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
DIR-2023-2028-TOC-SPR-HCA / Transit Oriented Communities, Site Plan Review

LEAD CITY AGENCY	CASE NUMBER
City of Los Angeles (Department of City Planning)	ENV-2023-2029-CE
PROJECT TITLE	COUNCIL DISTRICT
2511 Sunset Mixed Use	13 – Soto-Martinez

PROJECT LOCATION (Street Address and Cross Streets and/or Attached Map) ☐ Map attached.
2511, 2513, 2515, and 2517 West Sunset Boulevard

PROJECT DESCRIPTION: ☐ Additional page(s) attached.
Demolition of an existing single-story grocery store, recycling center, and surface parking lot for the construction, use, and maintenance of a five-story, mixed-use building containing approximately 89,719 square-feet of floor area, comprised of 3,603 square-feet of commercial floor area and 86,116 square-feet of residential floor area, on an approximately 27,055 square-foot site, resulting in a Floor Area Ratio ("FAR") of 3.32:1. The project will include 121 dwelling units, 13 of which will be reserved for Extremely Low Income Households. The proposed unit mix is comprised of 73 studio, 36 one-bedroom, and 12 two-bedroom units. The building will rise to a maximum height of approximately 79 feet. A total of 79 vehicle parking spaces, 87 long-term bicycle parking spaces, and 11 short-term bicycle parking spaces will be provided within the two-level subterranean parking garage and the ground floor. The project includes 9,418 square-feet of open space, consisting of a 2,926 square-foot courtyard, three (3) recreation rooms that total 2,353 square-feet, and a 4,139 square-foot roof deck. The project also includes the planting of a minimum of 31 24-inch box trees and the export of 20,700 cubic yards of earth from the site.

NAME OF APPLICANT / OWNER:
Guy Vidal, Sunset at Rampart, LLC & Sunset at Coronado, LLC

CONTACT PERSON (If different from Applicant/Owner above)	(AREA CODE) TELEPHONE NUMBER | EXT.
Gary Benjamin, Alchemy Planning + Land Use	(213) 479-7521

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) **Section 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
See attached justification.

☒ 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	STAFF TITLE
Erick Morales	Planning Assistant

ENTITLEMENTS APPROVED
Transit Oriented Communities, Site Plan Review

DISTRIBUTION: County Clerk, Agency Record

Rev. 6-22-2021

CATEGORICAL EXEMPTION

2511 SUNSET MIXED-USE PROJECT

2511 W. Sunset Boulevard, Los Angeles, CA 90026

Prepared for:

City of Los Angeles Department of City Planning
200 N Spring Street, Room 621
Los Angeles CA 90012

Prepared by:

Westlake Village Office
920 Hampshire Road, Suite A5
Westlake Village, CA 91361

Meridian Consultants

Los Angeles Office
706 S. Hill Street, 11th Floor
Los Angeles, CA 90014

DECEMBER 2023

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INTRODUCTION

The California Environmental Quality Act (CEQA) requires the review of projects that involve the exercise of discretionary powers by a public agency and that could result in a physical change in the environment. Section 15061 of the CEQA guidelines provides that once a lead agency has determined that a project is subject to CEQA, it shall next determine if that project may be exempt from CEQA.

Public Resources Code Section 21084 provides that the CEQA Guidelines shall include a list of classes of projects that have been determined not to have a significant effect on the environment and that shall be exempt from CEQA. Article 19 of the CEQA Guidelines (Sections 15300 to 15333) sets forth the list of exemption classes. Class 32, described in Section 15332 of the CEQA Guidelines, consists of in-fill development projects meeting the following criteria:

- The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- The project site has no value as habitat for endangered, rare or threatened species.
- Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- The site can be adequately served by all required utilities and public services.

A project that meets these criteria for an exemption may still be subject to CEQA if one of the following exceptions, as set forth in CEQA Guidelines Section 15300.2, applies:

- Location. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located - these classes are considered to not apply where the project may have an impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.
- Cumulative Impact. 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.
- Significant Effect. 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.
- 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.
- 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.
- 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.

PROJECT DESCRIPTION

This document analyzes the 2511 Sunset Boulevard multifamily residential project (the Project. Identified by the City of Los Angeles Department of City Planning as DIR-2023-2028-TOC-SPR-HCA) and concludes that the Project (1) meets the eligibility criteria for the Class 32 exemption and (2) is not barred from using the exemption by any of the exceptions set forth in CEQA Guideline Section 15300.2.

Project Location

The Project Site is located at 2511 Sunset Boulevard in the Silver Lake neighborhood of the City of Los Angeles, as shown in **Figure 1: Project Location**. The site occupies the northwest corner of Sunset Boulevard and Coronado Street.

Existing Site Conditions

The Project site consists of four lots that together are Assessor Parcel Numbers (APN) 5402-015-004, 5402-015-005, 5402-015-006, and 5402-015-007. The site is approximately 27,055 square feet (sf) (0.62 acres) in size. The site is currently occupied by 6,681.5-square-feet of commercial space including a 4,336 square foot market & liquor store on the eastern portion of the site and a recycling center on the western portion of the site. The balance of the site is paved surface parking.

Land Use Designation and Zoning

The Project site is located in the Echo Park neighborhood, within the Silver Lake-Echo Park-Elysian Valley Community Plan area and is designated for Community Commercial land uses, as shown in **Figure 2: Community Plan Map**. Consistent with this land use designation, the Project site is zoned [Q]C2-1VL. The C2 is a commercial zone that also allows for multifamily-residential uses at the density of 400 square feet of lot area per apartment.[1] The 1VL height district limits building height to 45 feet and 3 stories with a maximum floor-area ratio (FAR) of 1.5, though residential buildings are limited by height and not to stories. The existing Q condition establishes specific design, parking, access and use limitations.

Surrounding Land Uses

The Project is located in an urbanized area, as shown in **Figure 1** below. The vicinity of the Project site contains mixed-use, and commercial uses along Sunset Boulevard and single-family residential neighborhoods to the north and south. Less than 1/2 mile north of the Project site is the Mayberry Street Elementary School and less than to 1/2 mile east of the Project site is the Sandra Cisneros Learning Academy.

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[1] Department Of City Planning Generalized Summary Of Zoning Regulations, Updated March 2020; https://planning.lacity.org/odocument/eadcb225-a16b-4ce6-bc94-c915408c2b04/Zoning_Code_Summary.pdf

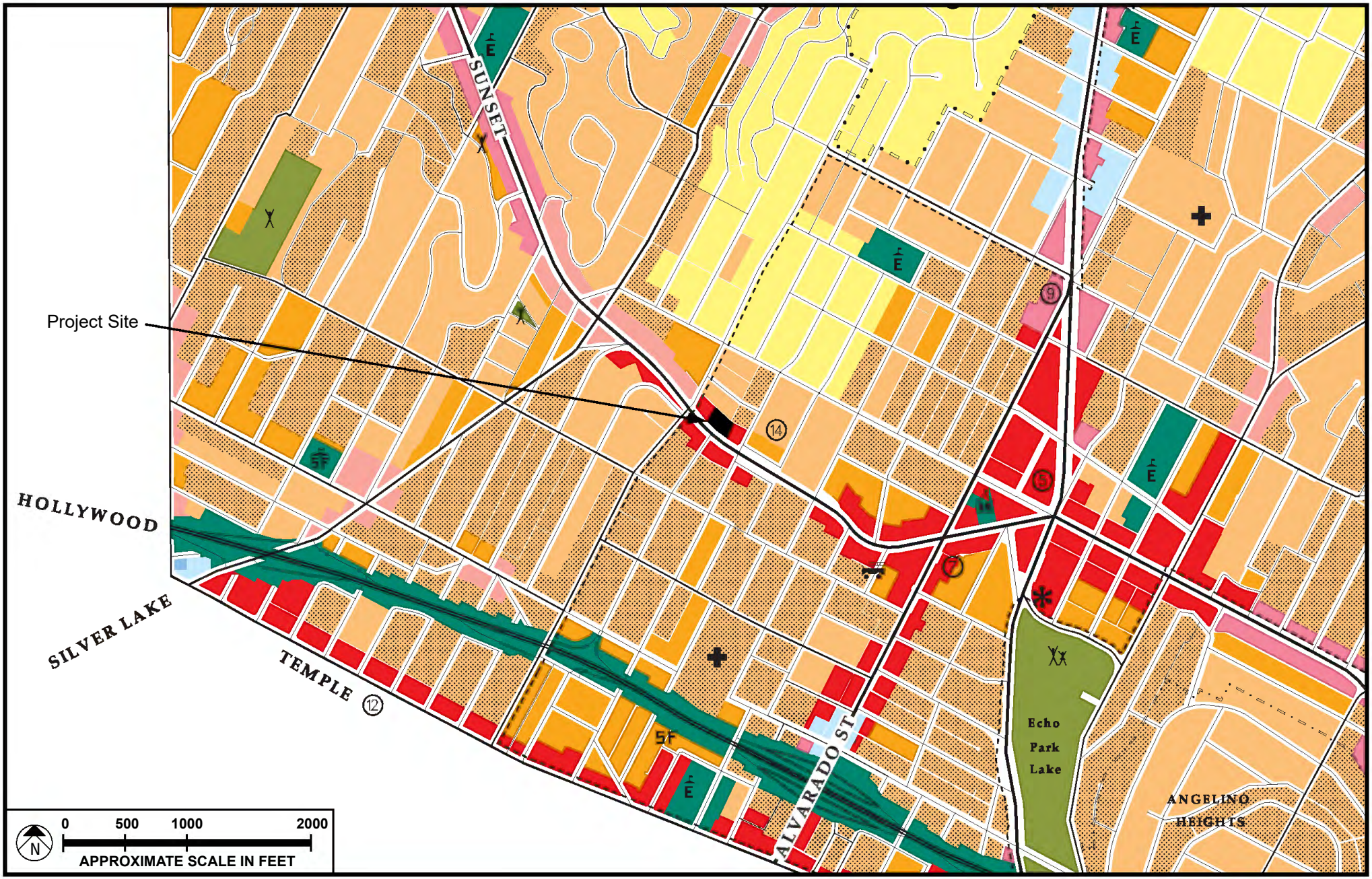
SOURCE: Google Earth - 2023

FIGURE **1**

Meridian Consultants

Project Site Location

330-002-22



SOURCE: General Plan Land Use Map, City of Los Angeles - June 2013

FIGURE **2**

Meridian Consultants

Community Plan Map

330-002-22

Development Program

The Project would construct a new 5-story mixed-use building totaling approximately 89,719 square feet of floor area. The building would feature 5 floors of residential units with a height of approximately 79 feet. 2 subterranean parking levels would contain 79 vehicle parking spaces and 98 bicycle parking spaces. There will be a total of 121 units, anticipated to include 73 studio, 36 one-bedrooms and 12 two-bedrooms. A total of 9,418 square feet of open space, comprised of a courtyard, recreational rooms, and roof area, will be included. Additionally, the lot will include 3,603 square feet of ground floor commercial space.

The ground level is shown in **Figure 3: Ground Level Plan**; the upper levels are shown in **Figure 4 a-f: Upper Level Plans**.

Construction

The Project would be built over a 24-month period and is expected to be completed by March 2026. Prior to development, all existing uses and structures on site would be demolished and removed.

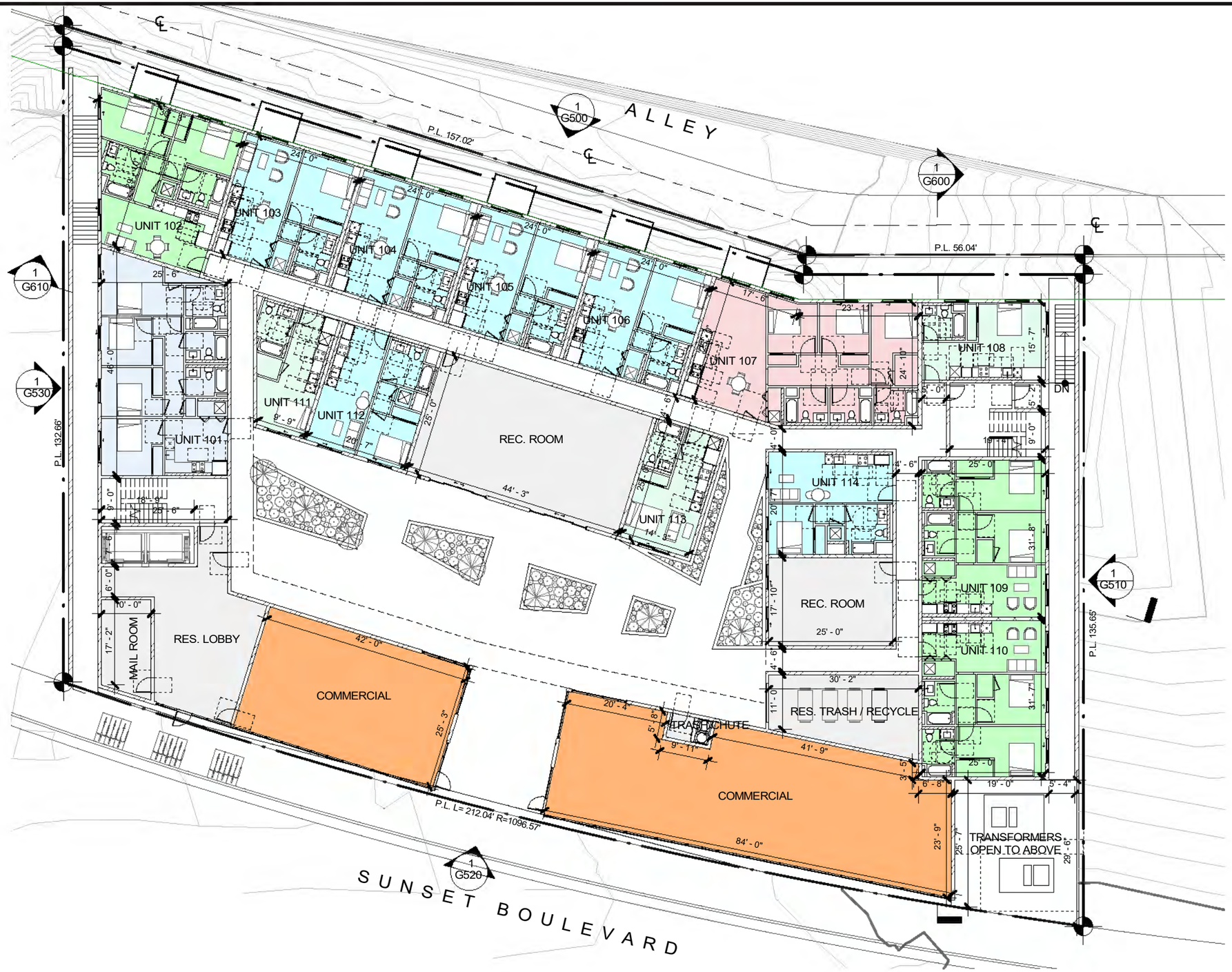
Access and Transit

The Project site fronts on Sunset Boulevard, which is a designated Avenue I that travels in the east-west direction and consist of two to three lanes in each direction with a left-turn median as well as curbside parking and Class II bicycle lanes in each direction. Nearby roadways include North Coronado Street to the east, North Benton Way to the northwest, and Elsinore Street to the north, as well as Silver Lake Boulevard to the west and North Alvarado Street to the southeast. US Route 101 is located four blocks south of the Project site.

Public transit is provided by the Los Angeles County Metropolitan Transportation Authority (Metro), including the 2 and 4 bus lines along W Sunset Boulevard and N Benton Way. Bus lines 2, 4, and 603 run along W Sunset Boulevard and N Coronado St. These bus lines all have stops within a quarter mile of the Project site.

Approval Actions

The Applicant is utilizing TOC incentives pursuant to LAMC Section 12.22.A.31, as implemented by the TOC Guidelines. The Project would request the following TOC base incentives: to increase density by approximately 70 percent, allow for a Project FAR of approximately 3.32:1 (3.75:1 permitted). Additionally, under AB 2097, the project is not required to provide a minimum number of required automobile parking spaces. The Project requests three additional incentives, pursuant to LAMC Section 12.22.A.31 and the TOC Guidelines to: Utilize RAS3 side and rear yard requirements in lieu of the yard requirements described in LAMC Sections 12.14.C and 12.11.C; Increased height of 22 feet and two stories in lieu of otherwise applicable height requirements; and reduce the required open space by up to 25 percent, in lieu of the open space requirements described in LAMC Section 12.21.G. The Project would also be subject to Site Plan Review, pursuant to LAMC Section 16.05.C and would require a hillside haul route approval pursuant to LAMC Section 91.7006.7.5.



SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **3**

Meridian Consultants

Ground Level Plan

330-002-22

SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4a**

Meridian Consultants

Second Level Plan

330-002-22

THIRD LEVEL PLAN 1

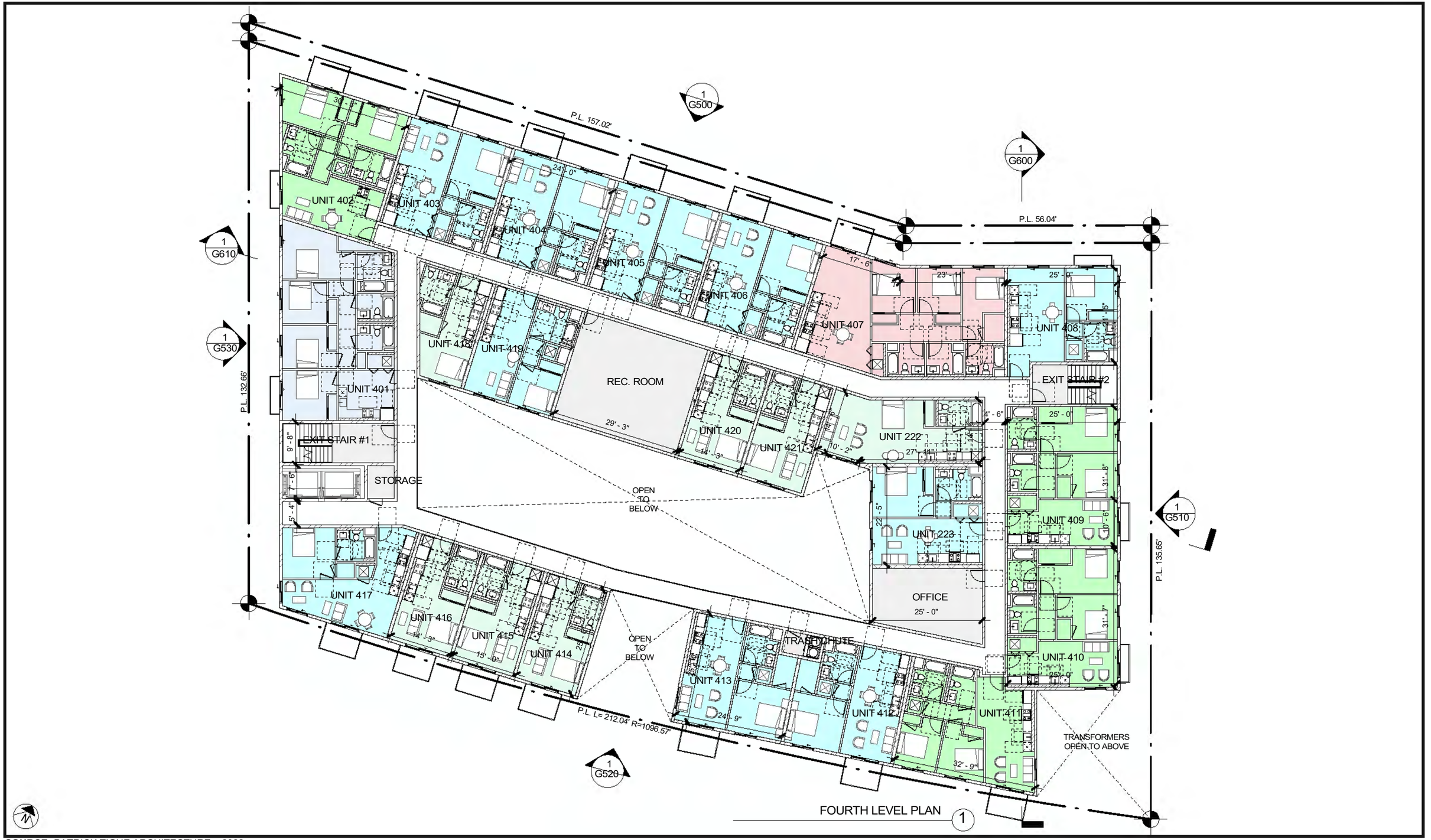
SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4b**

Meridian Consultants

Third Level Plan

330-002-22



SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4c**

Meridian Consultants

Fourth Level Plan

330-002-22

FIFTH LEVEL PLAN 1

SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4d**

Meridian Consultants

Fifth Level Plan

330-002-22

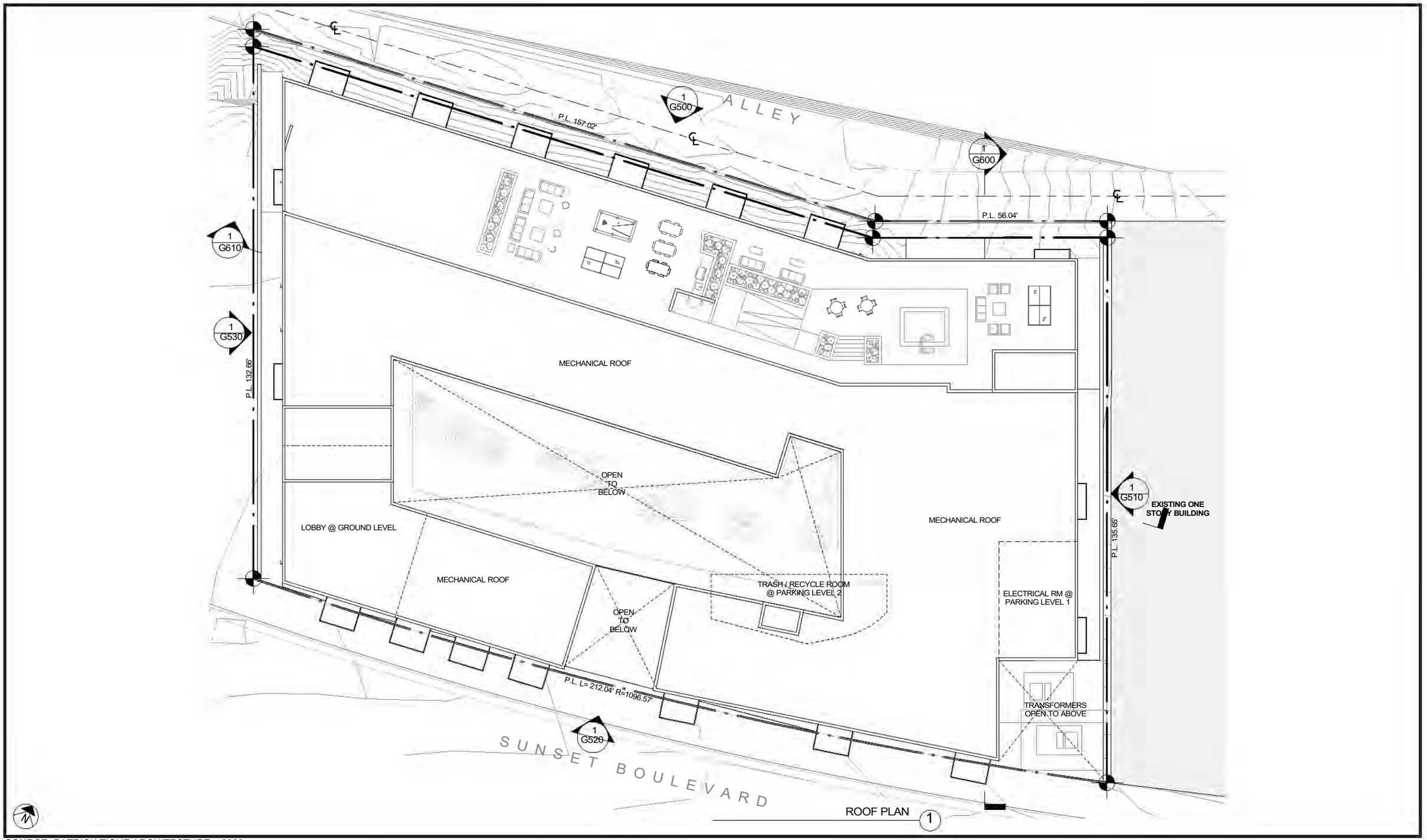
SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4e**

Meridian Consultants

Sixth Level Plan

330-002-22



SOURCE: PATRICK TIGHE ARCHITECTURE – 2022

FIGURE **4f**

Meridian Consultants

Roof Plan

330-002-22

CONSISTENCY WITH CLASS 32 EXEMPTION CRITERIA

As discussed below, the Project meets all of the criteria for the Class 32 exemption.

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

The Land Use Element of the General Plan of the City of Los Angeles consists of a Framework Element and 35 Community Plans. The Framework Element contains a Long-Range land Use Diagram that depicts the Project site as within a Mixed Use Boulevard which are intended to be generally characterized by up to 3- to 6-story mixed use buildings. The Project is a 5-story mixed-use building and therefore is consistent with the long-range land use envisioned in the Framework Element. The Project site is located within the Silver Lake-Echo Park-Elysian Valley Community Plan area, which designates the site as Community Commercial, within which the proposed project is a consistent use, as footnote 13 on the Community Plan Land Use Map states that mixed use development with residential over ground floor commercial is encouraged in this designation. The Project's consistency with the Community Plan objectives and policies is addressed on the following page in Table 1: Consistency with Silver Lake-Echo Park-Elysian Valley Community Plan. As shown in Table 1, the Project would be consistent with the applicable policies of the Silver Lake-Echo Park-Elysian Valley Community Plan.

The Community Plan states that its goals, objectives, policies, and programs were created to meet the needs of the community through the year 2010. The Community Plan was adopted in 2004. At the time the forecasted 2010 population of the Community Plan area was 81,950 and the estimated potential plan capacity was 94,900 residents. However, the City has reported that the population of the Community Plan area only reached 70,088 in 2010 and has declined to 67,387 by 2021.[2] The current estimated population for the entire City is approximately 3,973,278 people.[3] SCAG has forecast that City will grow to a population of 4,771,300 by 2045, an increase of close to 800,000.[4] As such, the Project does not represent a substantial increase in the population of the Community Plan area or the City and is within the SCAG projections for population growth. The Project would provide 121 housing units which could accommodate up to 288 people at the average household size for renter occupied units in the Community Plan area.

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2 City of Los Angeles Department of City Planning Demographics Unit, Silver Lake - Echo Park - Elysian Valley Demographic 11Profile, January 25, 2023

3 City of Los Angeles, Department of City Planning Demographics Unit, 2020 Citywide Demographic Profile.

4 SCAG, Technical Reports, Demographics and Growth Forecast, https://scag.ca.gov/read-plan-adopted-final-plan. Accessed August 2022.

TABLE 1
CONSISTENCY WITH SILVER LAKE-ECHO PARK-ELYSIAN VALLEY COMMUNITY PLAN

Policy	Project Consistency
1-1.1 Maintain an adequate supply and distribution of multiple family, low income and special needs housing opportunities in the Community Plan Area.	**Consistent.** The Project would increase the supply of housing in the community by providing 121 multifamily residential dwelling units, including 13 extremely low-income affordable units.
1-1.2 Improve the quality of existing single family and multiple family housing throughout the Plan Area.	**Not Applicable.** The Project would not involve or effect existing housing.
1-1.3 Protect existing single family residential neighborhoods from new out-of-scale development.	**Consistent.** The Project is located along Sunset Boulevard, outside of single-family residential neighborhoods.
1-1.4 Encourage new infill residential development that complements existing development and architectural style.	**Consistent.** The Project is an infill development along Sunset Boulevard that has been designed to complement the general character of the boulevard.
1-1.5 Protect existing stable single family and low-density multiple family residential neighborhoods from encroachment by higher density residential and other incompatible uses.	**Consistent.** The Project is located along Sunset Boulevard, outside of existing low-density residential neighborhoods.
1-1.6 Promote the preservation of existing single and multiple family neighborhoods.	**Consistent.** The Project is located along Sunset Boulevard, outside of single-family residential neighborhoods.
1-1.7 Promote the unique quality and functionality of the Community Plan Area's mixed single and multiple family residential neighborhoods by encouraging infill development that continues to offer a variety of housing opportunities that capitalize on the eclectic character and architectural styles of existing development.	**Consistent.** The Project is an infill development that replaced aging commercial uses and offers a variety of housing opportunities with a new architectural design.
1-2.1 Locate higher residential densities near commercial centers and major bus routes where public service facilities, utilities and topography will accommodate this development.	**Consistent.** The Project is located along Sunset Boulevard and is served by existing bus routes and utilities and works with the existing topography.
1-2.2 Encourage multiple family residential development in commercially zoned areas in designated Neighborhood Districts and Community Centers and along Mixed Use Boulevards (see Figure 1) and, where appropriate, provide floor area bonuses as an incentive to encourage mixed-use development in those areas.	**Consistent.** The Project is a multi-family, mixed use development located along Sunset Boulevard in a commercially zoned area.
1-3.1 Seek a higher degree of architectural compatibility and landscaping for new infill development to protect the character and scale of existing residential neighborhoods.	**Consistent.** The Project would be oriented toward Sunset Boulevard and would be separated from the existing adjacent residential neighborhood by an alley.

1-3.2 Preserve existing views in hillside areas.	**Not Applicable.** The Project is not located in a hillside area.
1-3.3 Consider factors such as neighborhood character and identity, compatibility of land uses, impacts on services and public facilities and impacts on traffic levels when changes in residential densities are proposed.	**Consistent.** The listed factors have been considered for the Project. Previously the consistency of the Project with the land use type and intensity expressed in the City's General Plan was identified. Impacts on services, public facilities and traffic levels are discussed later in this document,
1-4.1 Promote greater individual choice in type, quality, price and location of housing.	**Consistent.** The Project would increase the supply of housing in the community by providing 121 multifamily residential dwelling units, including 13 extremely low-income affordable units.
1-4.2 Promote mixed-use housing projects in pedestrian-oriented areas and designated Mixed Use Boulevards, Neighborhood Districts and Community Centers to increase supply and maintain affordability (see Figures 1, 2, and 3).	**Consistent.** The Project is a mixed-use housing project in a pedestrian oriented area.
1-4.3 Ensure that new housing developments minimize displacement of low-income residents.	**Consistent.** The Project would not displace any existing residents or housing units.
1-4.4 Increase home ownership options by providing opportunities for development of townhouses, condominiums and similar types of housing.	**Not Applicable.** The Project would provide rental housing options.
1-5.1 Protect and enhance the historic and architectural legacy of the Plan area's neighborhoods.	**Consistent.** The Project is located outside of the historic and architectural neighborhoods within the Plan area.
1-5.2 Encourage reuse of historic resources in a manner that maintains and enhances the historic character of structures and neighborhoods.	**Not Applicable.** The Project site does not contain any historic resources.
1-6.1 Limit development according to the adequacy of the existing and assured street circulation system within the Plan area and surrounding areas.	**Consistent**. The Project has been evaluated according the LADOT standards and found to be adequately served by the existing circulation system.
1-6.2 Ensure the availability of adequate sewers, drainage facilities, fire protection services and facilities and other public utilities to support development within hillside areas.	**Not Applicable.** The Project is not located in a hillside area.
1-6.3 Consider the steepness of the topography and suitability of the geology in any proposal for development within the Plan area.	**Not Applicable.** The Project is not located in a hillside area.
1-6.4 Ensure that any proposed development be designed to enhance and be compatible with adjacent development.	**Consistent.** The Project has been designed in accordance with the applicable zoning standards and with the context of this portion of Sunset Boulevard.

2-1.1 New commercial uses shall be located in established commercial areas, emphasizing more intense and efficient use of existing commercial land, ultimately contributing to and enhancing the existing urban form and village atmosphere.	**Consistent.** The Project would replace the existing commercial uses with a mixed-use development that would more intensely and efficiently utilize the site while enhancing the pedestrian environment of Sunset Boulevard.
2-2.1 Preserve existing pedestrian-oriented areas.	**Consistent.** The Project would improve the pedestrian facilities along the street frontage of the site.
2-2.2 New developments in pedestrian-oriented areas should add to and enhance existing pedestrian street activity.	**Consistent.** The Project would improve the pedestrian facilities along the street frontage of the site and provide new uses that would stimulate greater street activity.
2-2.3 The first-floor street frontage for structures, including mixed-use projects and parking structures located in pedestrian-oriented areas, should incorporate commercial uses.	**Consistent.** The Project would include commercial uses on the street front frontage of the site.
2-3.1 Proposed developments should be designed to enhance and be compatible with existing adjacent development.	**Consistent.** The Project has been designed in accordance with the applicable zoning standards and with the context of this portion of Sunset Boulevard.
2-3.2 Support efforts to obtain Main Street grant or other funding to enhance and supplement planned improvements of Glendale Boulevard south of the Glendale Freeways part of the Glendale Boulevard Corridor Improvement Project and Glendale Freeway Terminus project, as approved by DOT and Caltrans.	**Not Applicable.** The Project is not located in the area specified.
2-3.3 Require screening of open storage and auto repair uses, and prohibit storage of automobile parts and other noxious commercial-related products in front of commercial developments exposed to the street.	**Not Applicable.** The Project does not include the uses specified.
2-3.4 Preserve community character, scale and architectural diversity.	**Consistent.** The Project has been designed in accordance with the applicable zoning standards and with the context of this portion of Sunset Boulevard.
2-3.5 Landscaped corridors should be created and enhanced through the planting of street trees along street segments with no building setbacks and through median plantings.	**Consistent.** The Project would include new street trees along the street front frontage of the site.
2-4.1 Ensure that commercial infill projects achieve harmony with the best of existing development.	**Consistent.** The Project has been designed in accordance with the applicable zoning standards and with the context of this portion of Sunset Boulevard.
2-4.2 Require that mixed-use projects and development in pedestrian-oriented areas be designed and developed to achieve a high level of quality, distinctive character and compatibility with existing uses.	**Consistent.** The Project has been designed in accordance with the applicable zoning standards and with the context of this portion of Sunset Boulevard.

2-4.3 Implement development standards that promote commercial development at a scale commensurate with their designation as Neighborhood, General or Community Center commercial and that is compatible with adjacent, primarily residential uses.	**Consistent.** The Project would include commercial uses integrated into the residential structure at a scale that is appropriate to serve the proposed residential uses of the project and the existing surrounding residential uses.

Consistent with its land use designation, the Project site is zoned [Q]C2-1VL. The C2 zone allows for mixed-use residential structures such as the Project. The height district limitation of 1VL limit the intensity allowed on the site; however, the Project would utilize the City's Transit Oriented Communities (TOC) incentives provided by the zoning code, which provide for an increase in FAR and additional incentives including increased height, setback relief and open space reduction for projects, such as this one, that include a specified amount of affordable housing within walking distance of transit stops. Under AB 2097, the project is not required to provide a minimum number of required automobile parking spaces.

Based on the above, the Project would meet this criterion of the Class 32 Exemption.

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

The Project site is approximately 0.62 acres in size and is located in a developed area of the City of Los Angeles. The Project site is surrounded by dense, developed urban uses. Therefore, the Project satisfies this criterion of the Class 32 Exemption.

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

The Project would develop a site previously developed with commercial uses, including a small market, parking lot and recycling center. Other than minimum decorative landscaping, the Project site is completely impervious. The Project site does not contain any critical habitat, including wetlands, nor is it known to support any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service. The Project site is not part of any draft or adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan.[5] There are no trees or shrubs on the Project site that would be considered protected native within the City of Los Angeles Native Tree Protection Ordinance. In addition, due to the urbanized surroundings, there are no wildlife corridors through or native wildlife nursery sites on the Project site. As such, the Project site has no value as a habitat for endangered, rare, or threatened species. Therefore, the Project satisfies this criterion of the Class 32 Exemption.

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5 California Department of Fish and Wildlife, National Community Conservation Planning (NCCP) Plan Summaries, accessed January 2023, https://wildlife.ca.gov/Conservation/Planning/NCCP/Plans.

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

Traffic

The Los Angeles Department of Transportation (LADOT) has established significance criteria for traffic impacts. Applicable thresholds include whether the Project would (1) conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities; (2) conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)(1); or (3) substantially increase hazards due to a geometric design feature or incompatible uses. A Technical Assessment was prepared in accordance with the requirements of LADOT to analyze and evaluate potential traffic impacts. The Technical Assessment and the LADOT review and approval letter are included as **Appendix A** to these findings.

With the development of the Project, Sunset Boulevard along the Project frontage would provide improved pedestrian safety and landscaping that would provide for a comfortable pedestrian network, improving connections to the Project, transit facilities, and other pedestrian attractors in the area. The Project would also reduce the curb cuts along Sunset Boulevard and provide vehicular access on the Coronado Alley, reducing the number of conflict points between vehicles and pedestrians/bicyclists. In addition, the Project would provide an approximate four-foot dedication on the Coronado Alley north of the Project site to meet the Mobility Plan standard for the alley.

The Project is located within walking distance of local and rapid bus routes. The Project would not remove or obstruct any existing roadway, bicycle infrastructure, pedestrian facility, or transit. The Project would not prevent future installation of bicycle facilities on Sunset Boulevard. Vehicle and bicycle parking would be provided as required by code.

Based on the above, the Project would not conflict with programs, plans, ordinances, or policies addressing the circulation system.

CEQA Guidelines section 15064.3 identifies vehicle miles traveled (VMT) as the most appropriate measure of transportation impacts. The LA DOT has developed a VMT Calculator to estimate project-specific daily VMT for developments within City limits. Based on the land use type and density, the VMT Calculator estimates that the Project would generate an average household VMT per capita of 5.3 which is less than the LADOT impact threshold of 7.2 for a project within the East Los Angeles Area Planning Commission. Therefore, the Project would not result in a significant VMT impact and would not conflict or be inconsistent with CEQA Guidelines section 15064.3.

The Project site fronts on West Sunset Boulevard and would not alter the geometric design of the existing street. Pedestrian and vehicular access points are separated to avoid conflict. The Project would prepare a construction management plan that would include, to the extent necessary, detour routes for all applicable travel modes, including pedestrian and transit users. No unusual or incompatible elements or uses are

proposed that would create impediments or hazardous to vehicular or pedestrian movement. As such, the Project would not substantially increase hazards.

Based on the above, traffic effects of the Project would not be significant, and the Project satisfies this criterion of the Class 32 Exemption.

Noise

The following section summarizes and incorporates by reference information from the Noise Study that was conducted for this Project; the findings are included as **Appendix B** of this Categorical Exemption.

In accordance with Appendix G of the State CEQA Guidelines, a project would have a potentially significant impact related to noise and ground borne vibration if it would result in:

- 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.
- Generation of excessive ground borne vibration or ground borne noise levels?

Appendix G of the State CEQA Guidelines also includes:

- 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?

The Project site is not located within an airport land use plan and is not located within two miles of public airport or public use airport, nor is it within the vicinity of private airstrips. As such, the Project would result in no impacts to this screening criteria and no further analyses of this topic is necessary.

A Project would normally have a significant impact on noise levels from construction if:

- Construction activities lasting more than one day would exceed existing ambient exterior sound levels by 10 dBA (hourly Leq) 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 Leq) or more at a noise-sensitive use; or
- Construction activities of any duration would exceed the ambient noise level by 5 dBA (hourly Leq) at a noise sensitive use between the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or at any time on Sunday.

Noise sensitive uses are defined as such uses as residences, schools, libraries, churches and medical facilities[6]. There are residential neighborhoods north and south of the Project that constitute the nearest noise sensitive uses. Specifically, the nearest would be the residences between the alley on the north side of the Project site and Elsinore Street. Short-term sound monitoring was conducted at seven (7) locations selected to represent the nearest sensitive receptor in each direction. The distance from the site range from 15 feet to 225 feet in order to measure the ambient sound environment at different noise sensitive uses in the Project vicinity.[7] To be represent the time of day when peak construction and operation of the Project could occur, measurements were taken over 15-minute intervals at each location between the hours of 9:14 AM and 11:20 AM on Wednesday January 11, 2023, and provided in Appendix B. As detailed in Appendix B, ambient noise levels ranged from a low of 60.0 dBA (Leq-15minute) north of the Project site along the alleyway between N. Coronado Street and N. Benton Way (Site 3) to a high of 73.7 dBA (Leq-15minute) at the Project site along Sunset Boulevard (Site 1).

On-Site Construction Noise

Section 112.05 of the City's Municipal Code sets a maximum noise level for construction equipment of 75 dBA at a distance of 50 feet when operated within 500 feet of a residential zone. Compliance with this standard is only required where "technically feasible."[8] Section 41.40 of the City's Municipal Code prohibits construction between the hours of 9:00 PM and 7:00 AM Monday through Friday, 6:00 PM and 8:00 AM on Saturday, and at any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 AM to 9:00 PM; and Saturdays and National Holidays between 8:00 AM to 6:00 PM). In general, the City's Department of Building and Safety enforces noise ordinance provisions relative to equipment and the Los Angeles Police Department enforces provisions relative to noise generated by people.

Based on consultation with the applicant, a list has been compiled of construction equipment typically used for this scale of construction and expected to be used on site.[9] **Table 2: Construction Maximum Noise Estimates** presents the maximum noise impacts that are forecasted to occur at each of the receptor sites. As shown, average noise levels during construction would result in a maximum increase of 17.8 dBA (Leq-1hour) above the significance threshold of 5 dBA over ambient noise levels during the concrete structure phase at the adjacent residential uses (Site 3) without implementation of any noise reduction measures mentioned in Section 112.05 of the City's Municipal Code.

In devising construction noise control strategies, important options include controlling the noise at the source. Source control requirements include added benefits in promoting technological advances in the

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6 See California Code of Regulations, Title 21, Section 5014

7 The location of monitoring locations is detailed in the Noise Study included as Appendix B.

8 In accordance with the City's Noise Ordinances, "technically feasible" means that the established noise limitations can be compiled with at a project site, with the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques employed during the operation of equipment.

9 See Table 2 in the Noise Study included as Appendix B to this document.

development of quieter equipment. Source control techniques can include: (1) muffler requirements, (2) maintenance and operational requirements, and (3) equipment emission level requirements. These control techniques can be used separately or in combination with each other in order to achieve the desired results. Most control noise originates from equipment powered by either gasoline or diesel engines.

Using optimal muffler systems on all equipment would reduce construction noise levels by 10 dBA or more.[10] Additionally, a noise barrier can achieve a 5 dBA noise level reduction, when it is tall enough to break the line-of-sight to the sensitive receiver. It can achieve approximately 1.5 dBA of additional noise level reduction for each meter of barrier height. Additionally, limiting the number of noise-generating, heavy-duty construction equipment to two (2) pieces operating simultaneously would reduce construction noise levels by approximately 1.5 dBA.

The incorporation of these practices into the construction management of the Project represents regulatory compliance with the LAMC and would reduce construction noise levels by up to 18 dBA (Leq-1hour). Moreover, the Project would comply with Section 112.04 of the LAMC by ensuring that the operation of construction equipment would only occur between the hours of 7:00 AM and 10:00 PM on weekdays and Saturday. Compliance with the above practices would ensure construction noise levels would be below the significance threshold; thus, construction noise levels would not be considered significant.

TABLE 2
CONSTRUCTION MAXIMUM NOISE ESTIMATES

		Calculated Noise Level (Leq-1hour) by Construction Phase						
Noise Monitoring Site	Ambient Noise Levels	Demolition	Grading/ Excavation	Concrete Structure	Framing	Finishing	Significance Threshold	Maximum Increase Above Significance Threshold
Site 2	62.7	81.1	80.4	81.8	77.5	76.7	67.7	**+14.1**
Site 3	60.0	82.3	81.7	82.8	78.5	78.2	65.0	**+17.8**
Site 4	63.3	83.2	82.5	83.3	79.0	80.3	68.3	**+15.0**
Site 5	64.4	63.7	63.0	64.8	60.5	55.5	69.4	**-4.6**
Site 6	66.1	63.3	62.6	64.4	60.1	58.9	71.1	**-6.7**
Site 7	60.2	59.9	59.3	61.1	56.8	54.4	65.2	**-4.1**

*Note: Noise Monitoring Site 1 was located at the Sunset Boulevard boundary of the site and as such is not included as a reference point for noise experienced by an offsite noise sensitive use. Refer to **Attachment B** for more detail.*

10 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm. Accessed January 2023.

Off-site Construction Noise

Construction of the Project would require worker, haul, and vendor truck trips to and from the site to work on the site, export soil, and deliver supplies to the site Soil haul trucks traveling to and from the Project site would be required to travel along a haul route approved by the City. Haul truck traffic would take the most direct route to the freeway ramp, which is expected to be west on Sunset Boulevard then south on Silver Lake Boulevard. At the maximum, up to 25 hauling trips per day would take place during the grading/excavation phase.[11] These trips are considered in the evaluation of noise. Noise associated with construction truck trips was estimated using the Caltrans FHWA Traffic Noise Model based on the maximum number of worker and truck trips in a day. Project haul truck trips, which includes medium- and heavy-duty trucks, would generate noise levels of approximately 50.0 to 54.9 dBA, respectively, measured at a distance of 25 feet from the adjacent sensitive receptor. As detailed in **Appendix B**, existing noise levels ranged from 60.0 dBA to 73.7 dBA. The noise level increases from truck trips would be below the significance threshold of 5 dBA. As such, off-site construction noise impacts would not be considered significant.

Vibration

The City has not adopted a significance threshold to assess vibration impacts during construction. Thus, the Caltrans *Transportation and Construction Vibration Guidance Manual*[12] is used as a screening tool to assess the potential for adverse vibration effects related to structural damage. This manual identifies 0.5 PPV as an appropriate threshold for adverse vibration effects related to structural damage. Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. **As shown in Table 3: On-Site Construction Vibration Impacts–Building Damage**, and discussed in more detail in **Attachment B**, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold of 0.5 PPV at the adjacent structures. As such, impacts related to building damage from on-site construction vibration would not be considered significant.

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11 See page 60 of the Transportation Assessment included as Attachment A

12 Caltrans, Transportation and Construction Vibration Guidance Manual (September 2013), https://cityofdavis.org/home/showdocument?id=4521. Accessed January 2023.

TABLE 3 ON-SITE CONSTRUCTION VIBRATION IMPACTS – BUILDING DAMAGE					
Site	Nearest Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment			Significance Threshold (PPV ips)
		Loaded Trucks	Jackhammer	Small bulldozer	
2	Residential	0.164	0.075	0.006	0.5
3	Residential	0.076	0.035	0.003	0.5
4	Residential	0.007	0.003	0.000	0.5
5	Residential	0.003	0.002	0.000	0.5
6	Residential	0.005	0.002	0.000	0.5
7	Residential	0.003	0.001	0.000	0.5

*Source: US Department of Transportation, Federal Transportation Authority, Transit Noise and Vibration Impact Assessment. Refer to **Attachment C** for construction vibration worksheets.*

Operation

The Project would introduce various stationary noise sources, including heating, ventilation, and air conditioning systems, which would be located either on the roof, the side of a structure, or on the ground. All Project mechanical equipment would be required to be designed with appropriate noise-control devices—such as sound attenuators, acoustics louvers, or sound screens/parapet walls—to comply with noise-limitation requirements provided in LAMC Section 112.02, which prohibits equipment from causing more than a 5 dB increase in the ambient noise level. Therefore, operation of mechanical equipment on the Project building would not exceed the City's threshold of significance.

Air Quality

The following analysis is based on the Project's Air Quality Technical Report included in **Appendix C**. Significant air quality impacts could occur if a project were inconsistent with the Air Quality Management Plan (AQMP) or exceeded the quantified thresholds developed by the South Coast Air Quality Management District (SCAQMD).

The SCAQMD is the agency principally responsible for comprehensive air pollution control in Los Angeles and prepared the AQMP, which contains strategies and policies for achieving air quality standards and healthful air. The AQMP relies upon SCAG growth projections, which are based on cities' general plan land use and zoning parameters. Projects that do not result in or contribute to air quality violations and are consistent with the growth forecasts of the AQMP are considered consistent with the AQMP.[13] The Project proposes land uses consistent with the forecasted land use of the site as envisioned in the City's General Plan and reflected in SCAG's growth projections for the City. As such, the Project would not exceed the assumptions utilized in preparing the AQMP and is consistent with the land use assumptions on which the AQMP is based. Nor would the Project delay the timely attainment of the air quality standards or the interim

13 SCAQMD, *CEQA Air Quality Handbook,* April 1993, pa 12-3.

emission reductions specified in the AQMP. As discussed below, the Project would not cause or contribute to new air quality violations nor increase the frequency or severity of existing air quality violations. Therefore, the Project would not be inconsistent with the AQMP.

In addition, the SCAQMD has developed quantified thresholds for identifying regional and localized air quality violations from both construction and operation of a project. To evaluate the Project against these quantified thresholds, an estimate of emissions was prepared utilizing the California Emissions Estimator Model (CalEEMod), the tool recommended by SCAQMD.

Estimated construction emissions were quantified based on the type and number of equipment associated with construction of the proposed building. The emissions were estimated using the CalEEMod software, a program recommended by SCAQMD. The input values for construction equipment were based on default assumptions in CalEEMod for a Project of this size and type with adjustments made to various inputs based on site specific information and Project-specific activities determined through consultation with the applicant and experience with similar projects. The default values are based on construction surveys conducted by SCAQMD and may not fully reflect the type of site and project that is being evaluated. Adjustments are recommended by SCAQMD when supported by information specific to the location or the project. The adjustments made for the Project include the anticipated construction schedule, equipment for each phase, vehicle trips and the quantity of debris and soil to be hauled off-site, all of which have been calibrated to the specifics of the site and the Project. Further detail is provided in **Appendix C.**

Emissions calculations assumed (1) all construction activities would be conducted in compliance with the SCAQMD rules pertaining to Fugitive Dust (Rule 403)[14] and Architectural Coatings (Rule 1113);[15] and (2) heavy-duty diesel equipment engines would meet minimum Tier 3 standards in accordance with CARB fleet requirements. **Table 4: Maximum Construction Emissions** presents the maximum estimated daily emissions anticipated to occur throughout the duration of Project construction. As shown, maximum daily emissions during construction of volatile organic compounds (VOC), nitrogen oxides (NOx), carbon monoxide (CO), sulfur oxides (SOx), and particulate matter (PM10 and PM2.5) would be below the applicable SCAQMD maximum daily emission thresholds.

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14 South Coast Air Quality Management District (SCAQMD), Fugitive Dust (Rule 403), http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf.

15 SCAQMD, *Architectural Coatings (Rule 1113)*, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf.

TABLE 4
MAXIMUM CONSTRUCTION EMISSIONS

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
2024	5	8	14	<0.1	2	1
2025	7	8	13	<0.1	2	1
2026	7	6	9	<0.1	1	<1
Maximum	7	8	14	<0.1	2	1
SCAQMD Mass Daily Threshold	75	100	550	150	150	55
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

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

*Refer to **Appendix C: Air Quality Study**.*

The Project would also generate air pollutant emissions during operation from normal day-to-day use of the Project. **Table 5: Maximum Operational Emissions** presents the maximum estimated daily emissions anticipated to occur throughout the operation of the Project. As shown, the daily operational emissions attributed to the Project's operation would not exceed the SCAQMD established operational significance thresholds.

TABLE 5
MAXIMUM OPERATIONAL EMISSIONS

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Area	3	2	9	<0.1	0.1	0.1
Energy	<0.1	0.3	0.1	<0.1	<1	<1
Mobile	3	2	9	<0.1	2	0.3
Total	**6**	**4**	**18**	**<0.1**	**2**	**0.5**
SCAQMD Mass Daily Threshold	55	55	550	150	150	55
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.

*Refer to **Appendix C: Air Quality Study**.*

The SCAQMD Final Localized Significance Threshold [LST] Methodology[16] provides guidance on analysis of localized air quality impacts. SCAQMD provides LST thresholds based on the size and location of the site. Maximum daily LST values were derived for emissions of NOx, CO, PM10, and PM2.5 that would be generated during construction and operation of projects. **Table 6 Estimated On-Site Emissions and LST Comparison** provides the maximum daily on-site emissions generated by the Project during construction and operation. As shown, on-site emissions during construction and operation would not exceed the applicable LSTs.

16 SCAQMD, *Final Localized Significance Threshold Methodology (2008)*, p. 3-3, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

TABLE 6
LOCALIZED CONSTRUCTION AND OPERATIONAL EMISSIONS

Source	NOx	CO	PM10	PM2.5
	On-Site Emissions (pounds/day)			
Construction				
Total maximum emissions	6	9	<1	<1
LST threshold	74	680	5	3
Threshold Exceeded?	**No**	**No**	**No**	**No**
Operational				
Project area/energy emissions	2	9	0.1	0.1
LST threshold	74	680	2	1
Threshold Exceeded?	**No**	**No**	**No**	**No**

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

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

*Refer to **Appendix C: Air Quality Study**.*

SCAQMD has stated that if an individual project generates less than significant construction or operational emissions, then the project would not generate a cumulatively considerable increase in emissions for those pollutants, without needing to consider the contribution of related projects.[17] The Project would not generate construction or operational emissions that exceed the SCAQMD's recommended regional thresholds of significance and therefore the Project would not generate a cumulatively considerable increase. As shown, the Project would result in less than significant impacts on air quality, and therefore the Project satisfies this criterion of the Class 32 Exemption.

Water Quality

As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System Permit (NPDES) program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances, such as pipes or man-made ditches. Three general sources of potential short-term, construction-related stormwater pollution are associated with the proposed Project: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earthmoving activities that, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

The State Water Resources Control Board (SWRCB) oversees the implementation of NPDES in California through the General Construction Activity Storm Water Permit (GCASWP). Compliance with the requirements of GCASWP include the preparation of a Stormwater Pollution Prevention Plan (SWPPP) that includes Best Management Practices (BMPs) to address such things as erosion control, cleanup, and maintenance of dumpsters.[18] The purpose of a SWPPP, prepared in compliance with SWRCB

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

18 California Green Building Code 5.106.1 Stormwater Pollution Prevention for Projects That Disturb Less Than One Acre of Land

requirements, is to ensure that construction of the Project would not violate water quality standards and/or discharge requirements, or otherwise substantially degrade water quality.

The Project would be required to demonstrate compliance with Low Impact Development (LID) Ordinance standards and retain or treat the first three-quarters of an inch of rainfall in a 24-hour period. Compliance with the LID Ordinance would reduce the amount of surface water runoff leaving the Project site as compared to the current conditions. City of Los Angeles Ordinance Nos. 172,176 and 173,494 specify Storm Water and Urban Runoff Pollution Control and require the compliance and application of storm water BMPs. The Project would also be required to comply with water quality standards and wastewater discharge requirements set forth by the SUSMP for Los Angeles County and Cities in Los Angeles County and approved by the Los Angeles Regional Water Quality Control Board (LARWQCB). Full compliance with the LID Ordinance and implementation of design-related storm water BMPs would ensure that the operation of the Project would not violate any water quality standards or discharge requirements or otherwise substantially degrade water quality. Furthermore, this compliance would ensure that the Project would not have a considerable contribution to cumulative water quality effects of related projects or community growth.

After compliance with GCASWP during construction and the LID Ordinance during operations, the Project would have a less than significant impact on water quality, and therefore the Project satisfies this criterion of the Class 32 Exemption.

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

Utilities

Water

The Project site is located in a developed, urbanized portion of Los Angeles that is served by existing water mains and utility services. Water is provided by the Los Angeles Department of Water and Power (LADWP). Based on forecasted growth, the LADWP's 2020 Urban Water Management Plan (UWMP) projects adequate water supplies through 2045.[19] The 2020 UWMP estimates that LADWP's 2025 water demand will be approximately 509.501 acre feet per year and forecasts a demand of 565,751 acre feet per by the year 2045, with supply available to meet this demand throughout the planning period.

The Project is estimated to generate a water demand of 11,911.1 gallons per day which equivalent to 13.34 acre feet per year.[20] The demand projections used in the UWMP were derived from SCAG growth projections which assumed growth in population and households within the Silver Lake-Echo Park-Elysian Valley Community Plan area based on the development potential expressed by existing land use and zoning designations. The Project is consistent within the assumed growth projections LADWP utilized in developing the UWMP. The Project would also be designed to current building codes that would reduce

19 City of Los Angeles Department of Public Works, *2020 City of Los Angeles Urban Water Management Plan.*

20 Based on wastewater calculation provided in Table 7 below.

water demand as compared to previous uses through requirements for more efficient fixtures. As such, it is expected that LADWP has sufficient water supplies available to serve the Project.

Wastewater

The Project site is located in a developed, urbanized portion of Los Angeles that is served by the existing wastewater system operated by the City of Los Angeles Sanitation Department (LASAN). LASAN serves over 4 million residential and industrial customers and processes approximately 328 million gallons per day (mgd) of wastewater.[21] As shown in **Table 7: Estimated Sewage Generation** below, it is estimated that the Project would generate approximately 11,911.1 gpd of new wastewater. LASAN estimated that wastewater flow will increase to 376 mgd by 2040 and has planned capacity to serve this forecasted growth. The growth projections used by LASAN are derived from SCAG growth projections which assumed growth in population and households within the Silver Lake-Echo Park-Elysian Valley Community Plan area based on the development potential expressed by existing land use and zoning designations. The Project is within the growth projections used by LASAN. As such, it is expected that LASAN has sufficient capacity to serve the Project.

TABLE 7
ESTIMATED SEWAGE GENERATION

Land Use	Quantity – du	Factor (gpd/unit)[a]	Generation
Studio	65 du	75 gpd/du	4,875 gpd
1-Bedroom	39 du	110 gpd/du	4,290 gpd
2-Bedroom	16 du	150 gpd/du	2,400 gpd
3-Bedrooms	1 du	190 gpd/du	190 gpd
Commercial-Use	3,122 SF	50/ksf	156.1 gpd
Total Daily Estimate			**11,911.1 gpd**
Annual Estimate			**13.34 afy**

Note: gpd = gallons per day; ksf = thousand square feet; du=dwelling unit; afy = acre feet per year

[a] *Los Angeles Bureau of Sanitation, Sewage Generation Factors, April 2012*

21 City of Los Angeles Sanitation Department, SEWERS, https://www.lacitysan.org/san/faces/wcnav_externalId/s-lsh-wwd-cw-s?_adf.ctrl-state=1cvj6ecyxf_5&_afrLoop=8617779647821654#!

Stormwater

The Project site is located in a developed portion of Los Angeles that is currently served by existing stormwater infrastructure. In addition, the Project would be required to demonstrate compliance with the Los Angeles Low Impact Development (LID) Ordinance standards, which are more rigorous than the standards to which the prior uses were built. The primary purpose of the LID Ordinance is to ensure that development and redevelopment projects manage runoff in a manner that captures rainwater and removes pollutants while reducing the volume and intensity of stormwater flows. Through implementation of design features and Best Management Practices, stormwater would be captured and managed on-site. As such, the volume of stormwater runoff entering the public stormwater infrastructure during peak events would not increase as compared to existing conditions. Therefore, the Project can adequately be served by the stormwater utility system.

Solid Waste

Solid waste generated within the City is disposed of at landfill facilities throughout Los Angeles County. Private haulers provide waste collection services for most multifamily residential and commercial developments within the City, including the Project. The Project would follow all City and State regulations related to recycling and reduction of solid waste. The County of Los Angeles Department of Public Works prepares an annual report on solid waste management in the County to address long-term needs and maintain adequate capacity.[22] As described in the County's most recent report, no shortfall in permitted solid waste disposal capacity is anticipated to occur under forecasted growth and ongoing municipal efforts at waste reduction and diversion. As such, the Project could be adequately served by the solid waste disposal system.

Electric Power, Natural Gas, and Telecommunications

The Project site is located in a developed, urbanized portion of Los Angeles that is served by existing electric power, natural gas, and telecommunications services. In the context of the greater Los Angeles service area, the Project would not be a substantial source of new demand for services. New connections would be established for the Project; however, no substantial additional infrastructure would need to be installed or relocated to provide electric power facilities, natural gas facilities, or telecommunication services. Furthermore, the Project Applicant shall be required to implement applicable California Building Code and Los Angeles Green Building Code requirements, including the City's Solar Roof Ordinance and the recently adopted All Electric Building Ordinance, that would further reduce utility demand as compared to the existing structures. Thus, the Project would be adequately served by existing electric power, natural gas, and telecommunications services.

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22 Los Angeles County Public Works, *Countywide Integrated Waste Management Plan 2020 Annual Report,* October 2021.

Public Services

A project could have a significant impact on public services if it were to generate substantial new demand for services through population or employment growth, result in additional demand for service due to insecure design or cause a decrease in service response times due to traffic congestion.

The Los Angeles Police Department provides police protection services for the Project site. The area is served by the Northeast community Police Station located approximately 4.1 miles north of the Project site. The Los Angeles Fire Department would provide fire protection and emergency medical services for the Project site. The area is served by Station 20, located approximately 0.3 miles southeast of the Project site. As described previously, the Project would not result in a substantial increase in population within the service area. Therefore, the Project would not create the need to construct new or expanded police, fire protection or emergency medical facilities.

The Project would construct new residences but would not result in substantial population growth within the overall community. The development would be required to pay all applicable school and public facility fees. As such, impacts on schools and other publics facilities would be less than significant.

For the reasons set forth above, the Project can adequately be served by all required utilities and public services and therefore the Project meets this criterion for the Class 32 Exemption.

INAPPLICABILITY OF EXCEPTIONS

As discussed below, the exceptions set forth in CEQA Guideline 15300.2 do not apply to the Project.

(a) Location.

This exception applies only to exemption Class 3, 4, 5, 6, and 11, and does not apply to exemption Class 32. Because the Project meets the criteria for exemption Class 32, this exception does not apply.

(b) Cumulative Impact.

A categorical exemption is inapplicable "when the cumulative impact of successive projects of the same type in the same place, over time is significant." The Project consists of redevelopment of a commercial site with new residential uses that are consistent with the existing General Plan and zoning. As discussed in these Findings, the Project would not generate a considerable increase in population, traffic, noise, or air pollutant emissions nor would it result in any other substantial impacts compared to existing uses of the site. As such, successive development in the surrounding area of a similar type - replacement of older commercial uses with new zoning-compliant mixed-use development - would not generate substantial cumulative conditions and in fact would further the policy goals of the City.

Based on information from LADOT, seven related projects have been identified in the surrounding area, as listed in the Project's Traffic Assessment included as Appendix A to this document. Six of these are similar mixed-use or multi-family residential projects ranging from 47 to 170 units; the seventh is a restaurant and retail project. These projects are spaced apart along the Sunset Boulevard corridor with enough separation that there would not be cumulative construction noise or cumulative localized air quality effects. As noted previously, projects that do not have individual impacts with respect to regional air quality or vehicle miles travelled are considered to not have a considerable contribution to cumulative effects. The Project is also within the growth projections that inform public service facility and utility capacity planning. As such it would not have a considerable contribution to cumulative impacts. As such, this exception does not apply.

(c) Unusual Circumstances.

A categorical exemption is inapplicable when there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. Unusual circumstances could occur if the Project site were featured conditions or a location substantially different than typically associated with the existing or proposed uses. The Project is located on a previously developed site in an existing urban area. Comparable uses exist on the site and in the vicinity of the Project site. The Project site is comparable in size and features to adjacent parcels of similar zoning and use. The site is not within any designated scenic, agricultural, historic, mineral, natural resource or wildfire hazard area. The site is not within a hillside area, nor does it contain any unusual geologic features or soil conditions. The building would be designed and constructed in accordance with applicable building codes, including seismic and energy codes. As

such, there are no unusual circumstances associated with the Project site or the proposed Project. Therefore, this exception does not apply.

(d) Scenic Highways.

The Project site is not located in a scenic highway area.[23] No unique ecological, geologic features or rock outcroppings are located on the Project site. Accordingly, this exception does not apply.

(e) Hazardous Waste Sites.

This exception applies if a project is included on any list compiled pursuant to Section 65962.5 of the Government Code. Section 65962.5 of the California Government Code requires the Department of Toxic Substances Control, Department of Health Services, and Water Resources Control Board to compile lists of hazardous waste sites. The Project site is not included on any list compiled pursuant to Section 65962.5.[24] As such, this exception would not apply.

(f) Historical Resources.

The Project site does not contain any features that are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources. The Project site is not identified as a historic resource in HistoricPlacesLA, SurveyLA or other City parcel reports or references. Due to the distance from the Project site, implementation of the Project would not alter any of the physical characteristics of nearby historic resources, including through construction activities, vibration from off-road equipment, and operation of the Project. Therefore, this exception does not apply.

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23 City of Los Angeles, Department of City Planning, *Mobility Plan 2035,* Appendix B: Inventory of Designated Scenic Highways and Guidelines.

24 https://geotracker.waterboards.ca.gov/ accessed January 2023

AIR QUALITY STUDY

2511 SUNSET MIXED-USE PROJECT

2511 W. Sunset Boulevard, Los Angeles, CA 90026

PREPARED FOR:

Gonzales Law Group
707 Wilshire Boulevard, Suite 4350
Los Angeles, CA 90017

PREPARED BY:

Meridian Consultants

860 Hampshire Road, Suite P
Westlake Village, CA 91361

DECEMBER 2023

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Tables

EXECUTIVE SUMMARY

The Project site is located at 2511 Sunset Boulevard Avenue (APN 5402-015-004, 5402-015-005, 5402-012-006, and 5402-015-007) within the Silver Lake-Echo Park-Elysian Valley Community Plan Area in the City of Los Angeles (City), as shown in Figure 1: Project Site Location. The Project site is approximately 27,055 square feet (0.62 acres) in size and currently consists of 6,681.5 square feet of commercial space, including a 4,336 square foot liquor store on the eastern portion of the site and a recycling center on the western portion of the site. The Project site is Zoned [Q]C2-1VL (commercial zone that allows both commercial and high-density residential uses) with a General Plan Designation of Community Commercial. The Project site is surrounded by single- and multi-family uses along Elsinore Street to the north, Rampart Boulevard to the south, Coronado Street to the east and Benton Way to the west.

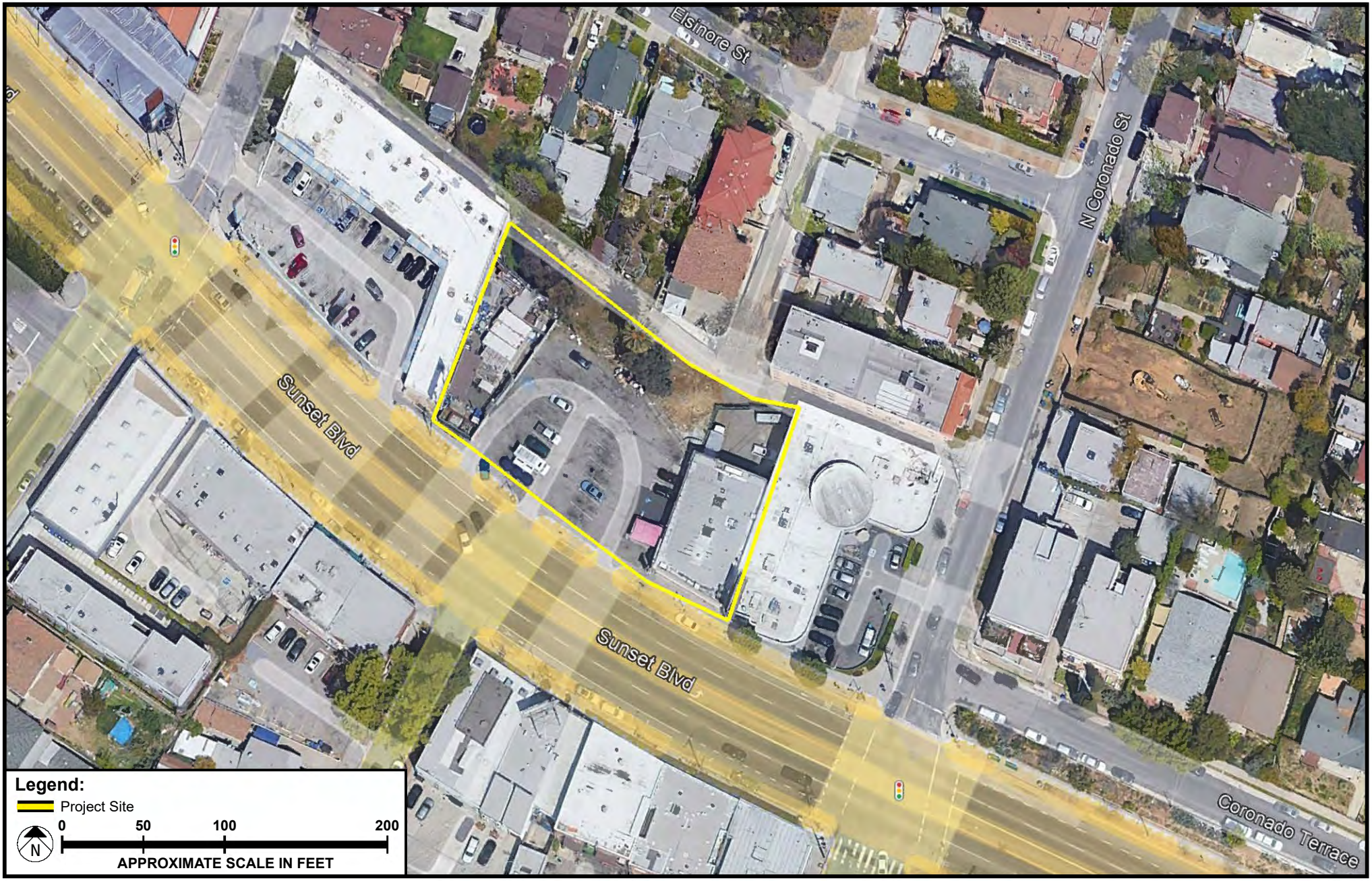
The Project includes removal of the existing uses to construct a new five (5) story 121-unit mixed use building consisting of 3,603 square feet of commercial and 79 parking spaces provided in a 2-level subterranean garage.

In accordance with requirements under the California Environmental Quality Act (CEQA), this Air Quality Study provides an estimate of emissions for the Project and the potential impacts from associated construction and operation activities. The report includes the categories and types of emission sources resulting from the Project, the calculation procedures used in the analysis, and any assumptions or limitations. This report summarizes the potential for the Project to conflict with an applicable air quality plan, violate an air quality standard or threshold, result in a cumulatively net increase of criteria pollutant emissions, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people.

The findings of the analyses are as follows:

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

Based upon a worst-case assessment, the Project does not result in significant impacts to surrounding land uses from air quality.



SOURCE: Google Earth - 2023

FIGURE **1**

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Project Site Location

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REGULATORY SETTING

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

South Coast Air Quality Management District

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

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

SCAQMD adopted the 2022 AQMP on December 2, 2022.[1] The AQMP includes transportation control measures developed by SCAG from its 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, as well as the integrated strategies and measures needed to meet the NAAQS. The AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS, as well as the latest 24-hour and annual PM2.5 standards.

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

1 SCAQMD, Final 2022 Air Quality Management Plan, adopted December 2, 2022, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=10. Accessed January 2023.

Among the SCAQMD rules applicable to the Project are Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 requires the use of stringent best available control measures (BACMs) to minimize PM10 emissions during grading and construction activities. Rule 1113 limits the VOC content of coatings, with a VOC content limit for flat coatings of 50 grams per liter (g/L).[2] Additional details regarding these rules and other potentially applicable rules are presented as follows.

Rule 402 (Nuisance). This rule states that a "person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."[3]

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement BACMs for all sources and prohibits all forms of visible particulate matter from crossing any property line. BACMs may include application of water or chemical stabilizers to disturbed soils covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); sweeping loose dirt from paved site-access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

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

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

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

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2 SCAQMD, Rule 1113 Architectural Coating (amended September 6, 2013), http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf. Accessed January 2023.

3 SCAQMD, Rule 402—Nuisance, http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-402.pdf. Accessed January 2023.

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

Regional Air Quality

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

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

For evaluation purposes, the SCAQMD territory is divided into 38 source receptor areas (SRAs). These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area. The Project site is within SRA 1, Central Los Angeles.[4] The nearest air monitoring station SCAQMD operates is located at 1610 North Main Street in Los Angeles. This station monitors O3, NO2, PM10, and PM2.5. Table 1: Air Quality Monitoring Summary summarizes published monitoring data from 2019 through 2021, the most recent 3-year period available. The data shows that during the past few years, the region has exceeded the O3, PM10, and PM2.5 standards.

4 SCAQMD, General Forecast Areas and Air Monitoring Areas, map, http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf. Accessed January 2023.

TABLE 1
AIR QUALITY MONITORING SUMMARY

Air Pollutant	Average Time (Units)	2019	2020	2021
Ozone (O3)	State Max 1 hour (ppm)	0.093	0.185	0.099
	Days > CAAQS threshold (0.09 ppm)	0	14	1
	National Max 8 hour (ppm)	0.080	0.118	0.085
	Days > NAAQS threshold (0.075 ppm)	2	22	2
	State Max 8 hour (ppm)	0.080	0.118	0.086
	Days > CAAQS threshold (0.07 ppm)	2	22	2
Carbon monoxide (CO)		—	—	—
Nitrogen dioxide (NO2)	National Max 1 hour (ppm)	0.070	0.062	0.078
	Days > NAAQS threshold (0.100 ppm)	0	0	0
	State Max 1 hour (ppm)	0.069	0.061	0.077
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Respirable particulate matter (PM10)	National Max (µg/m3)	62.4	83.7	64.0
	National Annual Average (µg/m3)	23.0	33.1	26.0
	Days > NAAQS threshold (35 µg/m3)	0	0	0
	State Max (µg/m3)	93.9	185.2	138.5
	State Annual Average (µg/m3)	--	33.9	30.9
Fine particulate matter (PM2.5)	National Max (µg/m3)	43.5	175.0	61.0
	National Annual Average (µg/m3)	10.8	13.7	12.8
	Days > NAAQS threshold (35 µg/m3)	1	12	13
	State Max (µg/m3)	43.5	175.0	61.1
	State Annual Average (µg/m3)	10.8	15.0	14.8

Source: CARB, iADAM: Air Quality Data Statistics.
Note: (—) = Data not available.

USEPA and the CARB designate air basins where AAQS are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. The current attainment designations for the Basin are shown in Table 2: South Coast Air Basin Attainment Status. The Basin is currently designated as being in nonattainment at the federal level for O3 and PM2.5; and at the State level for O3, PM10, and PM2.5.

TABLE 2
SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	State Status	National Status
Ozone (O3)	Nonattainment	Nonattainment
Carbon monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen dioxide (NO2)	Attainment	Unclassified/Attainment
Sulfur dioxide (SO2)	Attainment	Unclassified/Attainment
Respirable particulate matter (PM10)	Nonattainment	Attainment
Fine particulate matter (PM2.5)	Nonattainment	Nonattainment

Source: California Air Resources Board (CARB) Area Designation Maps / State and National, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed January 2023.

Existing Operational Emission

As mentioned previously, the Project site currently consists of a 6,681.5 square commercial space including a 4,336 square foot liquor store on the eastern portion of the site and a recycling center on the western portion of the site. Table 3: Existing Operational Emissions identifies the existing emissions these uses. The most current CARB-approved, SCAQMD-recommended air quality modeling software, the California Emissions Estimator Model (CalEEMod), was used to estimate the existing air quality operational emissions.

TABLE 3
EXISTING OPERATIONAL EMISSIONS

	VOC	NOx	CO	SOx	PM10	PM2.5
Source	pounds/day					
Area	0.2	<0.1	0.3	<1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	1	1	9	<0.1	1	0.1
Total	**2**	**<1**	**10**	**<1**	**<1**	**<1**
SCAQMD Mass Daily Regional Threshold	55	55	550	150	150	55
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.
Refer to Attachment A.1: CalEEMod Air Quality Emission Output Files - Existing.

Sensitive Receptors

SCAQMD considers a sensitive receptor to be a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. Sensitive receptors are identified near sources of air pollution to determine the potential for health hazards. Locations evaluated for exposure to air pollution include but are not limited to residences, schools, hospitals, and convalescent facilities. As mentioned previously, the Project site is surrounded by single- and multi-family residential uses along Elsinore Street to the north, Rampari Boulevard to the south, Coronado Street to the east and Benton Way to the west (refer to Figure 2: Sensitive Receptor Map).

SOURCE: Google Earth - 2023

FIGURE **2**

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Sensitive Receptor Map

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Construction

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

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

- **Control Efficiency of PM10.** During construction, methods and techniques should be applied to various operations or equipment when appropriate to reduce estimated emissions related to particulate matter. This includes replacing ground cover in disturbed areas as quick as possible, yielding to emission reduction efficiency of 15 – 49 percent.[5]

In addition, SCAQMD Staff recommends that the Lead Agency require the use of Tier 4 construction equipment of 50 horsepower or greater during construction. Alternative, applicable strategies include equipment outfitted with Best Available Control Technology (BACT) devices and CARB certified Level 3 Diesel Particulate Filters (DPF). Level 3 DPFs are capable of achieving at least an 85 percent reduction in particulate matter emissions.[6] The condition detailed below would be considered a regulatory compliance measure, however, conservatively this analysis only takes into account reductions from control efficiency of PM10 listed above.

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

5 SCAQMD, CEQA Handbook, Tables 11-4, p. 11-15 and A11-9-A, page A11-77, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-sample-construction-scenario-report.pdf. Accessed January 2023.

6 California Air Resources Board, Verification Procedure: Stationary, https://ww2.arb.ca.gov/our-work/programs/verification-procedure-warranty-and-use-compliance-requirements-use-strategies-4. Accessed January 2023.

The emissions are estimated using the CalEEMod software, an emissions inventory software program recommended by SCAQMD. CalEEMod is based on outputs from the CARB off-road emissions model (OFFROAD) and the CARB on-road vehicle emissions model (EMFAC), which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, including on- and off-road vehicles. The input values used in this analysis are based on conservative assumptions in CalEEMod, with appropriate Project-specific adjustments based on equipment types and expected construction activities. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Attachment A.

Operation

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

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

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

SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

The determination of a project's significance on air quality shall be made considering the factors provided in the SCAQMD *CEQA Air Quality Handbook* (Handbook). The City has not adopted specific Citywide significance thresholds for air quality impacts; rather, the thresholds and methodologies contained in the SCAQMD Handbook for both construction and operational emissions are utilized for evaluating projects in the City. These thresholds are described below.

Construction Emission Thresholds

The Project will have a significant impact if it exceeds the regional construction thresholds, as listed in Table 4: Construction Thresholds.

TABLE 4
CONSTRUCTION THRESHOLDS

Pollutant	Construction Emissions (pounds/day)
Volatile organic compounds (VOCs)	75
Nitrogen dioxide (NO2)	100
Carbon monoxide (CO)	550
Sulfur dioxide (SO2)	150
Respirable particulate matter (PM10)	150
Fine particulate matter (PM2.5)	55

Construction and Operational Localized Significance Thresholds

The local significance thresholds are based on the SCAQMD's Final *Localized Significance Threshold (LST) Methodology* (LST Methodology)[7] guidance document for short-duration construction activities. The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site because of construction activities. The SCAQMD provides voluntary guidance on the evaluation of localized air quality impacts to public agencies conducting environmental review of projects located within its jurisdiction. Localized air quality impacts are evaluated by examining the on-site generation of pollutants and their resulting downwind concentrations. For construction, pollutant concentrations are compared to significance thresholds for particulates (PM10 and PM2.5), CO, and NO2. The significance threshold for PM10 represents compliance with SCAQMD Rule 403 (Fugitive Dust). The threshold for PM2.5 is designed to limit emissions and to allow progress toward

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

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

The LST Methodology provides lookup tables of emissions that are based on construction projects of up to 5 acres in size. These LST lookup tables were developed to assist lead agencies with a simple tool for evaluating the impacts from small typical projects. Ambient conditions for Central Los Angeles, as recorded in SRA 1 by the SCAQMD, were used for ambient conditions in determining appropriate threshold levels. The screening criteria are linearly interpolated for a 0.62-acre site and are listed in Table 5: Localized Significance Thresholds.

TABLE 5
LOCALIZED SIGNIFICANCE THRESHOLDS

	Construction	Operational
Pollutant	pounds/day	
Nitrogen dioxide (NO2)	61	61
Carbon monoxide (CO)	540	540
Respirable particulate matter (PM10)	4	2
Fine particulate matter (PM2.5)	2	1

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

Based on the SCAQMD Handbook, regional thresholds for each criteria pollutant for the operations of the Project are provided in Table 6: Operational Thresholds.

TABLE 6
OPERATIONAL THRESHOLDS

Pollutant	**Operational Emissions (pounds/day)**
Volatile organic compounds (VOCs)	55
Nitrogen dioxide (NO2)	55
Carbon monoxide (CO)	550
Sulfur dioxide (SO2)	150
Respirable particulate matter (PM10)	150
Fine particulate matter (PM2.5)	55

Toxic Air Contaminants

As set forth in the SCAQMD Handbook, the determination of significance of a project with respect TACs shall be made on a case-by-case basis, considering the following factors:

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

Consistency with Applicable Air Quality Plans

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

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

Cumulative Threshold

SCAQMD recommends that a project be considered to result in a cumulatively considerable impact to air quality if any construction-related emissions and operational emissions from individual development projects exceed the mass daily emissions thresholds for individual projects.[8]

The SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions. A project is also considered to result in a cumulatively considerable contribution to significant impacts if the population and employment projections for the project exceed the rate of growth defined in SCAQMD's AQMP.

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

Daily emissions during construction and operation are forecasted based on conservative construction assumptions provided by the Applicant. This includes anticipated construction schedule, equipment for each phase, and the amount of debris to be hauled off-site. The California Air Pollution Control Officer's Association and SCAQMD recommends the use CalEEMod to calculate and organize emissions data for new development projects. CalEEMod is a program that relies on project-specific information pertaining to geographic setting, utility service provision, construction scheduling and equipment inventory, and operational design features to generate estimates of air pollutant and GHG emissions.

Construction

Table 7: Project Construction Schedule forecasts a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) as well as a brief description of the scope of work. Future dates represent approximations based on the general Project timeline and are subject to change pending unpredictable circumstances that may arise. However, the input values used in this analysis are based on conservative assumptions with a compressed construction duration to provide maximum emission values during construction.

TABLE 7
PROJECT CONSTRUCTION SCHEDULE

Construction Activity	Approximate Start Date	Approximate End Date	Duration (Days)	Description
Demolition	3/1/2024	4/1/2024	22	Demolition of approximately 16,681.5 square feet of building and 10,000 square feet of parking lot
Grading/Excavation	4/2/2024	7/2/2024	66	Grading of the Project site and export of 20,700 cubic yards of soil
Concrete Structure	7/3/2024	3/31/2025	194	Construction of Proposed Project
Framing & MEP Rough-In	4/1/2025	9/30/2025	131	Paving of asphalt surfaces
Final Inspection, Punchlist, Drywall Finishing	10/1/2025	3/1/2026	108	Application of architectural coatings to building materials

Note: Refer to Attachment A.2: CalEEMod Air Quality Emission Output Files - Proposed.

An assessment of air pollutant emissions was prepared utilizing the construction schedule in Table 7. As mentioned previously, an inventory of construction equipment, including the number and types of equipment, which is analytically assumed to be operating simultaneously within the Project Site was conservatively identified by the Applicant for each phase/component of construction and shown in Table 8: Project Construction Diesel Equipment Inventory. Under regulatory compliance measures in CalEEMod, it would be required that all construction activities adhere to SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

TABLE 8
PROJECT CONSTRUCTION DIESEL EQUIPMENT INVENTORY

Phase	Off-Road Equipment Type	Amount	Daily Hours	Horsepower [HP] (Load Factor)
Demolition	Concrete/Industrial Saws	1	8	33 (0.73)
	Crushing/Proc. Equipment	1	1	12 (0.85)
	Dumpers/Tenders	1	6	16 (0.38)
	Excavator	1	8	36 (0.38)
Grading/Excavation	Bore/Drill Rigs	1	6	83 (0.50)
	Cement and Mortar Mixers	1	6	10 (0.56)
	Dumpers/Tenders	2	7	16 (0.38)
	Excavators	1	8	36 (0.38)
	Forklifts	1	8	82 (0.20)
	Generator Sets	1	8	14 (0.74)
Concrete Structure	Air Compressors	1	6	367 (0.29)
	Cement and Mortar Mixers	1	6	82 (0.20
	Concrete/Industrial Saws	1	8	84 (0.37)
	Forklifts	1	6	82 (0.20)
	Generator Sets	1	8	14 (0.74)
	Pumps	1	8	11 (0.74)
Framing & MEP Rough-In	Air Compressors	2	6	10 (0.56)
	Cranes	1	4	81 (0.42)
	Forklifts	1	6	36 (0.38)
Final Inspection, Punchlist, Drywall Finishing	Air Compressors	2	6	37 (0.48)
	Cement and Mortar Mixers	2	6	10 (0.56)
	Concrete Industrial Saws	1	8	33 (0.73)
	Forklifts	1	6	82 (0.20)
	Pavers	1	8	81 (0.42)
	Pressure Washers	1	8	14 (0.30)

Refer to Attachment A.2: CalEEMod Air Quality Emission Output Files - Proposed, for equipment inventory information.

Maximum daily emissions of air pollutants during construction of the Project were calculated using CalEEMod. Table 9: Maximum Construction Emissions identifies daily emissions that are estimated for peak construction days for each construction year. It is important to note, emissions presented in Table 9 do not include regulatory compliance measures such as construction equipment controls (Tier 3 emissions standards with Level 3 DPF) and control efficiency of PM10 (dust control measures) to provide a worst-case scenario analysis. Based on the modeling, construction of the Project would not exceed regional VOC, NOx, CO, SOx, PM10, and PM2.5 concentration thresholds. All criteria air pollutants would be below SCAQMD construction thresholds. As such, construction of the Project would not generate any significant environmental impacts associated with air quality compliance. Adherence to regulatory compliance measures would result in even lower construction emissions.

TABLE 9
MAXIMUM CONSTRUCTION EMISSIONS

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
2024	5	8	14	<0.1	2	1
2025	7	8	13	<0.1	2	1
2026	7	6	9	<0.1	1	<1
Maximum	7	8	14	<0.1	2	1
SCAQMD Mass Daily Regional Threshold	75	100	550	150	150	55
Threshold exceeded?	No	No	No	No	No	No

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

Refer to Attachment A.2: CalEEMod Air Quality Emission Output Files - Proposed.

Operation

Operational emissions would result primarily from passenger vehicles traveling to and from the Project site. The results presented in Table 10: Maximum Operational Emissions are compared to the SCAQMD-established operational significance thresholds. It is important to note, emissions presented in Table 10 include regulatory compliance measures such as compliance with green building standards, which are enforced during the construction plan check process by the Los Angeles Department of Building and Safety. As shown in Table 10, the operational emissions would not exceed the regional VOC, NOx, CO, SOx, PM10, and PM2.5 concentration thresholds. Operation of the Project would not generate any significant environmental impacts associated with air quality compliance.

TABLE 10
MAXIMUM OPERATIONAL EMISSIONS

Source	VOC	NOx	CO	SOx	PM10	PM2.5
	pounds/day					
Area	3	2	9	<0.1	0.1	0.1
Energy	<0.1	0.3	0.1	<0.1	<1	<1
Mobile	3	2	9	<0.1	2	0.3
Total	**6**	**4**	**18**	**<0.1**	**2**	**0.5**
SCAQMD Mass Daily Regional Threshold	55	55	550	150	150	55
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.
CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; SOx = sulfur oxides; VOC = volatile organic compounds.

Refer to Attachment A.2: CalEEMod Air Quality Emission Output Files - Proposed.

Localized Significance Thresholds

As mentioned previously, the localized air quality analysis was conducted using the methodology described in the SCAQMD Localized Significance Threshold Methodology. The screening criteria for a 0.62 acre site were used to determine localized emissions thresholds for the Project. The localized emissions and thresholds are provided in Table 11: Localized Construction and Operational Emissions. As shown in Table 11, emissions would not exceed the localized significance construction and operational thresholds.

TABLE 11
LOCALIZED CONSTRUCTION AND OPERATIONAL EMISSIONS

	NOx	CO	PM10	PM2.5
Source	On-Site Emissions (pounds/day)			
Construction				
Total maximum emissions	6	9	<1	<1
LST threshold	61	540	4	2
Threshold Exceeded?	No	No	No	No
Operational				
Project area/energy emissions	2	9	0.1	0.1
LST threshold	61	540	2	1
Threshold Exceeded?	No	No	No	No

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

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

Refer to Attachment A.2: CalEEMod Air Quality Emission Output Files - Proposed.

Toxic Air Contaminants

Project construction would result in short-term emissions of diesel particulate matter, which is a TAC. Off-road heavy-duty diesel equipment would emit diesel particulate matter over the course of the construction period. Sensitive receptors are located adjacent to the Project site. Localized diesel particulate emissions (strongly correlated with PM2.5 emissions) would be minimal and would be substantially below localized thresholds, as shown in Table 11. Project compliance with the CARB anti-idling measure, which limits idling to no more than 5 minutes at any location for diesel-fueled commercial vehicles, would further minimize diesel particulate matter emissions in the Project area.

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

Odors

As shown in Table 11, the construction of the Project would result in emissions below the localized significance thresholds. Mandatory compliance with SCAQMD Rule 1113 would limit the number of VOCs in architectural coatings and solvents. According to SCAQMD, while almost any source may emit objectionable odors, some land uses are more likely to produce odors because of their operation. Land uses more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding manufacturing, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The Project does not contain any active manufacturing activities and would not convert current agricultural land to residential land uses. Therefore, objectionable odors would not be emitted by the proposed uses.

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

Consistency with AQMP

The Basin is designated nonattainment at the federal level for O3 and PM2.5 and State level for O3, PM10, and PM2.5. SCAQMD developed regional emissions thresholds, as shown in Table 4 and Table 6 to determine whether a project would contribute to air pollutant violations. If a project exceeds the regional air pollutant thresholds, then it would significantly contribute to air quality violations in the Basin.

As shown in Table 9, temporary emissions associated with construction of the Project would fall below SCAQMD thresholds for VOCs, NOx, CO, SOx, PM10, and PM2.5. As shown in Table 10, long-term emissions associated with operation of the Project would not exceed SCAQMD thresholds for VOCs, NOx, CO, SOx, PM10, and PM2.5. The Project's maximum potential NOx, CO, PM10, and PM2.5 daily emissions during construction and operation were analyzed to determine potential effects on localized concentrations and to determine if the potential exists for such emissions to cause or affect a violation of an applicable AAQS. As shown in Table 11, NOx, CO, PM10, and PM2.5 emissions would not exceed the SCAQMD localized significance thresholds.

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

Cumulative Impacts

SCAQMD recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As shown in Table 9 and Table 11, regional emissions calculated would be less than the applicable SCAQMD daily significance thresholds for construction and operation, respectively. The thresholds are designed to assist the region in attaining the applicable state and national ambient air quality standards. Although the Project site is located in a region that is in non-attainment for O_3, PM10, and PM2.5, the emissions associated with the Project would not be cumulatively considerable as the emissions would fall below SCAQMD daily significance thresholds. Therefore, construction of the Project would result in cumulative impacts that would not be considered significant.

Additionally, with the implementation of regulatory compliance measures such as Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coating), the Project's construction and operational emissions are not expected to significantly contribute to cumulative emissions for CO, NOx, PM10, and PM2.5. As such, the Project's contribution to cumulative air quality emissions in combination with the related projects would not be cumulatively considerable.

As discussed previously, the Project would not jeopardize the attainment of air quality standards in the 2022 AQMP for the South Coast Air Basin and the Los Angeles County portion of the South Coast Air Basin. As such, the Project would not have a cumulatively considerable contribution to a potential conflict with or obstruction of the implementation of the AQMP regional reduction plans.

CERTIFICATION

The contents of this Air Quality Study represent an accurate depiction of the air quality environment and impacts associated with the proposed 2511 Sunset Mixed-Use Project. The information contained in this study is based on the best available information at the time of preparation. If you have any questions, please contact me directly at (818) 415-7274.

Christ Kirikian
Principal | Director of Air Quality & Acoustics
ckirikian@meridianconsultantsllc.com

ATTACHMENT A

CalEEMod Air Quality Emission Output Files

ATTACHMENT A.1

Existing

2511 Sunset (Existing) Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	2511 Sunset (Existing)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	34.08003138305823, -118.26939291656983
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4023
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas

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
Free-Standing Discount store	6.00	1000sqft	0.14	6,682	0.00	—	—	—

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.63	1.68	0.90	9.68	0.02	0.01	0.58	0.60	0.01	0.10	0.12	14.8	1,939	1,954	1.61	0.09	7.46	2,028
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.60	0.98	8.98	0.02	0.01	0.58	0.60	0.01	0.10	0.12	14.8	1,863	1,878	1.62	0.09	0.22	1,946
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.28	1.35	0.82	7.73	0.01	0.01	0.49	0.50	0.01	0.09	0.10	14.8	1,599	1,614	1.59	0.08	2.72	1,679
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.25	0.15	1.41	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	2.44	265	267	0.26	0.01	0.45	278
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshol	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.58	1.47	0.89	9.39	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,796	1,796	0.12	0.08	7.43	1,832
Area	0.05	0.21	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.19	1.19	< 0.005	< 0.005	—	1.23
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	136	136	0.01	< 0.005	—	137
Water	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.63	1.68	0.90	9.68	0.02	0.01	0.58	0.60	0.01	0.10	0.12	14.8	1,939	1,954	1.61	0.09	7.46	2,028
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.55	1.44	0.97	8.97	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,721	1,721	0.13	0.09	0.19	1,751
Area	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	136	136	0.01	< 0.005	—	137
Water	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.55	1.60	0.98	8.98	0.02	0.01	0.58	0.60	0.01	0.10	0.12	14.8	1,863	1,878	1.62	0.09	0.22	1,946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.24	1.15	0.81	7.52	0.01	0.01	0.49	0.50	0.01	0.09	0.10	—	1,456	1,456	0.10	0.07	2.69	1,483

Area	0.04	0.19	< 0.005	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.82	0.82	< 0.005	< 0.005	—	0.84
Energy	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	136	136	0.01	< 0.005	—	137
Water	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.28	1.35	0.82	7.73	0.01	0.01	0.49	0.50	0.01	0.09	0.10	14.8	1,599	1,614	1.59	0.08	2.72	1,679
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.23	0.21	0.15	1.37	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	241	241	0.02	0.01	0.44	246
Area	0.01	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.14	0.14	< 0.005	< 0.005	—	0.14
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	0.95	1.09	0.01	< 0.005	—	1.56
Waste	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.23	0.25	0.15	1.41	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	2.44	265	267	0.26	0.01	0.45	278

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	1.58	1.47	0.89	9.39	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,796	1,796	0.12	0.08	7.43	1,832

Total	1.58	1.47	0.89	9.39	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,796	1,796	0.12	0.08	7.43	1,832
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	1.55	1.44	0.97	8.97	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,721	1,721	0.13	0.09	0.19	1,751
Total	1.55	1.44	0.97	8.97	0.02	0.01	0.58	0.60	0.01	0.10	0.12	—	1,721	1,721	0.13	0.09	0.19	1,751
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	0.23	0.21	0.15	1.37	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	241	241	0.02	0.01	0.44	246
Total	0.23	0.21	0.15	1.37	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	241	241	0.02	0.01	0.44	246

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.01	< 0.005	—	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.01	< 0.005	—	126
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Free-Sta Discount store	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.01	< 0.005	—	126
Total	—	—	—	—	—	—	—	—	—	—	—	—	126	126	0.01	< 0.005	—	126
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Sta nding Discount store	—	—	—	—	—	—	—	—	—	—	—	—	20.8	20.8	< 0.005	< 0.005	—	20.9
Total	—	—	—	—	—	—	—	—	—	—	—	—	20.8	20.8	< 0.005	< 0.005	—	20.9

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Sta nding Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Sta nding Discount store	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Total	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Free-Standing Discount store	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.75	1.75	< 0.005	< 0.005	—	1.75
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.75	1.75	< 0.005	< 0.005	—	1.75

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.05	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.19	1.19	< 0.005	< 0.005	—	1.23
Total	0.05	0.21	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.19	1.19	< 0.005	< 0.005	—	1.23
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.14	0.14	< 0.005	< 0.005	—	0.14
Total	0.01	0.04	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.14	0.14	< 0.005	< 0.005	—	0.14

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Total	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Total	—	—	—	—	—	—	—	—	—	—	—	0.85	5.72	6.57	0.09	< 0.005	—	9.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	0.14	0.95	1.09	0.01	< 0.005	—	1.56
Total	—	—	—	—	—	—	—	—	—	—	—	0.14	0.95	1.09	0.01	< 0.005	—	1.56

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Total	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Total	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06
Total	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Free-Standing Discount store	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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

5.9. 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
Free-Standing Discount store	319	425	361	124,070	1,687	2,102	1,788	642,689

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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)
0	0.00	10,022	3,341	—

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)
Free-Standing Discount store	66,525	690	0.0489	0.0069	32,901

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Free-Standing Discount store	444,435	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Free-Standing Discount store	25.8	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
Free-Standing Discount store	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Free-Standing Discount store	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	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

5.16. 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. Biomass Cover Type

5.18.1.1. Unmitigated

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)

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	9.58	annual days of extreme heat
Extreme Precipitation	6.70	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 ¾ 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.

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	88.8
AQ-DPM	62.9
Drinking Water	92.5
Lead Risk Housing	72.5
Pesticides	0.00
Toxic Releases	75.6
Traffic	97.7
Effect Indicators	—
CleanUp Sites	44.2
Groundwater	43.8
Haz Waste Facilities/Generators	66.6
Impaired Water Bodies	66.7
Solid Waste	0.00
Sensitive Population	—
Asthma	63.7
Cardio-vascular	60.6
Low Birth Weights	38.7
Socioeconomic Factor Indicators	—

Education	68.2
Housing	87.2
Linguistic	77.1
Poverty	68.5
Unemployment	40.6

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	41.67842936
Employed	75.70896959
Median HI	27.51186963
Education	—
Bachelor's or higher	70.21686129
High school enrollment	1.231874759
Preschool enrollment	85.15334274
Transportation	—
Auto Access	16.15552419
Active commuting	87.91222892
Social	—
2-parent households	59.97690235
Voting	21.62196843
Neighborhood	—
Alcohol availability	13.02450917
Park access	32.10573592
Retail density	85.87193635

Supermarket access	94.25125112
Tree canopy	60.5800077
Housing	—
Homeownership	15.97587579
Housing habitability	6.03105351
Low-inc homeowner severe housing cost burden	9.611189529
Low-inc renter severe housing cost burden	37.66200436
Uncrowded housing	14.5515206
Health Outcomes	—
Insured adults	31.25882202
Arthritis	84.5
Asthma ER Admissions	36.7
High Blood Pressure	74.3
Cancer (excluding skin)	71.8
Asthma	65.7
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	74.0
Diagnosed Diabetes	48.6
Life Expectancy at Birth	82.7
Cognitively Disabled	78.9
Physically Disabled	65.4
Heart Attack ER Admissions	51.2
Mental Health Not Good	45.5
Chronic Kidney Disease	64.9
Obesity	46.0
Pedestrian Injuries	81.7
Physical Health Not Good	45.1

Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	36.9
Current Smoker	45.9
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—
Wildfire Risk	92.7
SLR Inundation Area	0.0
Children	25.4
Elderly	68.4
English Speaking	22.5
Foreign-born	85.2
Outdoor Workers	80.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	21.7
Traffic Density	74.1
Traffic Access	87.4
Other Indices	—
Hardship	67.8
Other Decision Support	—
2016 Voting	39.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	84.0
Healthy Places Index Score for Project Location (b)	33.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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	Existing liquor store

ATTACHMENT A.2

Proposed

2511 Sunset (Proposed) Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	2511 Sunset (Proposed)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	34.07998314827044, -118.26940216350711
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4023
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas

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
Apartments Mid Rise	121	Dwelling Unit	0.62	101,458	3,401	—	358	—
Regional Shopping Center	3.00	1000sqft	0.00	3,122	0.00	—	—	—

Enclosed Parking with Elevator	84.0	Space	0.00	33,600	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.78	4.64	8.19	14.9	0.03	0.31	1.50	1.81	0.29	0.36	0.64	—	3,846	3,846	0.19	0.46	7.35	3,994
Mit.	4.78	4.64	8.19	14.9	0.03	0.31	1.50	1.81	0.29	0.36	0.64	—	3,846	3,846	0.19	0.46	7.35	3,994
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.78	7.01	8.15	13.7	0.02	0.31	1.50	1.81	0.29	0.36	0.64	—	3,427	3,427	0.15	0.15	0.19	3,475
Mit.	4.78	7.01	8.15	13.7	0.02	0.31	1.50	1.81	0.29	0.36	0.64	—	3,427	3,427	0.15	0.15	0.19	3,475
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.96	1.57	4.65	6.97	0.01	0.16	0.74	0.91	0.15	0.18	0.33	—	1,993	1,993	0.09	0.14	1.75	2,040
Mit.	0.96	1.57	4.65	6.97	0.01	0.16	0.74	0.91	0.15	0.18	0.33	—	1,993	1,993	0.09	0.14	1.75	2,040
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.29	0.85	1.27	< 0.005	0.03	0.14	0.17	0.03	0.03	0.06	—	330	330	0.01	0.02	0.29	338
Mit.	0.18	0.29	0.85	1.27	< 0.005	0.03	0.14	0.17	0.03	0.03	0.06	—	330	330	0.01	0.02	0.29	338
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	4.78	4.64	8.19	14.9	0.03	0.31	1.50	1.81	0.29	0.36	0.64	—	3,846	3,846	0.19	0.46	7.35	3,994
2025	0.36	0.30	2.12	2.96	< 0.005	0.10	0.13	0.23	0.09	0.03	0.12	—	487	487	0.02	0.01	0.51	490
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.78	4.64	8.15	13.7	0.02	0.31	1.50	1.81	0.29	0.36	0.64	—	3,427	3,427	0.15	0.15	0.19	3,475
2025	1.35	7.01	7.57	13.1	0.02	0.28	1.50	1.78	0.25	0.36	0.61	—	3,389	3,389	0.15	0.15	0.18	3,436
2026	0.97	6.96	6.27	8.78	0.01	0.22	0.27	0.49	0.20	0.06	0.27	—	1,331	1,331	0.06	0.02	0.02	1,338
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.96	0.82	4.65	6.97	0.01	0.16	0.74	0.91	0.15	0.18	0.33	—	1,993	1,993	0.09	0.14	1.75	2,040
2025	0.55	1.57	3.28	5.01	0.01	0.13	0.36	0.48	0.12	0.08	0.20	—	1,015	1,015	0.04	0.03	0.68	1,026
2026	0.11	0.82	0.74	1.04	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	157	157	0.01	< 0.005	0.05	158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.18	0.15	0.85	1.27	< 0.005	0.03	0.14	0.17	0.03	0.03	0.06	—	330	330	0.01	0.02	0.29	338
2025	0.10	0.29	0.60	0.91	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	168	168	0.01	0.01	0.11	170
2026	0.02	0.15	0.13	0.19	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	25.9	25.9	< 0.005	< 0.005	0.01	26.1

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.78	4.64	8.19	14.9	0.03	0.31	1.50	1.81	0.29	0.36	0.64	—	3,846	3,846	0.19	0.46	7.35	3,994
2025	0.36	0.30	2.12	2.96	< 0.005	0.10	0.13	0.23	0.09	0.03	0.12	—	487	487	0.02	0.01	0.51	490
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.78	4.64	8.15	13.7	0.02	0.31	1.50	1.81	0.29	0.36	0.64	—	3,427	3,427	0.15	0.15	0.19	3,475

2025	1.35	7.01	7.57	13.1	0.02	0.28	1.50	1.78	0.25	0.36	0.61	—	3,389	3,389	0.15	0.15	0.18	3,436
2026	0.97	6.96	6.27	8.78	0.01	0.22	0.27	0.49	0.20	0.06	0.27	—	1,331	1,331	0.06	0.02	0.02	1,338
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.96	0.82	4.65	6.97	0.01	0.16	0.74	0.91	0.15	0.18	0.33	—	1,993	1,993	0.09	0.14	1.75	2,040
2025	0.55	1.57	3.28	5.01	0.01	0.13	0.36	0.48	0.12	0.08	0.20	—	1,015	1,015	0.04	0.03	0.68	1,026
2026	0.11	0.82	0.74	1.04	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	157	157	0.01	< 0.005	0.05	158
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.18	0.15	0.85	1.27	< 0.005	0.03	0.14	0.17	0.03	0.03	0.06	—	330	330	0.01	0.02	0.29	338
2025	0.10	0.29	0.60	0.91	< 0.005	0.02	0.06	0.09	0.02	0.02	0.04	—	168	168	0.01	0.01	0.11	170
2026	0.02	0.15	0.13	0.19	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	25.9	25.9	< 0.005	< 0.005	0.01	26.1

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.82	5.84	3.75	28.5	0.06	0.20	1.67	1.86	0.20	0.30	0.49	59.0	8,336	8,395	6.30	0.23	14.9	8,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.87	4.95	3.82	18.7	0.06	0.19	1.67	1.86	0.19	0.30	0.49	59.0	8,119	8,178	6.31	0.23	1.11	8,407
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.10	5.25	2.17	22.9	0.04	0.06	1.55	1.61	0.06	0.28	0.34	59.0	5,846	5,905	6.26	0.22	6.42	6,133
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.57	0.96	0.40	4.18	0.01	0.01	0.28	0.29	0.01	0.05	0.06	9.76	968	978	1.04	0.04	1.06	1,015

Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	55.0	55.0	550	150	—	—	150	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.67	2.44	1.66	19.2	0.05	0.03	1.67	1.70	0.03	0.30	0.32	—	4,650	4,650	0.23	0.19	14.2	4,725
Area	1.12	3.38	1.79	9.19	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,191	2,191	0.04	< 0.005	—	2,193
Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	3.82	5.84	3.75	28.5	0.06	0.20	1.67	1.86	0.20	0.30	0.49	59.0	8,336	8,395	6.30	0.23	14.9	8,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.64	2.41	1.81	17.8	0.04	0.03	1.67	1.70	0.03	0.30	0.32	—	4,457	4,457	0.24	0.20	0.37	4,522
Area	0.20	2.52	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168

Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	2.87	4.95	3.82	18.7	0.06	0.19	1.67	1.86	0.19	0.30	0.49	59.0	8,119	8,178	6.31	0.23	1.11	8,407
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.21	1.69	16.9	0.04	0.03	1.55	1.58	0.02	0.28	0.30	—	4,185	4,185	0.22	0.18	5.68	4,250
Area	0.64	3.02	0.17	5.85	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	165	165	< 0.005	< 0.005	—	166
Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	3.10	5.25	2.17	22.9	0.04	0.06	1.55	1.61	0.06	0.28	0.34	59.0	5,846	5,905	6.26	0.22	6.42	6,133
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.31	3.08	0.01	< 0.005	0.28	0.29	< 0.005	0.05	0.05	—	693	693	0.04	0.03	0.94	704
Area	0.12	0.55	0.03	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	27.4	27.4	< 0.005	< 0.005	—	27.4
Energy	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	238	238	0.02	< 0.005	—	239
Water	—	—	—	—	—	—	—	—	—	—	—	1.50	10.2	11.7	0.15	< 0.005	—	16.7
Waste	—	—	—	—	—	—	—	—	—	—	—	8.26	0.00	8.26	0.83	0.00	—	28.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	0.57	0.96	0.40	4.18	0.01	0.01	0.28	0.29	0.01	0.05	0.06	9.76	968	978	1.04	0.04	1.06	1,015

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.67	2.44	1.66	19.2	0.05	0.03	1.67	1.70	0.03	0.30	0.32	—	4,650	4,650	0.23	0.19	14.2	4,725
Area	1.12	3.38	1.79	9.19	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,191	2,191	0.04	< 0.005	—	2,193
Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	3.82	5.84	3.75	28.5	0.06	0.20	1.67	1.86	0.20	0.30	0.49	59.0	8,336	8,395	6.30	0.23	14.9	8,635
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.64	2.41	1.81	17.8	0.04	0.03	1.67	1.70	0.03	0.30	0.32	—	4,457	4,457	0.24	0.20	0.37	4,522
Area	0.20	2.52	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	2.87	4.95	3.82	18.7	0.06	0.19	1.67	1.86	0.19	0.30	0.49	59.0	8,119	8,178	6.31	0.23	1.11	8,407
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.21	1.69	16.9	0.04	0.03	1.55	1.58	0.02	0.28	0.30	—	4,185	4,185	0.22	0.18	5.68	4,250
Area	0.64	3.02	0.17	5.85	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	165	165	< 0.005	< 0.005	—	166
Energy	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	1,435	1,435	0.11	0.01	—	1,441
Water	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Waste	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Total	3.10	5.25	2.17	22.9	0.04	0.06	1.55	1.61	0.06	0.28	0.34	59.0	5,846	5,905	6.26	0.22	6.42	6,133

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.31	3.08	0.01	< 0.005	0.28	0.29	< 0.005	0.05	0.05	—	693	693	0.04	0.03	0.94	704
Area	0.12	0.55	0.03	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	27.4	27.4	< 0.005	< 0.005	—	27.4
Energy	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	238	238	0.02	< 0.005	—	239
Water	—	—	—	—	—	—	—	—	—	—	—	1.50	10.2	11.7	0.15	< 0.005	—	16.7
Waste	—	—	—	—	—	—	—	—	—	—	—	8.26	0.00	8.26	0.83	0.00	—	28.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	0.57	0.96	0.40	4.18	0.01	0.01	0.28	0.29	0.01	0.05	0.06	9.76	968	978	1.04	0.04	1.06	1,015

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	4.58	2.89	9.08	0.01	0.17	—	0.17	0.14	—	0.14	—	442	442	0.02	< 0.005	—	443
Demolition	—	—	—	—	—	—	0.46	0.46	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	4.58	2.89	9.08	0.01	0.17	—	0.17	0.14	—	0.14	—	442	442	0.02	< 0.005	—	443

Demolition	—	—	—	—	—	—	0.46	0.46	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	0.17	0.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.03	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.41	4.41	< 0.005	< 0.005	—	4.42
Demolition	—	—	—	—	—	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.75	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	141	141	0.01	< 0.005	0.56	143
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
Hauling	0.05	0.01	0.77	0.30	< 0.005	0.01	0.05	0.05	0.01	0.02	0.02	—	615	615	0.03	0.10	1.41	647
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.64	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	134	134	0.01	< 0.005	0.01	135
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
Hauling	0.05	0.01	0.80	0.30	< 0.005	0.01	0.05	0.05	0.01	0.02	0.02	—	616	616	0.03	0.10	0.04	646

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.19	8.19	< 0.005	< 0.005	0.01	8.30
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
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.1	37.1	< 0.005	0.01	0.04	39.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
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
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.14	6.14	< 0.005	< 0.005	0.01	6.45

3.2. Demolition (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	4.58	2.89	9.08	0.01	0.17	—	0.17	0.14	—	0.14	—	442	442	0.02	< 0.005	—	443
Demolition	—	—	—	—	—	—	0.46	0.46	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.68	4.58	2.89	9.08	0.01	0.17	—	0.17	0.14	—	0.14	—	442	442	0.02	< 0.005	—	443
Demolition	—	—	—	—	—	—	0.46	0.46	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.28	0.17	0.55	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.6	26.6	< 0.005	< 0.005	—	26.7
Demolition	—	—	—	—	—	—	0.03	0.03	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.03	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.41	4.41	< 0.005	< 0.005	—	4.42
Demolition	—	—	—	—	—	—	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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.75	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	141	141	0.01	< 0.005	0.56	143
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
Hauling	0.05	0.01	0.77	0.30	< 0.005	0.01	0.05	0.05	0.01	0.02	0.02	—	615	615	0.03	0.10	1.41	647
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.64	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	134	134	0.01	< 0.005	0.01	135
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
Hauling	0.05	0.01	0.80	0.30	< 0.005	0.01	0.05	0.05	0.01	0.02	0.02	—	616	616	0.03	0.10	0.04	646
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.19	8.19	< 0.005	< 0.005	0.01	8.30
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
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.1	37.1	< 0.005	0.01	0.04	39.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.36	1.36	< 0.005	< 0.005	< 0.005	1.37
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
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.14	6.14	< 0.005	< 0.005	0.01	6.45

3.3. Grading (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.52	4.64	5.07	0.01	0.19	—	0.19	0.17	—	0.17	—	834	834	0.03	0.01	—	837
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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	0.92	< 0.005	0.03	—	0.03	0.03	—	0.03	—	151	151	0.01	< 0.005	—	151

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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.0	25.0	< 0.005	< 0.005	—	25.1
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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.32	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	247	247	0.01	0.01	0.97	251
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
Hauling	0.21	0.06	3.46	1.33	0.02	0.03	0.21	0.24	0.03	0.07	0.10	—	2,765	2,765	0.15	0.44	6.35	2,907
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	43.0	43.0	< 0.005	< 0.005	0.08	43.6
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
Hauling	0.04	0.01	0.66	0.24	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	500	500	0.03	0.08	0.50	525
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.11	7.11	< 0.005	< 0.005	0.01	7.21
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

Hauling	0.01	< 0.005	0.12	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	82.8	82.8	< 0.005	0.01	0.08	86.9

3.4. Grading (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.52	4.64	5.07	0.01	0.19	—	0.19	0.17	—	0.17	—	834	834	0.03	0.01	—	837
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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	0.92	< 0.005	0.03	—	0.03	0.03	—	0.03	—	151	151	0.01	< 0.005	—	151
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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.0	25.0	< 0.005	< 0.005	—	25.1

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	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.32	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	247	247	0.01	0.01	0.97	251
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
Hauling	0.21	0.06	3.46	1.33	0.02	0.03	0.21	0.24	0.03	0.07	0.10	—	2,765	2,765	0.15	0.44	6.35	2,907
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.21	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	43.0	43.0	< 0.005	< 0.005	0.08	43.6
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
Hauling	0.04	0.01	0.66	0.24	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	500	500	0.03	0.08	0.50	525
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.11	7.11	< 0.005	< 0.005	0.01	7.21
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
Hauling	0.01	< 0.005	0.12	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	82.8	82.8	< 0.005	0.01	0.08	86.9

3.5. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	6.82	6.81	0.01	0.30	—	0.30	0.28	—	0.28	—	1,447	1,447	0.06	0.01	—	1,452
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	6.82	6.81	0.01	0.30	—	0.30	0.28	—	0.28	—	1,447	1,447	0.06	0.01	—	1,452
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.43	2.42	0.01	0.11	—	0.11	0.10	—	0.10	—	515	515	0.02	< 0.005	—	517
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	0.06	0.05	0.44	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.3	85.3	< 0.005	< 0.005	—	85.6
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	0.51	0.46	0.49	7.71	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,443	1,443	0.06	0.05	5.69	1,465
Vendor	0.05	0.02	0.72	0.35	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	611	611	0.02	0.08	1.66	639
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	0.50	0.45	0.58	6.52	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,368	1,368	0.06	0.05	0.15	1,385
Vendor	0.05	0.02	0.75	0.36	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	612	612	0.02	0.08	0.04	638
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	0.18	0.16	0.21	2.44	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	494	494	0.02	0.02	0.87	501
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	218	218	0.01	0.03	0.25	227
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	0.03	0.03	0.04	0.45	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	81.9	81.9	< 0.005	< 0.005	0.14	83.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	< 0.005	0.04	37.6
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

3.6. Building Construction (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.72	6.82	6.81	0.01	0.30	—	0.30	0.28	—	0.28	—	1,447	1,447	0.06	0.01	—	1,452
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.86	0.72	6.82	6.81	0.01	0.30	—	0.30	0.28	—	0.28	—	1,447	1,447	0.06	0.01	—	1,452
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.43	2.42	0.01	0.11	—	0.11	0.10	—	0.10	—	515	515	0.02	< 0.005	—	517
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	0.06	0.05	0.44	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.3	85.3	< 0.005	< 0.005	—	85.6
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	0.51	0.46	0.49	7.71	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,443	1,443	0.06	0.05	5.69	1,465
Vendor	0.05	0.02	0.72	0.35	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	611	611	0.02	0.08	1.66	639
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	0.50	0.45	0.58	6.52	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,368	1,368	0.06	0.05	0.15	1,385
Vendor	0.05	0.02	0.75	0.36	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	612	612	0.02	0.08	0.04	638
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	0.18	0.16	0.21	2.44	0.00	0.00	0.03	0.03	0.00	0.00	0.00	—	494	494	0.02	0.02	0.87	501
Vendor	0.02	0.01	0.27	0.13	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	218	218	0.01	0.03	0.25	227

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	0.03	0.03	0.04	0.45	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	81.9	81.9	< 0.005	< 0.005	0.14	83.0
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	< 0.005	0.04	37.6
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

3.7. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.37	6.77	0.01	0.27	—	0.27	0.25	—	0.25	—	1,447	1,447	0.06	0.01	—	1,452
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.19	< 0.005	0.05	—	0.05	0.04	—	0.04	—	255	255	0.01	< 0.005	—	256
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	0.03	0.02	0.20	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.49	6.03	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,340	1,340	0.06	0.05	0.13	1,357
Vendor	0.04	0.02	0.71	0.34	< 0.005	0.01	0.03	0.04	< 0.005	0.01	0.02	—	602	602	0.02	0.08	0.04	627
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	0.08	0.08	0.09	1.12	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	239	239	0.01	0.01	0.39	243
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	106	106	< 0.005	0.01	0.13	111
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	0.02	0.01	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	39.6	39.6	< 0.005	< 0.005	0.07	40.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.82	0.69	6.37	6.77	0.01	0.27	—	0.27	0.25	—	0.25	—	1,447	1,447	0.06	0.01	—	1,452
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.12	1.19	< 0.005	0.05	—	0.05	0.04	—	0.04	—	255	255	0.01	< 0.005	—	256
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	0.03	0.02	0.20	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.2	42.2	< 0.005	< 0.005	—	42.3
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.49	6.03	0.00	0.00	0.08	0.08	0.00	0.00	0.00	—	1,340	1,340	0.06	0.05	0.13	1,357
Vendor	0.04	0.02	0.71	0.34	< 0.005	0.01	0.03	0.04	< 0.005	0.01	0.02	—	602	602	0.02	0.08	0.04	627
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	0.08	0.08	0.09	1.12	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	239	239	0.01	0.01	0.39	243
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	106	106	< 0.005	0.01	0.13	111
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	0.02	0.01	0.02	0.20	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	39.6	39.6	< 0.005	< 0.005	0.07	40.2

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	17.5	17.5	< 0.005	< 0.005	0.02	18.3
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

3.9. Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.08	2.26	< 0.005	0.10	—	0.10	0.09	—	0.09	—	349	349	0.01	< 0.005	—	350
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	0.81	< 0.005	0.03	—	0.03	0.03	—	0.03	—	125	125	0.01	< 0.005	—	126
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.14	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.05	0.04	0.04	0.70	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	138	138	0.01	< 0.005	0.51	140
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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	47.7	47.7	< 0.005	< 0.005	0.08	48.4
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
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	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.90	7.90	< 0.005	< 0.005	0.01	8.01
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
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

3.10. Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.08	2.26	< 0.005	0.10	—	0.10	0.09	—	0.09	—	349	349	0.01	< 0.005	—	350
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.75	0.81	< 0.005	0.03	—	0.03	0.03	—	0.03	—	125	125	0.01	< 0.005	—	126
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.14	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	20.7	20.7	< 0.005	< 0.005	—	20.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.05	0.04	0.04	0.70	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	138	138	0.01	< 0.005	0.51	140
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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	47.7	47.7	< 0.005	< 0.005	0.08	48.4
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

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	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	7.90	7.90	< 0.005	< 0.005	0.01	8.01
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
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

3.11. Architectural Coating (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.77	6.40	7.70	0.01	0.25	—	0.25	0.23	—	0.23	—	1,069	1,069	0.04	0.01	—	1,073
Architectural Coatings	—	6.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.15	1.39	< 0.005	0.04	—	0.04	0.04	—	0.04	—	192	192	0.01	< 0.005	—	193
Architectural Coatings	—	1.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.21	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.9	31.9	< 0.005	< 0.005	—	32.0
Architectural Coatings	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.21	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	268	268	0.01	0.01	0.03	271
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
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	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	49.0	49.0	< 0.005	< 0.005	0.08	49.6
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
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	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.11	8.11	< 0.005	< 0.005	0.01	8.21
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
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

3.12. Architectural Coating (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.77	6.40	7.70	0.01	0.25	—	0.25	0.23	—	0.23	—	1,069	1,069	0.04	0.01	—	1,073
Architectural Coatings	—	6.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.15	1.39	< 0.005	0.04	—	0.04	0.04	—	0.04	—	192	192	0.01	< 0.005	—	193
Architectural Coatings	—	1.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.03	0.21	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.9	31.9	< 0.005	< 0.005	—	32.0
Architectural Coatings	—	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.21	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	268	268	0.01	0.01	0.03	271
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
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	0.02	0.02	0.02	0.23	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	49.0	49.0	< 0.005	< 0.005	0.08	49.6
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
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	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	8.11	8.11	< 0.005	< 0.005	0.01	8.21
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
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 (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.18	7.66	0.01	0.22	—	0.22	0.20	—	0.20	—	1,068	1,068	0.04	0.01	—	1,072

Architect Coatings	—	6.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.73	0.90	< 0.005	0.03	—	0.03	0.02	—	0.02	—	125	125	0.01	< 0.005	—	126
Architectural Coatings	—	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.13	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.8	20.8	< 0.005	< 0.005	—	20.8
Architectural Coatings	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.13	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	263	263	0.01	0.01	0.02	266
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
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	0.01	0.01	0.14	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	31.3	31.3	< 0.005	< 0.005	0.05	31.7
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
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	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.18	5.18	< 0.005	< 0.005	0.01	5.25
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
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

3.14. Architectural Coating (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.73	6.18	7.66	0.01	0.22	—	0.22	0.20	—	0.20	—	1,068	1,068	0.04	0.01	—	1,072
Architectural Coatings	—	6.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.73	0.90	< 0.005	0.03	—	0.03	0.02	—	0.02	—	125	125	0.01	< 0.005	—	126
Architectural Coatings	—	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.02	0.02	0.13	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.8	20.8	< 0.005	< 0.005	—	20.8
Architectural Coatings	—	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	1.13	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	263	263	0.01	0.01	0.02	266
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
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	0.01	0.01	0.14	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	31.3	31.3	< 0.005	< 0.005	0.05	31.7
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
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	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	5.18	5.18	< 0.005	< 0.005	0.01	5.25
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
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

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.25	2.05	1.45	16.9	0.04	0.03	1.50	1.52	0.02	0.27	0.29	—	4,164	4,164	0.20	0.16	12.7	4,231
Regional Shopping Center	0.42	0.39	0.21	2.26	< 0.005	< 0.005	0.17	0.17	< 0.005	0.03	0.03	—	486	486	0.03	0.02	1.45	495
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
Total	2.67	2.44	1.66	19.2	0.05	0.03	1.67	1.70	0.03	0.30	0.32	—	4,650	4,650	0.23	0.19	14.2	4,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.23	2.02	1.58	15.6	0.04	0.03	1.50	1.52	0.02	0.27	0.29	—	3,991	3,991	0.21	0.17	0.33	4,048
Regional Shopping Center	0.41	0.39	0.23	2.18	< 0.005	< 0.005	0.17	0.17	< 0.005	0.03	0.03	—	466	466	0.03	0.02	0.04	474

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
Total	2.64	2.41	1.81	17.8	0.04	0.03	1.67	1.70	0.03	0.30	0.32	—	4,457	4,457	0.24	0.20	0.37	4,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.38	0.35	0.28	2.78	0.01	< 0.005	0.26	0.26	< 0.005	0.05	0.05	—	636	636	0.03	0.03	0.86	645
Regional Shopping Center	0.06	0.05	0.03	0.30	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	57.3	57.3	< 0.005	< 0.005	0.08	58.4
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
Total	0.44	0.40	0.31	3.08	0.01	< 0.005	0.28	0.29	< 0.005	0.05	0.05	—	693	693	0.04	0.03	0.94	704

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.25	2.05	1.45	16.9	0.04	0.03	1.50	1.52	0.02	0.27	0.29	—	4,164	4,164	0.20	0.16	12.7	4,231
Regional Shopping Center	0.42	0.39	0.21	2.26	< 0.005	< 0.005	0.17	0.17	< 0.005	0.03	0.03	—	486	486	0.03	0.02	1.45	495
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

Total	2.67	2.44	1.66	19.2	0.05	0.03	1.67	1.70	0.03	0.30	0.32	—	4,650	4,650	0.23	0.19	14.2	4,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	2.23	2.02	1.58	15.6	0.04	0.03	1.50	1.52	0.02	0.27	0.29	—	3,991	3,991	0.21	0.17	0.33	4,048
Regional Shopping Center	0.41	0.39	0.23	2.18	< 0.005	< 0.005	0.17	0.17	< 0.005	0.03	0.03	—	466	466	0.03	0.02	0.04	474
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
Total	2.64	2.41	1.81	17.8	0.04	0.03	1.67	1.70	0.03	0.30	0.32	—	4,457	4,457	0.24	0.20	0.37	4,522
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.38	0.35	0.28	2.78	0.01	< 0.005	0.26	0.26	< 0.005	0.05	0.05	—	636	636	0.03	0.03	0.86	645
Regional Shopping Center	0.06	0.05	0.03	0.30	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	57.3	57.3	< 0.005	< 0.005	0.08	58.4
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
Total	0.44	0.40	0.31	3.08	0.01	< 0.005	0.28	0.29	< 0.005	0.05	0.05	—	693	693	0.04	0.03	0.94	704

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	752	752	0.05	0.01	—	755
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	58.8	58.8	< 0.005	< 0.005	—	59.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	—	236
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,045	1,045	0.07	0.01	—	1,050
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	752	752	0.05	0.01	—	755
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	58.8	58.8	< 0.005	< 0.005	—	59.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	—	236
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,045	1,045	0.07	0.01	—	1,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	124	124	0.01	< 0.005	—	125
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	9.73	9.73	< 0.005	< 0.005	—	9.78

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	38.8	38.8	< 0.005	< 0.005	—	39.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	173	173	0.01	< 0.005	—	174

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	752	752	0.05	0.01	—	755
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	58.8	58.8	< 0.005	< 0.005	—	59.1
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	—	236
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,045	1,045	0.07	0.01	—	1,050
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	752	752	0.05	0.01	—	755
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	58.8	58.8	< 0.005	< 0.005	—	59.1

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	235	235	0.02	< 0.005	—	236
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,045	1,045	0.07	0.01	—	1,050
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	124	124	0.01	< 0.005	—	125
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	9.73	9.73	< 0.005	< 0.005	—	9.78
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	38.8	38.8	< 0.005	< 0.005	—	39.0
Total	—	—	—	—	—	—	—	—	—	—	—	—	173	173	0.01	< 0.005	—	174

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	385	385	0.03	< 0.005	—	386
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.93	4.93	< 0.005	< 0.005	—	4.94
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

Total	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	390	390	0.03	< 0.005	—	391
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	385	385	0.03	< 0.005	—	386
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.93	4.93	< 0.005	< 0.005	—	4.94
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
Total	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	390	390	0.03	< 0.005	—	391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.7	63.7	0.01	< 0.005	—	63.9
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.82	0.82	< 0.005	< 0.005	—	0.82
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
Total	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.5	64.5	0.01	< 0.005	—	64.7

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	385	385	0.03	< 0.005	—	386
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.93	4.93	< 0.005	< 0.005	—	4.94
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
Total	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	390	390	0.03	< 0.005	—	391
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	385	385	0.03	< 0.005	—	386
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.93	4.93	< 0.005	< 0.005	—	4.94
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
Total	0.04	0.02	0.31	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	390	390	0.03	< 0.005	—	391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.7	63.7	0.01	< 0.005	—	63.9
Regional Shopping Center	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.82	0.82	< 0.005	< 0.005	—	0.82

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
Total	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.5	64.5	0.01	< 0.005	—	64.7

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.20	0.10	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Consumer Products	—	2.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.92	0.86	0.08	8.47	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	24.9	24.9	< 0.005	< 0.005	—	25.0
Total	1.12	3.38	1.79	9.19	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,191	2,191	0.04	< 0.005	—	2,193
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.20	0.10	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Consumer Products	—	2.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.20	2.52	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	24.6	24.6	< 0.005	< 0.005	—	24.6
Consumer Products	—	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.11	0.01	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.83	2.83	< 0.005	< 0.005	—	2.84
Total	0.12	0.55	0.03	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	27.4	27.4	< 0.005	< 0.005	—	27.4

4.3.1. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.20	0.10	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Consumer Products	—	2.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.92	0.86	0.08	8.47	< 0.005	< 0.005	—	< 0.005	0.01	—	0.01	—	24.9	24.9	< 0.005	< 0.005	—	25.0

Total	1.12	3.38	1.79	9.19	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,191	2,191	0.04	< 0.005	—	2,193
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.20	0.10	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Consumer Products	—	2.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.20	2.52	1.71	0.73	0.01	0.14	—	0.14	0.14	—	0.14	0.00	2,166	2,166	0.04	< 0.005	—	2,168
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	24.6	24.6	< 0.005	< 0.005	—	24.6
Consumer Products	—	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.12	0.11	0.01	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.83	2.83	< 0.005	< 0.005	—	2.84
Total	0.12	0.55	0.03	1.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	27.4	27.4	< 0.005	< 0.005	—	27.4

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.64	58.7	67.3	0.89	0.02	—	96.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.43	2.86	3.29	0.04	< 0.005	—	4.70
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.64	58.7	67.3	0.89	0.02	—	96.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.43	2.86	3.29	0.04	< 0.005	—	4.70
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.43	9.71	11.1	0.15	< 0.005	—	15.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.07	0.47	0.54	0.01	< 0.005	—	0.78

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.50	10.2	11.7	0.15	< 0.005	—	16.7

4.4.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.64	58.7	67.3	0.89	0.02	—	96.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.43	2.86	3.29	0.04	< 0.005	—	4.70
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.64	58.7	67.3	0.89	0.02	—	96.0
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.43	2.86	3.29	0.04	< 0.005	—	4.70

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	9.07	61.5	70.6	0.93	0.02	—	101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.43	9.71	11.1	0.15	< 0.005	—	15.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.07	0.47	0.54	0.01	< 0.005	—	0.78
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.50	10.2	11.7	0.15	< 0.005	—	16.7

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.2	0.00	48.2	4.82	0.00	—	169
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.70	0.00	1.70	0.17	0.00	—	5.94

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.2	0.00	48.2	4.82	0.00	—	169
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.70	0.00	1.70	0.17	0.00	—	5.94
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.98	0.00	7.98	0.80	0.00	—	27.9
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	—	0.98
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.26	0.00	8.26	0.83	0.00	—	28.9

4.5.1. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.2	0.00	48.2	4.82	0.00	—	169
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.70	0.00	1.70	0.17	0.00	—	5.94
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	48.2	0.00	48.2	4.82	0.00	—	169
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	1.70	0.00	1.70	0.17	0.00	—	5.94
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	49.9	0.00	49.9	4.99	0.00	—	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	7.98	0.00	7.98	0.80	0.00	—	27.9

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	0.28	0.00	0.28	0.03	0.00	—	0.98
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.26	0.00	8.26	0.83	0.00	—	28.9

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.73	0.73
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.73	0.73
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.73	0.73
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.73	0.73
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.74	0.74

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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	3/1/2024	4/1/2024	5.00	22.0	Demolition of 6,681.5 square feet of building and 10,000 sq ft. parking lot
Grading/Excavation	Grading	4/2/2024	7/2/2024	5.00	66.0	20,700 cubic yards of export
Concrete Structure	Building Construction	7/3/2024	3/31/2025	5.00	194	—
Framing & MEP Rough-in	Paving	4/1/2025	9/30/2025	5.00	131	—
Final Inspection, punchlist, Drywall Finishing	Architectural Coating	10/1/2025	3/1/2026	5.00	108	—

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
Concrete Structure	Air Compressors	Diesel	Average	1.00	6.00	367	0.29
Concrete Structure	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	82.0	0.20
Concrete Structure	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	84.0	0.37

Framing & MEP Rough-in	Air Compressors	Diesel	Average	2.00	6.00	10.0	0.56
Framing & MEP Rough-in	Cranes	Diesel	Average	1.00	4.00	81.0	0.42
Framing & MEP Rough-in	Forklifts	Diesel	Average	1.00	6.00	36.0	0.38
Final Inspection, punchlist, Drywall Finishing	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.00	1.00	12.0	0.85
Demolition	Dumpers/Tenders	Diesel	Average	1.00	6.00	16.0	0.38
Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading/Excavation	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Grading/Excavation	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Grading/Excavation	Dumpers/Tenders	Diesel	Average	2.00	7.00	16.0	0.38
Grading/Excavation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading/Excavation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Grading/Excavation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Concrete Structure	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Concrete Structure	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Concrete Structure	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Final Inspection, punchlist, Drywall Finishing	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Final Inspection, punchlist, Drywall Finishing	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Final Inspection, punchlist, Drywall Finishing	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20

Final Inspection, punchlist, Drywall Finishing	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Final Inspection, punchlist, Drywall Finishing	Pressure Washers	Diesel	Average	1.00	8.00	14.0	0.30

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
Concrete Structure	Air Compressors	Diesel	Average	1.00	6.00	367	0.29
Concrete Structure	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	82.0	0.20
Concrete Structure	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	84.0	0.37
Framing & MEP Rough-in	Air Compressors	Diesel	Average	2.00	6.00	10.0	0.56
Framing & MEP Rough-in	Cranes	Diesel	Average	1.00	4.00	81.0	0.42
Framing & MEP Rough-in	Forklifts	Diesel	Average	1.00	6.00	36.0	0.38
Final Inspection, punchlist, Drywall Finishing	Air Compressors	Diesel	Average	2.00	6.00	37.0	0.48
Demolition	Crushing/Proc. Equipment	Gasoline	Average	1.00	1.00	12.0	0.85
Demolition	Dumpers/Tenders	Diesel	Average	1.00	6.00	16.0	0.38
Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading/Excavation	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Grading/Excavation	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56

Grading/Excavation	Dumpers/Tenders	Diesel	Average	2.00	7.00	16.0	0.38
Grading/Excavation	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading/Excavation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Grading/Excavation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Concrete Structure	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Concrete Structure	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Concrete Structure	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Final Inspection, punchlist, Drywall Finishing	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Final Inspection, punchlist, Drywall Finishing	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Final Inspection, punchlist, Drywall Finishing	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Final Inspection, punchlist, Drywall Finishing	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Final Inspection, punchlist, Drywall Finishing	Pressure Washers	Diesel	Average	1.00	8.00	14.0	0.30

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	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Grading/Excavation	—	—	—	—
Grading/Excavation	Worker	17.5	18.5	LDA,LDT1,LDT2
Grading/Excavation	Vendor	—	10.2	HHDT,MHDT
Grading/Excavation	Hauling	39.2	20.0	HHDT
Grading/Excavation	Onsite truck	—	—	HHDT
Concrete Structure	—	—	—	—
Concrete Structure	Worker	102	18.5	LDA,LDT1,LDT2
Concrete Structure	Vendor	19.0	10.2	HHDT,MHDT
Concrete Structure	Hauling	0.00	20.0	HHDT
Concrete Structure	Onsite truck	—	—	HHDT
Framing & MEP Rough-in	—	—	—	—
Framing & MEP Rough-in	Worker	10.0	18.5	LDA,LDT1,LDT2
Framing & MEP Rough-in	Vendor	—	10.2	HHDT,MHDT
Framing & MEP Rough-in	Hauling	0.00	20.0	HHDT
Framing & MEP Rough-in	Onsite truck	—	—	HHDT
Final Inspection, punchlist, Drywall Finishing	—	—	—	—
Final Inspection, punchlist, Drywall Finishing	Worker	20.4	18.5	LDA,LDT1,LDT2
Final Inspection, punchlist, Drywall Finishing	Vendor	—	10.2	HHDT,MHDT
Final Inspection, punchlist, Drywall Finishing	Hauling	0.00	20.0	HHDT
Final Inspection, punchlist, Drywall Finishing	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	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading/Excavation	—	—	—	—
Grading/Excavation	Worker	17.5	18.5	LDA,LDT1,LDT2
Grading/Excavation	Vendor	—	10.2	HHDT,MHDT
Grading/Excavation	Hauling	39.2	20.0	HHDT
Grading/Excavation	Onsite truck	—	—	HHDT
Concrete Structure	—	—	—	—
Concrete Structure	Worker	102	18.5	LDA,LDT1,LDT2
Concrete Structure	Vendor	19.0	10.2	HHDT,MHDT
Concrete Structure	Hauling	0.00	20.0	HHDT
Concrete Structure	Onsite truck	—	—	HHDT
Framing & MEP Rough-in	—	—	—	—
Framing & MEP Rough-in	Worker	10.0	18.5	LDA,LDT1,LDT2
Framing & MEP Rough-in	Vendor	—	10.2	HHDT,MHDT
Framing & MEP Rough-in	Hauling	0.00	20.0	HHDT
Framing & MEP Rough-in	Onsite truck	—	—	HHDT
Final Inspection, punchlist, Drywall Finishing	—	—	—	—
Final Inspection, punchlist, Drywall Finishing	Worker	20.4	18.5	LDA,LDT1,LDT2
Final Inspection, punchlist, Drywall Finishing	Vendor	—	10.2	HHDT,MHDT
Final Inspection, punchlist, Drywall Finishing	Hauling	0.00	20.0	HHDT

Final Inspection, punchlist, Drywall Finishing	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

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)
Final Inspection, punchlist, Drywall Finishing	205,452	68,484	4,683	1,561	—

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 (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	16,682	—
Grading/Excavation	—	20,700	0.00	0.00	—
Framing & MEP Rough-in	0.00	0.00	0.00	0.00	0.00

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%
Regional Shopping Center	0.00	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	690	0.05	0.01
2025	0.00	690	0.05	0.01
2026	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	658	594	495	228,396	5,378	4,854	4,044	1,866,140
Regional Shopping Center	113	138	63.3	40,041	449	613	281	163,707
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	658	594	495	228,396	5,378	4,854	4,044	1,866,140
Regional Shopping Center	113	138	63.3	40,041	449	613	281	163,707
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	103
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	12
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	6
Pellet Wood Stoves	0

5.10.1.2. Mitigated

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

Gas Fireplaces	103
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	12
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	6
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)
205452.44999999998	68,484	4,683	1,561	—

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	397,303	690	0.0489	0.0069	1,200,968
Regional Shopping Center	31,084	690	0.0489	0.0069	15,373
Enclosed Parking with Elevator	124,032	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	397,303	690	0.0489	0.0069	1,200,968
Regional Shopping Center	31,084	690	0.0489	0.0069	15,373
Enclosed Parking with Elevator	124,032	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	4,510,130	58,297
Regional Shopping Center	222,218	0.00
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	4,510,130	58,297
Regional Shopping Center	222,218	0.00
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)
Apartments Mid Rise	30.2	0.00
Regional Shopping Center	3.15	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	30.2	0.00
Regional Shopping Center	3.15	0.00
Enclosed Parking with Elevator	0.00	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
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	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
Regional Shopping Center	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Regional Shopping Center	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	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	9.58	annual days of extreme heat
Extreme Precipitation	6.70	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 ¾ 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.

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	88.8
AQ-DPM	62.9
Drinking Water	92.5
Lead Risk Housing	72.5
Pesticides	0.00
Toxic Releases	75.6
Traffic	97.7
Effect Indicators	—
CleanUp Sites	44.2
Groundwater	43.8
Haz Waste Facilities/Generators	66.6
Impaired Water Bodies	66.7
Solid Waste	0.00
Sensitive Population	—
Asthma	63.7
Cardio-vascular	60.6
Low Birth Weights	38.7
Socioeconomic Factor Indicators	—
Education	68.2
Housing	87.2
Linguistic	77.1
Poverty	68.5
Unemployment	40.6

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	41.67842936
Employed	75.70896959
Median HI	27.51186963
Education	—
Bachelor's or higher	70.21686129
High school enrollment	1.231874759
Preschool enrollment	85.15334274
Transportation	—
Auto Access	16.15552419
Active commuting	87.91222892
Social	—
2-parent households	59.97690235
Voting	21.62196843
Neighborhood	—
Alcohol availability	13.02450917
Park access	32.10573592
Retail density	85.87193635
Supermarket access	94.25125112
Tree canopy	60.5800077
Housing	—
Homeownership	15.97587579
Housing habitability	6.03105351
Low-inc homeowner severe housing cost burden	9.611189529

Low-inc renter severe housing cost burden	37.66200436
Uncrowded housing	14.5515206
Health Outcomes	—
Insured adults	31.25882202
Arthritis	84.5
Asthma ER Admissions	36.7
High Blood Pressure	74.3
Cancer (excluding skin)	71.8
Asthma	65.7
Coronary Heart Disease	74.7
Chronic Obstructive Pulmonary Disease	74.0
Diagnosed Diabetes	48.6
Life Expectancy at Birth	82.7
Cognitively Disabled	78.9
Physically Disabled	65.4
Heart Attack ER Admissions	51.2
Mental Health Not Good	45.5
Chronic Kidney Disease	64.9
Obesity	46.0
Pedestrian Injuries	81.7
Physical Health Not Good	45.1
Stroke	70.4
Health Risk Behaviors	—
Binge Drinking	36.9
Current Smoker	45.9
No Leisure Time for Physical Activity	48.5
Climate Change Exposures	—

Wildfire Risk	92.7
SLR Inundation Area	0.0
Children	25.4
Elderly	68.4
English Speaking	22.5
Foreign-born	85.2
Outdoor Workers	80.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	21.7
Traffic Density	74.1
Traffic Access	87.4
Other Indices	—
Hardship	67.8
Other Decision Support	—
2016 Voting	39.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	84.0
Healthy Places Index Score for Project Location (b)	33.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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	5-story mixed use development with commercial on the ground floor and 2 level subterranean garage
Construction: Construction Phases	Phases include Demolition, Grading & Excavation, Concrete Structure, Framing & MEP Rough In, Drywall & Finishing and Final Inspection
Construction: Off-Road Equipment	Construction equipment forecast
Operations: Hearths	No woodstoves, no wood fireplaces

NOISE STUDY

2511 SUNSET MIXED-USE PROJECT

2511 W. Sunset Boulevard, Los Angeles, CA 90026

PREPARED FOR:

Gonzales Law Group
707 Wilshire Boulevard, Suite 4350
Los Angeles, CA 90017

PREPARED BY:

Meridian Consultants

860 Hampshire Road, Suite P
Westlake Village, CA 91361

DECEMBER 2023

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EXECUTIVE SUMMARY

The Project site is located at 2511 Sunset Boulevard Avenue (APN 5402-015-004, 5402-015-005, 5402-012-006, and 5402-015-007) within the Silver Lake-Echo Park-Elysian Valley Community Plan Area in the City of Los Angeles (City), as shown in Figure 1: Project Site Location. The Project site is approximately 27,055 square feet (0.62 acres) in size and is currently developed with 6,681.5 square feet of commercial space, including a 4,336 square foot liquor store on the eastern portion of the site and a recycling center on the western portion of the site. The Project site is zoned [Q]C2-1VL (commercial zone that allows both commercial and high-density residential uses) with a General Plan Designation of Community Commercial. The Project site is surrounded by single- and multi-family uses along Elsinore Street to the north, Rampart Boulevard to the south, Coronado Street to the east, and Benton Way to the west.

The Project includes removal of the existing uses to construct a new five (5) story 121-unit mixed use building consisting of 3,603 square feet of commercial and 79 parking spaces provided in a 2-level subterranean garage.

In accordance with requirements under the California Environmental Quality Act (CEQA), this Noise Study estimates future noise and vibration levels at surrounding land uses resulting from construction and operation of the Project. The report includes the categories and types of noise and vibration sources resulting from the Project, the calculation procedures used in the analysis, and any assumptions or limitations. This report summarizes the potential for the Project to generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; generate excessive groundborne vibration or groundborne noise levels; or expose people residing or working in the project area to excessive noise levels. The findings of the analyses are as follows:

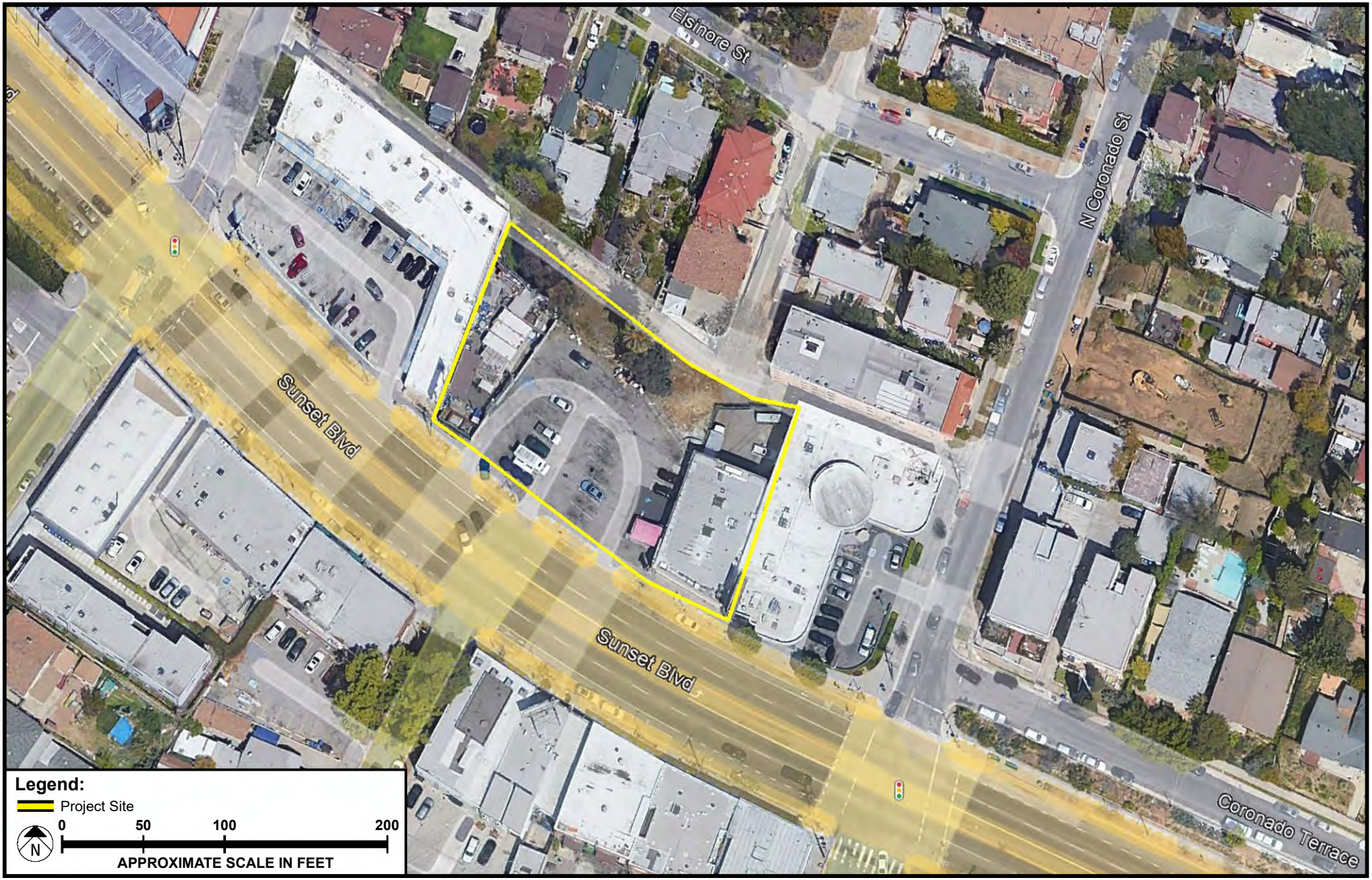
Construction activities would not result in short-term and temporary noise impacts to nearby noise-sensitive receptors due to on-site construction equipment and activities. Compliance with the City's Nosie Ordinance and standards established in the local general plan would ensure implementation of noise-attenuation techniques and placement of the construction-staging area, as well as situating earthmoving equipment away from noise-sensitive sites to reduce construction noise levels below the significance threshold.

Construction of the Project would generate sporadic, temporary vibration effects adjacent to the Project area but would not be expected to exceed the significance thresholds.

Noise associated with cumulative construction activities would be reduced to the degree reasonably and technically feasible through proposed recommended measures for each individual project and compliance with locally adopted and enforced noise ordinances. Given that construction activities would be required to comply with the City's allowable hours and would be temporary, construction-related noise would not be significant.

Noise associated with cumulative operational sources would not be significant.

Due to the rapid attenuation characteristics of groundborne vibration and the distance of the cumulative projects to the Project site, no potential exists for cumulative construction- or operational-related impacts with respect to groundborne vibration.



SOURCE: Google Earth - 2023

FIGURE **1**

Meridian Consultants

Project Site Location

330-002-22

Ambient Noise Levels

Short-term sound monitoring was conducted at seven (7) locations to measure the ambient sound environment in the Project vicinity. Measurements were taken over 15-minute intervals at each location between the hours of 9:14 AM and 11:20 AM on January 11, 2023, and provided in Table 1: Ambient Noise Measurements. Figures 2-7: Noise Monitoring Locations depicts locations where ambient noise measurements were conducted. As shown in Table 1, ambient noise levels ranged from a low of 60.0 dBA (Leq-15minute) north of the Project site along the alleyway between N. Coronado Street and N. Benton Way (Site 3) to a high of 73.7 dBA (Leq-15minute) at the Project site along Sunset Boulevard (Site 1).

TABLE 1
AMBIENT NOISE MEASUREMENTS

Location Number/Description	Nearest Use	Time Period	Noise Source	dBA Leq-15-minute
1 At the Project site along Sunset Boulevard	Commercial	9:14 AM-9:29 AM	Vehicle and pedestrian traffic along Sunset Boulevard	73.7
2 Northeast of the Project site along N. Coronado Street	Residential	9:31 AM-9:46 AM	Vehicle and pedestrian traffic along Coronado Street	62.7
3 North of the Project site along the alleyway between N. Coronado Street and N. Benton Way	Residential	9:48 AM-10:03 AM	Vehicle and pedestrian traffic along alleyway	60.0
4 Northwest of the Project site along N. Benton Way	Residential	10:08 AM-10:23 AM	Vehicle and pedestrian traffic along Benton Way	63.3
5 North of the Project site along Elsinore Street	Residential	10:27 AM-10:42 AM	Vehicle and pedestrian traffic along Elsinore Street	64.4
6 East of the Project at the corner of Coronado Terrace and N. Coronado Street	Residential	10:45 AM - 11:00 AM	Vehicle and pedestrian traffic along Coronado Terrace	66.1
7 South of the Project site along N. Rampart Boulevard	Residential	11:05 AM-11:20 AM	Vehicle and pedestrian traffic along Rampart Boulevard	60.2

Source: Refer to Attachment A for noise monitoring data sheets.
Notes: dBA = A-weighted decibels; Leq = average equivalent sound level.

Sensitive Uses

The vicinity of the Project site contains mixed-use, and commercial uses along Sunset Boulevard and single-family residential neighborhoods to the north and south. An overview of the surrounding land uses relative to the noise monitoring location in Table 1 above is provided below. Additionally, refer to Figure 9: Sensitive Receptor Map for location of the sensitive uses described below:

Noise Monitoring Site 1: Located at the Project site along Sunset Boulevard, sensitive uses include single- and multi-family uses to the north along the adjacent alleyway.

Noise Monitoring Site 2: Located northeast of the Project along N. Coronado Street, sensitive uses include single- and multi-family uses.

Noise Monitoring Site 3: Located to the north of the Project site along the alleyway, sensitive uses include single- and multi-family uses.

Noise Monitoring Site 4: Located to the northwest of the Project site along N. Benton Way, sensitive uses include single- and multi-family uses.

Noise Monitoring Site 5: Located to the north of the Project site along Elsinore Street, sensitive uses include single- and multi-family uses.

Noise Monitoring Site 6: Located to the east of the Project site at Coronado Terrace, sensitive uses include single- and multi-family uses.

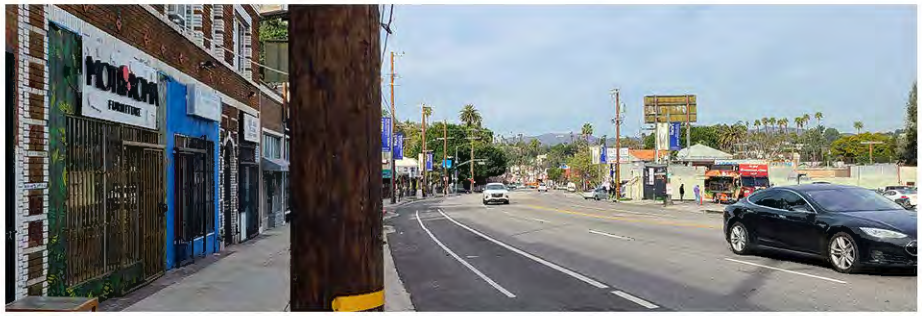
Noise Monitoring Site 7: Located to the south of the Project site along N. Rampart Boulevard, sensitive uses include single- and multi-family uses.

Vibration Conditions

Based on field observations, the primary source of existing ground-borne vibration in the vicinity of the Project site is vehicle traffic on local roadways. According to the Federal Transit Administration,[1] typical road traffic-induced vibration levels are unlikely to be perceptible by people. Trucks and buses typically generate ground-borne vibration velocity levels of approximately 63 VdB (at a 50-foot distance), and these levels could reach 72 VdB when trucks and buses pass over bumps in the road. A vibration level of 72 VdB is above the 60 VdB level of perceptibility.

1 Federal Transit Administration, Transit Noise and Vibration Impact Assessment, FTA report no. 0123 (September 2018), https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed January 2023.

North



West

South

East

SOURCE: Google Earth - 2023

FIGURE **2**

Meridian Consultants

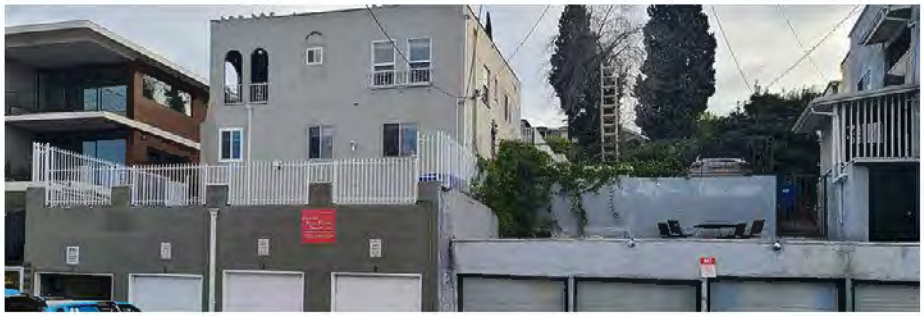
Noise Monitoring Location (Site 1)

330-002-22

North

West

South



East

SOURCE: Google Earth - 2023

FIGURE **3**

Meridian Consultants

Noise Monitoring Location (Site 2)

330-002-22

North

West

South

East

SOURCE: Google Earth - 2023

FIGURE **4**

Meridian Consultants

Noise Monitoring Location (Site 3)

330-002-22

North

West

South

East

SOURCE: Google Earth - 2023

FIGURE **5**

Meridian Consultants

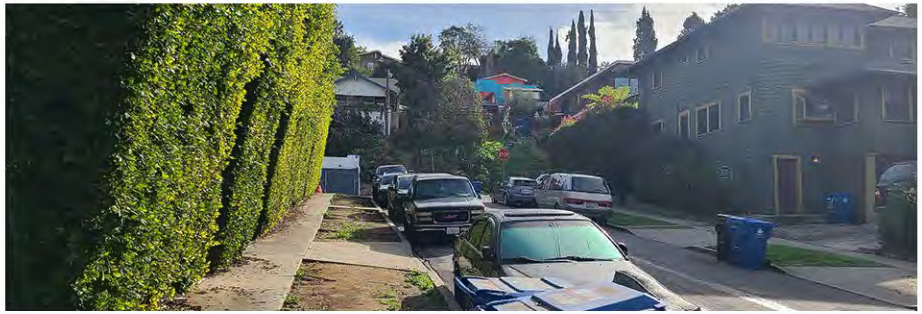
Noise Monitoring Location (Site 4)

330-002-22

North

West

South



East

SOURCE: Google Earth - 2023

FIGURE **6**

Meridian Consultants

Noise Monitoring Location (Site 5)

330-002-22

North

West

South

East

SOURCE: Google Earth - 2023

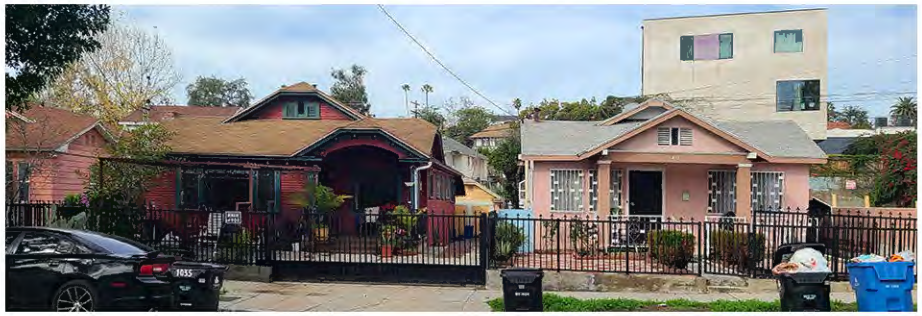
FIGURE **7**

Meridian Consultants

Noise Monitoring Location (Site 6)

330-002-22

North



West

South

East

SOURCE: Google Earth - 2023

FIGURE **8**

Meridian Consultants

Noise Monitoring Location (Site 7)

330-002-22

SOURCE: Google Earth - 2023

FIGURE **9**

Meridian Consultants

Sensitive Receptor Map

330-002-22

Ambient Noise Measurements

Noise-level monitoring was conducted by Meridian Consultants on January 11, 2023, at seven (7) locations within the Project area vicinity, as shown in Figure 2 through 8. Noise-level monitoring was conducted for 15-minute intervals at each location using a Larson Davis Model 831 sound-level meter. This meter satisfies the American National Standards Institute (ANSI) standard for general environmental noise measurement instrumentation. The ANSI specifies several types of sound-level meters according to their precision. Types 1, 2, and 3 are referred to as "precision," "general-purpose," and "survey" meters, respectively. Most measurements carefully taken with a Type 1 sound-level meter will have a margin of error not exceeding 1 dB.

The Larson Davis Model 831 is a Type 1 precision sound-level meter. This meter meets all requirements of ANSI S1.4-1983 and ANSI1.43-1997 Type 1 standards, as well as International Electrotechnical Commission (IEC) IEC61672-1 Ed. 1.0, IEC60651 Ed 1.2, and IEC60804 Type 1, Group X standards. The sound-level meter was located approximately 5 feet above ground and was covered with a Larson Davis windscreen. The sound-level meter was field calibrated with an external calibrator prior to operation.

Construction

Future dates represent approximations based on the general Project timeline and are subject to change pending unpredictable circumstances that may arise. As such, for purposes of this analysis, project construction is assumed to begin March 2024 and is expected to last until March 2026. Construction would occur over five phases: (1) demolition, (2) grading/excavation, (3) concrete structure, (4) framing & MEP rough-In, and (5) final Inspection, punchlist, and drywall finishing.

Each phase of construction would result in varying levels of intensity and a number of construction personnel. Based on CalEEMod, the construction workforce would consist of approximately 10 worker trips per day and 9 haul trip per day during demolition; 18 worker trips per day and 39 haul trips per day during grading/excavation; 102 worker trips per day and 19 vendor trip per day during concrete structure; 10 worker trips per day during framing & MEP rough-in; and 20 worker trips per day during final inspection, punchlist, and drywall finishing.

On-Site Construction Equipment

Construction activities typically generate noise from the operation of equipment within the Project Site that is required for the construction of various facilities. Noise impacts from on-site construction equipment, as well as the on-site staging of construction trucks, were evaluated by determining the noise levels generated by different types of construction activity and calculating the construction-related noise level at nearby noise-sensitive receptor locations. Actual construction noise levels would vary, depending upon the equipment type, model, the type of work activity being performed, and the condition of the equipment.

In order to calculate construction noise levels, hourly activity, or utilization factors (i.e., the percentage of normal construction activity that would occur, or construction equipment that would be active, during each hour of the day) are estimated based on the temporal characteristics of other previous and current construction projects. The hourly activity factors express the percentage of time that construction activities would emit average noise levels. Typical noise levels for each type of construction equipment were obtained from the FHWA Roadway Construction Noise Model.[2]

Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. As such, an inventory of construction equipment, including the number and types of equipment, which is analytically assumed to be operating simultaneously within the Project Site was conservatively identified by the Applicant for each phase/component of construction and shown in Table 2: Construction Equipment by Phase. Practically, it is highly unlikely that all pieces of construction equipment identified in Table 2 would operate simultaneously in any specific location during construction. Crawler tractors, graders and dozers can disturb 0.5 acres per day and scraper can disturb 1 acre per day.[3] Therefore, equipment is generally operated only when needed and space constraints (0.62 acre site) limit the equipment that can be used at any one time in a specific location. Consequently, this modeling is considered a conservative approach to calculate the maximum noise levels that would be generated.

The calculated average noise levels provided in Table 2 were inputted into the noise model SoundPLAN,[4] which generates computer simulations of noise propagation from sources such as construction noise. SoundPLAN forecasts noise levels at specific receptors using sound power data and three-dimensional topographical data.

Construction noise levels have been calculated at each of the analyzed sensitive receptors during each of the construction phases. As detailed in the FHWA Construction Noise Handbook, noise levels generated by on-site construction equipment can be reduced via specific noise control measures including the following: (1) muffler requirements; (2) equipment modifications that reduce noise levels; and (3) maintenance and operational requirements. These noise control measures can be used separately or in combination in order to reduce the noise levels generated by on-site construction equipment.

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2 U.S. Department of Transportation, FHWA Roadway Construction Noise Model Final Report, January 2006, accessed January 2023, https://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf

3 CalEEMod User Guide, Appendix A: Calculation Details for CalEEMod, http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6, accessed May 2023.

4 SoundPLAN model is in compliance with ISO 9613-2 standards for assessing attenuation of sound propagating outdoors and general calculation method.

TABLE 2
CONSTRUCTION EQUIPMENT BY PHASE

Construction Phase	Equipment Type	Quantity	Usage Hours (per day)	Noise Level at 50 feet (dBA Leq-1hour)	Calculated Average Noise Level (dBA Leq-1hour)
Demolition	Concrete/Industrial Saws	1	8	82.6	86.1
	Crushing/Proc. Equipment	1	1	72.5	
	Dumpers/Tenders	1	6	82.0	
	Excavators	1	8	76.7	
Grading/Excavation	Bore/Drill Rigs	1	6	72.2	85.4
	Cement and Mortar Mixers	1	6	74.8	
	Dumpers/Tenders	2	7	75.5	
	Excavators	1	8	76.7	
	Forklifts	1	8	82.0	
	Generator Sets	1	8	77.6	
Concrete Structure	Air Compressors	1	6	73.7	87.8
	Cement and Mortar Mixers	1	6	74.8	
	Concrete/Industrial Saws	1	8	82.6	
	Forklifts	1	6	82.0	
	Generator Sets	1	8	77.6	
	Pumps	1	8	89.1	
Framing & MEP Rough-In	Air Compressors	2	6	76.7	83.5
	Cranes	1	4	72.6	
	Forklifts	1	6	82.0	
Final Inspection, Punchlist, Drywall Finishing	Air Compressors	2	6	76.7	88.0
	Cement and Mortar Mixers	2	6	77.8	
	Concrete Industrial Saws	1	8	82.6	
	Forklifts	1	6	82.0	
	Pavers	1	8	74.2	
	Pressure Washers	1	8	82.0	

Source: FHWA Roadway Construction Noise Model (RCNM) version 1.1
Refer to Attachment B for construction noise worksheets.

Most on-site construction-related noise originates from equipment powered by either gasoline or diesel engines. A large part of the noise emitted is due to the intake and exhaust portions of the engine cycle. Reducing noise from this source can be achieved via muffler systems. This noise control strategy would include the replacement of worn mufflers and retrofitting on-site construction equipment where mufflers are not in use. Using muffler systems on on-site construction equipment reduces construction noise levels by 10 dBA or more.[5]

Another effective method of diminishing noise levels associated with individual pieces of construction equipment is by modifying the equipment. Modifications such as the dampening of metal surfaces is effective in reducing on-site construction equipment noise levels. These modifications are typically done by the manufacturer or with factory assistance. Noise reductions of up to 5 dBA are achieved using dampening materials.[6]

Other temporary abatement techniques include the use of temporary and/or moveable shielding for both specific and nonspecific operations. Some mobile shielding is capable of being moved intact or being repeatedly erected and dismantled to shield a moving operation. An example of such a barrier utilizes noise curtains in conjunction with trailers to create an easily moveable, temporary noise barrier system. To be effective, the length of a barrier should be greater than its height, the noise source should not be visible, and any barrier should be located as close as possible to either the noise source or the receiver. In addition, providing increased distance between a noise source and a noise receiver can also be considered a form of abatement.

Additionally, faulty or damaged mufflers, loose engine parts, rattling screws, bolts, or metal plates all contribute to increasing the noise level of on-site construction equipment. By regularly inspecting on-site construction equipment for these conditions and making adjustments to the equipment as necessary can also reduce noise levels generated by on-site construction equipment.

Construction Traffic Noise

The analysis of off-site construction traffic noise impacts focuses on: (1) identifying major roadways that may be used for construction worker commute routes or truck haul routes; (2) identifying the nature and location of noise-sensitive receptors along those routes; and (3) evaluating the traffic characteristics along those routes, specifically as related to existing traffic volumes.

Construction Equipment Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through

5 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm, Accessed January 2023.

6 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, accessed January 2023, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm.

the ground and diminish in strength with distance. While ground vibrations from construction activities do not often reach the levels that can damage structures, fragile buildings must receive special consideration.

Impacts due to construction activities were evaluated by identifying vibration sources (i.e., construction equipment), measuring the distance between vibration sources and surrounding structure locations, and making a significance determination.

For quantitative construction vibration assessments related to building damage and human annoyance, vibration source levels for construction equipment are taken from the FTA *Transit Noise and Vibration Impact Assessment Manual.*[7] Building damage would be assessed for each piece of equipment individually and assessed in terms of peak particle velocity.

The vibration source levels for various types of equipment are based on data provided by the FTA.

7 FTA, Transit Noise and Vibration Impact Assessment Manual, September 2018, accessed January 2023, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

In accordance with Appendix G of the State CEQA Guidelines, a project would have a potentially significant impact related to noise and groundborne vibration if it would result in:

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?

Generation of excessive groundborne vibration or groundborne noise levels?

Appendix G of the State CEQA Guidelines also includes:

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?

The Project site is not located within an airport land use plan and is not located within two miles of public airport or public use airport, nor is it within the vicinity of private airstrips. As such, the Project would result in no impacts to this screening criteria and no further analyses of this topic is necessary.

Construction Noise

A Project would normally have a significant impact on noise levels from construction activities lasting more than 10 days in a three month period or occurring during the hours of 9:00 PM and 7:00 AM Monday through Friday, before 8:00 AM or after 6:00 PM on Saturday, or anytime on Sunday if construction activities cause the exterior ambient noise level to increase by 5 dBA or more at a noise-sensitive use.

Section 112.05 of the City's Municipal Code sets a maximum noise level for construction equipment of 75 dBA at a distance of 50 feet when operated within 500 feet of a residential zone. Compliance with this standard is only required where "technically feasible."[8] Section 41.40 of the City's Municipal Code prohibits construction between the hours of 9:00 PM and 7:00 AM Monday through Friday, 6:00 PM and 8:00 AM on Saturday, and at any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 AM to 9:00 PM; and Saturdays and National Holidays between 8:00 AM to 6:00 PM). In general, the City's Department of Building and Safety enforces noise ordinance provisions relative to equipment and the Los Angeles Police Department enforces provisions relative to noise generated by people.

8 In accordance with the City's Noise Ordinances, "technically feasible" means that the established noise limitations can be compiled with at a project site, with the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques employed during the operation of equipment.

Operational Noise

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

- The Project would cause any ambient noise levels to increase by 3 dBA CNEL to or within the "normally unacceptable" or "clearly unacceptable" category; or
- The Project causes the ambient noise levels measured at the property line of affected noise-sensitive uses to increase by 5 dBA CNEL or greater; or
- Project-related operational (i.e., nonroadway) noise sources, such as outdoor activities, building mechanical/electrical equipment, outdoor activities, loading, trash compactor, or parking facilities, increase ambient noise level (hourly Leq) at noise sensitive uses by 5 dBA.

The significance criterion used in the noise analysis for the on-site operations presented below is an increase in the ambient noise level of 5 dBA (hourly Leq) at the noise-sensitive uses, in accordance with the City's Noise Regulations (LAMC Chapter XI). The Noise Regulations do not apply to off-site traffic (i.e., vehicles traveling on public roadways). Therefore, the significance criteria for off-site traffic noise associated with Project operations is an increase in the ambient noise level by 3 dBA or 5 dBA in CNEL (depending on the land use category) at noise-sensitive uses. In addition, the significance for composite noise levels (on-site and off-site sources) is an increase in the ambient noise level of 3 dBA or 5 dBA in CNEL (depending on the land use category) for the Project's composite noise (both Project-related on-site and off-site sources) at noise-sensitive uses.

Groundborne Vibration

The City has not adopted a significance threshold to assess vibration impacts during construction. Thus, the Caltrans *Transportation and Construction Vibration Guidance Manual*[9] is used as a screening tool to assess the potential for adverse vibration effects related to structural damage. Impacts related to vibration would be considered significant if it exceeds the following standards:

- Project construction activities cause ground-borne vibration levels to exceed 0.5 PPV at the nearest off-site reinforced-concrete, steel, or timber building.
- Project construction activities cause ground-borne vibration levels to exceed 0.3 PPV at the nearest off-site engineered concrete and masonry building.
- Project construction activities cause ground-borne vibration levels to exceed 0.2 PPV at the nearest off-site non-engineered timber and masonry building.
- Project construction activities cause ground-borne vibration levels to exceed 0.12 PPV at buildings extremely susceptible to vibration damage, such as historic buildings.

9 Caltrans, Transportation and Construction Vibration Guidance Manual (September 2013), https://cityofdavis.org/home/showdocument?id=4521. Accessed January 2023.

Construction

Noise from construction activities would be affected by the amount of construction equipment, the location of this equipment, the timing and duration of construction activities, and the relative distance to noise-sensitive receptors. Construction activities that would occur during the construction phases would generate both steady-state and episodic noise that would be heard both on and off the Project site. Each construction phase involves the use of different types of construction equipment and, therefore, has its own distinct noise characteristics. The Project would be constructed using typical construction techniques; no blasting or impact pile driving would be required. The construction equipment reference noise levels provided in Table 2 above, are based on measured noise data compiled by the FHWA and would occur when equipment is operating under full power conditions. The acoustical usage factor is the percentage of time that each type of construction equipment is anticipated to be in full power operation during a typical construction day. These values are estimates and will vary based on the actual construction process and schedule.

Construction equipment operates at its noisiest levels for certain percentages of time during operation.[10] During a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently. To characterize construction-period noise levels, the average (hourly Leq) noise level associated with each construction stage was calculated based on equipment operating simultaneously within each phase. These noise levels are typically associated with multiple pieces of equipment operating simultaneously. The estimated construction noise levels were calculated for each of the analyzed receptors (refer to Figure 9) during each of the construction phases. Given the physical size of the Project site and logistical limitations, the noise-generating equipment was presumed to be located at the construction area nearest to the affected receptors to present a conservative impact analysis.

Table 3: Maximum Noise Impacts Associated With On-Site Construction Activities presents the maximum noise impacts that are forecasted to occur at each of the receptor sites. This is considered a worst-case evaluation because construction of the Project would typically use fewer pieces of equipment simultaneously at any given time as well as operating throughout the construction site (i.e., most of the time construction equipment would be operating at distances further away from the off-site receptors than that assumed). As such, Project construction would often generate lower noise levels than reported herein. As shown, average noise levels during construction would result in a maximum increase of 17.8 dBA (Leq-1hour) above the significance threshold of 5 dBA over ambient noise levels during the concrete structure phase at adjacent residential uses (Site 3) without implementation of the noise control measures mentioned above.

10 Federal Highway Administration, Traffic Noise Model (2006).

TABLE 3
CONSTRUCTION MAXIMUM NOISE ESTIMATES

Noise Monitoring Site`	Ambient Noise Levels	Calculated Noise Level (Leq-1hour) by Construction Phase					Significance Threshold[2]	Maximum Increase Above Significance Threshold
		Demolition	Grading/Excavation	Concrete Structure	Framing & MEP Rough-In	Final Inspection, Punchlist, Drywall Finishing		
Site 2	62.7	81.1	80.4	81.8	77.5	76.7	67.7	+14.1
Site 3	60.0	82.3	81.7	82.8	78.5	78.2	65.0	+17.8
Site 4	63.3	83.2	82.5	83.3	79.0	80.3	68.3	+15.0
Site 5	64.4	63.7	63.0	64.8	60.5	55.5	69.4	-4.6
Site 6	66.1	63.3	62.6	64.4	60.1	58.9	71.1	-6.7
Site 7	60.2	59.9	59.3	61.1	56.8	54.4	65.2	-4.1

Refer to Attachment B for Construction Noise Worksheets.

Note:

[1] Site 1 located at the Project site thus excluded from this analysis.

[2] Ambient noise level plus 5 dBA.

In devising construction noise control strategies, important options include controlling the noise at the source. Source control requirements include added benefits in promoting technological advances in the development of quieter equipment. Source control techniques can include: (1) muffler requirements, (2) maintenance and operational requirements, and (3) equipment emission level requirements. These control techniques can be used separately or in combination in order to achieve the desired results. Most control noise originates from equipment powered by either gasoline or diesel engines. A large part of the noise emitted is due to the intake and exhaust portions of the engine cycle. A remedy for controlling much of the engine noise is the specification and use of optimal muffler systems. This noise control strategy would lead to replacement of worn mufflers and to retrofitting where mufflers are not in use. Using optimal muffler systems on all equipment would reduce construction noise levels by 10 dBA or more.[11] Additionally, a noise barrier can achieve a 5 dBA noise level reduction, when it is tall enough to break the line-of-sight to the sensitive receiver. It can achieve approximately 1.5 dBA of additional noise level reduction for each meter of barrier height. Additionally, limiting the number of noise-generating, heavy-duty construction equipment to two (2) pieces operating simultaneously would reduce construction noise levels by approximately 1.5 dBA. Implementation of these regulatory compliance noise control practices would result in a minimum reduction of 18 dBA (Leq-1hour). Therefore, construction noise levels would not result in a 5 dBA increase or more over ambient noise levels with implementation of basic noise control measures. Moreover, the Project would comply with Section 112.04 of the LAMC by ensuring that the operation of construction equipment would only occur between the hours of 7:00 AM and 10:00 PM on weekdays and Saturday. Compliance with the above practices would ensure construction noise levels would be below the significance threshold; thus, impacts from construction noise levels would not be considered significant.

Off-Site Construction Noise

Construction of the Project would require worker, haul, and vendor truck trips to and from the site to work on the site, export soil, and deliver supplies to the site. Trucks traveling to and from the Project site would be required to travel along a haul route approved by the City. At the maximum, approximately 19 hauling trips per day would take place during the grading/excavation phase. Haul truck traffic would take the most direct route to the freeway ramp along Sunset Boulevard, which is expected to be west on Sunset Boulevard and then south on Silver Lake Boulevard. Noise associated with construction truck trips were estimated using the Caltrans FHWA Traffic Noise Model based on the maximum number of worker and truck trips in a day. Project haul truck trips, which includes medium- and heavy-duty trucks, would generate noise levels of approximately 50.0 to 54.9 dBA, respectively, measured at a distance of 25 feet from the adjacent sensitive receptor. As shown in Table 1, existing noise levels ranged from 60.0 dBA to 73.7 dBA. The noise level increases from truck trips would be below the significance threshold of 5 dBA. As such, off-site construction noise impacts would not be considered significant.

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11 FHWA, Special Report—Measurement, Prediction, and Mitigation, updated June 2017, https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm. Accessed January 2023.

Construction Vibration

Pile driving would not be required during construction. As shown in Table 4: On-Site Construction Vibration Impacts-Building Damage, the forecasted vibration levels due to on-site construction activities would not exceed the building damage significance threshold of 0.5 PPV for reinforced-concrete, steel, or timber building at the adjacent residential uses. Impacts related to building damage from on-site construction vibration would not be considered significant.

TABLE 4
ON-SITE CONSTRUCTION VIBRATION IMPACTS - BUILDING DAMAGE

Site	Nearest Off-Site Building Structures	Estimated Vibration Velocity Levels at the Nearest Off-Site Structures from the Project Construction Equipment			Significance Threshold (PPV ips)
		Loaded Trucks	Jackhammer	Small bulldozer	
2	Residential	0.164	0.075	0.006	0.5
3	Residential	0.076	0.035	0.003	0.5
4	Residential	0.007	0.003	0.000	0.5
5	Residential	0.003	0.002	0.000	0.5
6	Residential	0.005	0.002	0.000	0.5
7	Residential	0.003	0.001	0.000	0.5

Source: US Department of Transportation, Federal Transportation Authority, Transit Noise and Vibration Impact Assessment. Refer to Attachment C for construction vibration worksheets.

Operation

Fixed Mechanical Equipment Noise

The Project would introduce various stationary noise sources, including heating, ventilation, and air conditioning systems, which would be located either on the roof, the side of a structure, or on the ground. All Project mechanical equipment would be required to be designed with appropriate noise-control devices—such as sound attenuators, acoustics louvers, or sound screens/parapet walls—to comply with noise-limitation requirements provided in Section 112.02 of the LAMC, which prohibits equipment from causing more than a 5 dBA increase in the ambient noise level. Therefore, operation of mechanical equipment on the Project building would not exceed the City's threshold of significance.

CUMULATIVE

Noise from construction of the Project plus related projects would be localized, thereby potentially affecting areas immediately within 500 feet from each projects' construction site. Due to distance attenuation (more than 500 feet away) and intervening structures, construction noise from one site would not result in noticeable increase in noise at sensitive receptors near another site, precluding a cumulative noise impact. It is expected that, as with the Project, related projects would implement noise reduction techniques such as mufflers, shields, sound barriers, which would minimize any noise-related nuisances during construction. Therefore, the combined construction-noise impacts of related projects within 500 feet and the Project's contribution would not cause a significant cumulative impact.

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

CERTIFICATION

The contents of this noise study represent an accurate depiction of the noise environment and impacts associated with the proposed 2511 Sunset Mixed-Use Project. The information contained in this noise study is based on the best available information at the time of preparation. If you have any questions, please contact me directly at (818) 415-7274.

Sincerely,

Christ Kirikian, INCE
Principal | Director of Air Quality & Acoustics
ckirikian@meridianconsultantsllc.com

ATTACHMENT A

Noise Monitoring Data Sheets

Monitoring Location: Site 1
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
9:14:03	73.5	77.9	57.0
9:15:03	73.6	82.7	55.8
9:16:03	73.7	84.7	58.3
9:17:03	74.9	80.6	59.1
9:18:03	75.5	79.4	63.6
9:19:03	69.4	78.3	55.9
9:20:03	73.5	78.3	59.5
9:21:03	74.2	79.9	60.4
9:22:03	74.7	79.1	59.1
9:23:03	72.4	80.5	59.8
9:24:03	73.3	80.0	58.0
9:25:03	72.9	77.4	58.1
9:26:03	71.3	78.3	56.3
9:27:03	75.3	80.5	63.3
9:28:03	74.3	84.6	56.4
9:29:03	71.4	72.3	65.9

15-minute LAeq **73.7**

Monitoring Location: Site 2
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
9:31:42	59.0	65.5	53.8
9:32:42	61.3	67.0	55.7
9:33:42	60.1	64.5	56.0
9:34:42	59.5	64.8	56.3
9:35:42	62.8	70.0	54.1
9:36:42	65.0	71.7	53.6
9:37:42	65.2	69.5	58.4
9:38:42	62.7	71.4	54.0
9:39:42	62.4	65.7	59.1
9:40:42	66.5	76.5	54.3
9:41:42	64.6	75.7	59.3
9:42:42	60.1	65.1	55.4
9:43:42	62.3	67.1	59.5
9:44:42	60.3	68.3	56.3
9:45:42	63.3	69.6	59.4
9:46:42	58.6	59.6	59.0

15-minute LAeq **62.7**

Monitoring Location: Site 3
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
9:48:33	53.3	61.5	49.8
9:49:33	53.1	59.8	50.1
9:50:33	53.3	56.4	49.5
9:51:33	53.4	57.5	49.8
9:52:33	52.4	57.0	50.1
9:53:33	51.1	54.9	49.5
9:54:33	53.1	57.9	49.8
9:55:33	52.4	56.1	50.1
9:56:33	52.9	55.4	51.1
9:57:33	53.2	58.2	50.3
9:58:33	54.8	58.3	53.0
9:59:33	55.3	58.8	53.3
10:00:33	56.1	62.4	52.8
10:01:33	71.1	81.9	52.3
10:02:33	52.2	54.7	50.2
10:03:33	50.6	50.6	50.3

15-minute LAeq **60.0**

Monitoring Location: Site 4
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
10:08:50	64.5	73.7	55.3
10:09:50	60.3	67.1	55.1
10:10:50	66.0	72.5	56.4
10:11:50	64.3	72.4	54.9
10:12:50	63.7	69.4	56.7
10:13:50	64.9	70.9	57.0
10:14:50	58.6	62.2	55.4
10:15:50	63.3	71.4	54.6
10:16:50	64.2	72.7	56.4
10:17:50	63.3	70.1	54.8
10:18:50	63.1	68.1	58.4
10:19:50	65.3	72.6	59.5
10:20:50	62.3	71.8	52.9
10:21:50	58.9	63.6	52.5
10:22:50	63.2	69.9	54.5
10:23:50	59.4	61.7	59.2

15-minute LAeq **63.3**

Monitoring Location: Site 5
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
10:27:30	51.3	62.5	45.5
10:28:30	65.1	74.3	48.0
10:29:30	75.2	84.8	58.4
10:30:30	51.6	60.0	42.4
10:31:30	47.3	54.0	42.0
10:32:30	54.3	69.8	42.1
10:33:30	49.3	59.1	43.0
10:34:30	48.2	56.2	40.9
10:35:30	50.5	58.0	44.5
10:36:30	49.1	57.7	44.1
10:37:30	48.7	58.6	42.8
10:38:30	56.4	67.5	45.0
10:39:30	65.3	72.6	44.7
10:40:30	52.9	59.7	48.4
10:41:30	60.5	68.8	45.4
10:42:30	59.7	59.7	59.4

15-minute LAeq **64.4**

Monitoring Location: Site 6
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
10:45:34	62.3	68.9	51.4
10:46:34	62.6	70.9	53.8
10:47:34	63.3	71.1	53.2
10:48:34	60.9	66.1	54.0
10:49:34	68.8	73.9	59.6
10:50:34	63.8	72.3	52.0
10:51:34	66.5	71.8	55.8
10:52:34	61.5	65.8	53.2
10:53:34	66.6	70.5	54.6
10:54:34	70.2	79.2	62.3
10:55:34	67.0	73.1	51.6
10:56:34	65.5	73.4	54.5
10:57:34	66.3	72.6	55.5
10:58:34	67.0	71.9	58.9
10:59:34	62.6	68.5	54.4
11:00:34	68.7	69.9	67.3

15-minute LAeq **66.1**

Monitoring Location: Site 7
Monitoring Date: 1/11/2023

Monitoring Period

Time	LAeq	LASmax	LASmin
11:05:31	58.8	68.4	47.2
11:06:31	60.6	70.4	51.8
11:07:31	61.6	68.8	51.7
11:08:31	60.6	70.5	51.2
11:09:31	62.3	68.5	52.1
11:10:31	60.6	68.8	50.7
11:11:31	63.3	72.8	51.6
11:12:31	55.0	68.3	47.7
11:13:31	59.5	68.0	48.7
11:14:31	60.5	68.9	45.4
11:15:31	51.3	56.9	47.1
11:16:31	64.0	73.8	48.7
11:17:31	56.3	68.6	48.0
11:18:31	59.7	68.2	50.5
11:19:31	58.2	70.0	46.4
11:20:31	51.2	65.0	60.0

15-minute LAeq **60.2**

ATTACHMENT B

Construction Noise Worksheets

B.1

Demolition

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 1/6/2023
Case Desc Demolition

		Baselines (dBA)			---- Receptor #1 ----
Descriptio	Land Use	Daytime	Evening	Night	
Site 2	Residentia	55	55	55	

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	15	0
Dump Truck	No	40		76.5	15	0
Excavator	No	40		80.7	15	0
All Other Equipment :	No	50	85		15	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	100	93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	91.2	87.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment :	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	100	96.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 3	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	25	0
Dump Truck	No	40		76.5	25	0
Excavator	No	40		80.7	25	0
All Other Equipment >	No	50	85		25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	82.5	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	92.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 4	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	120	0
Dump Truck	No	40		76.5	120	0
Excavator	No	40		80.7	120	0
All Other Equipment >	No	50	85		120	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	82	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	68.8	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	73.1	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	82	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 5	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	195	0
Dump Truck	No	40		76.5	195	0
Excavator	No	40		80.7	195	0
All Other Equipment :	No	50	85		195	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	77.8	70.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	68.9	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment :	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.8	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 6	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	155	0
Dump Truck	No	40		76.5	155	0
Excavator	No	40		80.7	155	0
All Other Equipment >	No	50	85		155	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	79.8	72.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	70.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.8	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 7	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	225	0
Dump Truck	No	40		76.5	225	0
Excavator	No	40		80.7	225	0
All Other Equipment :	No	50	85		225	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	76.5	69.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	67.6	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment :	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
At 50 Feet	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50	0
Dump Truck	No	40		76.5	50	0
Excavator	No	40		80.7	50	0
All Other Equipment >	No	50	85		50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	86.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

B.2

Grading Excavation

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 1/6/2023
Case Desc Grading/Excavation

				---- Receptor #1 ----	
		Baselines (dBA)			
Descriptio	Land Use	Daytime	Evening	Night	
Site 2	Residentia	55	55	55	

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Drill Rig Truck	No	20		79.1	15	0
Concrete Mixer Truck	No	40		78.8	15	0
Dump Truck	No	40		76.5	15	0
Dump Truck	No	40		76.5	15	0
Excavator	No	40		80.7	15	0
All Other Equipment >	No	50	85		15	0
Generator	No	50		80.6	15	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	89.3	85.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	86.9	82.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	91.2	87.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	91.1	88.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.5	95.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 3	Residentia	55	55	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Drill Rig Truck	No	20		79.1	25	0
Concrete Mixer Truck	No	40		78.8	25	0
Dump Truck	No	40		76.5	25	0
Dump Truck	No	40		76.5	25	0
Excavator	No	40		80.7	25	0
All Other Equipment >	No	50	85		25	0
Generator	No	50		80.6	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	85.2	78.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	84.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	82.5	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	82.5	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	86.7	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	86.7	83.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	91	91.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 4	Residentia	55	55	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Drill Rig Truck	No	20		79.1	120	0
Concrete Mixer Truck	No	40		78.8	120	0
Dump Truck	No	40		76.5	120	0
Dump Truck	No	40		76.5	120	0
Excavator	No	40		80.7	120	0
All Other Equipment >	No	50	85		120	0
Generator	No	50		80.6	120	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	71.5	64.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	68.8	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	68.8	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	73.1	69.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	73	70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.4	77.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 5	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Drill Rig Truck	No	20		79.1	195	0
Concrete Mixer Truck	No	40		78.8	195	0
Dump Truck	No	40		76.5	195	0
Dump Truck	No	40		76.5	195	0
Excavator	No	40		80.7	195	0
All Other Equipment >	No	50	85		195	0
Generator	No	50		80.6	195	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	67.3	60.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	67	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	68.9	64.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	68.8	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	73.2	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 6	Residentia	55	55	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Drill Rig Truck	No	20		79.1	155	0
Concrete Mixer Truck	No	40		78.8	155	0
Dump Truck	No	40		76.5	155	0
Dump Truck	No	40		76.5	155	0
Excavator	No	40		80.7	155	0
All Other Equipment >	No	50	85		155	0
Generator	No	50		80.6	155	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	69.3	62.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	69	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	66.6	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	70.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	70.8	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	75.2	75.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 7	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Drill Rig Truck	No	20		79.1	225	0
Concrete Mixer Truck	No	40		78.8	225	0
Dump Truck	No	40		76.5	225	0
Dump Truck	No	40		76.5	225	0
Excavator	No	40		80.7	225	0
All Other Equipment >	No	50	85		225	0
Generator	No	50		80.6	225	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	66.1	59.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	63.4	59.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	67.6	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	67.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.9	72.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
At 50 Feet	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Drill Rig Truck	No	20		79.1	50	0
Concrete Mixer Truck	No	40		78.8	50	0
Dump Truck	No	40		76.5	50	0
Dump Truck	No	40		76.5	50	0
Excavator	No	40		80.7	50	0
All Other Equipment >	No	50	85		50	0
Generator	No	50		80.6	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	79.1	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85	85.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

B.3

Concrete Structure

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 1/6/2023
Case Desc Concrete Structure

		Baselines (dBA)			---- Receptor #1 ----
Descriptio	Land Use	Daytime	Evening	Night	
Site 2	Residentia	55	55	55	

			Equipment			
	Impact		Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	15	0
Concrete Mixer Truck	No	40		78.8	15	0
All Other Equipment >	No	50	85		15	0
All Other Equipment >	No	50	85		15	0
Concrete Saw	No	20		89.6	15	0
Generator	No	50		80.6	15	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	88.1	84.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	89.3	85.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	100	93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	91.1	88.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	100	98.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 3	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0
Concrete Mixer Truck	No	40		78.8	25	0
All Other Equipment >	No	50	85		25	0
All Other Equipment >	No	50	85		25	0
Concrete Saw	No	20		89.6	25	0
Generator	No	50		80.6	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	84.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	86.7	83.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	93.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 4	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	120	0
Concrete Mixer Truck	No	40		78.8	120	0
All Other Equipment >	No	50	85		120	0
All Other Equipment >	No	50	85		120	0
Concrete Saw	No	20		89.6	120	0
Generator	No	50		80.6	120	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	70.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	82	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	73	70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	82	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 5	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	195	0
Concrete Mixer Truck	No	40		78.8	195	0
All Other Equipment >	No	50	85		195	0
All Other Equipment >	No	50	85		195	0
Concrete Saw	No	20		89.6	195	0
Generator	No	50		80.6	195	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	65.8	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	67	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	77.8	70.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	68.8	65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.8	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 6	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	155	0
Concrete Mixer Truck	No	40		78.8	155	0
All Other Equipment >	No	50	85		155	0
All Other Equipment >	No	50	85		155	0
Concrete Saw	No	20		89.6	155	0
Generator	No	50		80.6	155	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	67.8	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	69	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	79.8	72.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	70.8	67.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.8	78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 7	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	225	0
Concrete Mixer Truck	No	40		78.8	225	0
All Other Equipment >	No	50	85		225	0
All Other Equipment >	No	50	85		225	0
Concrete Saw	No	20		89.6	225	0
Generator	No	50		80.6	225	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	76.5	69.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	67.6	64.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	76.5	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
At 50 Feet	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50	0
Concrete Mixer Truck	No	40		78.8	50	0
All Other Equipment >	No	50	85		50	0
All Other Equipment >	No	50	85		50	0
Concrete Saw	No	20		89.6	50	0
Generator	No	50		80.6	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	87.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

B.4
Framing

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 1/6/2023
Case Desc Framing & MEP Rough In

				---- Receptor #1 ----
		Baselines (dBA)		
Descriptio	Land Use	Daytime	Evening	Night
Site 2	Residentia	55	55	55

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Compressor (air)	No	40		77.7	15	0
Compressor (air)	No	40		77.7	15	0
Crane	No	16		80.6	15	0
All Other Equipment :	No	50	85		15	0

			Results											
	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	88.1	84.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	89.3	85.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment :	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	100	98.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 3	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0
Compressor (air)	No	40		77.7	25	0
Crane	No	16		80.6	25	0
All Other Equipment >	No	50	85		25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	84.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	93.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 4	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	120	0
Compressor (air)	No	40		77.7	120	0
Crane	No	16		80.6	120	0
All Other Equipment >	No	50	85		120	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	70.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	82	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 5	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	195	0
Compressor (air)	No	40		77.7	195	0
Crane	No	16		80.6	195	0
All Other Equipment >	No	50	85		195	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	65.8	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	67	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.8	76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 6	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	155	0
Compressor (air)	No	40		77.7	155	0
Crane	No	16		80.6	155	0
All Other Equipment >	No	50	85		155	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	67.8	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	69	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.8	78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 7	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	225	0
Compressor (air)	No	40		77.7	225	0
Crane	No	16		80.6	225	0
All Other Equipment >	No	50	85		225	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	76.5	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
At 50 Feet	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50	0
Compressor (air)	No	40		77.7	50	0
Crane	No	16		80.6	50	0
All Other Equipment >	No	50	85		50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85	83.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

B.5

Final Inspection

Roadway Construction Noise Model (RCNM),Version 1.1

Report dat 1/6/2023
Case Desc Final Inspection/Punchlist, Drywall

		Baselines (dBA)		---- Receptor #1 ----
Descriptio	Land Use	Daytime	Evening	Night
Site 2	Residentia	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	15	0
Compressor (air)	No	40		77.7	15	0
Concrete Mixer Truck	No	40		78.8	15	0
Concrete Mixer Truck	No	40		78.8	15	0
All Other Equipment >	No	50	85		15	0
Paver	No	50		77.2	15	0
All Other Equipment >	No	50	85		15	0
Concrete Saw	No	20		89.6	15	0

	Calculated (dBA)		Results Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	88.1	84.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	88.1	84.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	89.3	85.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	89.3	85.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	87.7	84.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	95.5	92.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	100	93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	100	98.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 3	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0
Compressor (air)	No	40		77.7	25	0
Concrete Mixer Truck	No	40		78.8	25	0
Concrete Mixer Truck	No	40		78.8	25	0
All Other Equipment >	No	50	85		25	0
Paver	No	50		77.2	25	0
All Other Equipment >	No	50	85		25	0
Concrete Saw	No	20		89.6	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	84.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	84.8	80.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	83.2	80.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	91	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	95.6	88.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	95.6	94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 4	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	120	0
Compressor (air)	No	40		77.7	120	0
Concrete Mixer Truck	No	40		78.8	120	0
Concrete Mixer Truck	No	40		78.8	120	0
All Other Equipment >	No	50	85		120	0
Paver	No	50		77.2	120	0
All Other Equipment >	No	50	85		120	0
Concrete Saw	No	20		89.6	120	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	70.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	70.1	66.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	71.2	67.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	69.6	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	77.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	82	75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	82	80.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 5	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	195	0
Compressor (air)	No	40		77.7	195	0
Concrete Mixer Truck	No	40		78.8	195	0
Concrete Mixer Truck	No	40		78.8	195	0
All Other Equipment >	No	50	85		195	0
Paver	No	50		77.2	195	0
All Other Equipment >	No	50	85		195	0
Concrete Saw	No	20		89.6	195	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	65.8	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	65.8	61.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	67	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	67	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	65.4	62.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	73.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	77.8	70.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.8	76.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 6	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	155	0
Compressor (air)	No	40		77.7	155	0
Concrete Mixer Truck	No	40		78.8	155	0
Concrete Mixer Truck	No	40		78.8	155	0
All Other Equipment >	No	50	85		155	0
Paver	No	50		77.2	155	0
All Other Equipment >	No	50	85		155	0
Concrete Saw	No	20		89.6	155	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	67.8	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	67.8	63.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	69	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	69	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	67.4	64.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	75.2	72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	79.8	72.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.8	78.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Site 7	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	225	0
Compressor (air)	No	40		77.7	225	0
Concrete Mixer Truck	No	40		78.8	225	0
Concrete Mixer Truck	No	40		78.8	225	0
All Other Equipment >	No	50	85		225	0
Paver	No	50		77.2	225	0
All Other Equipment >	No	50	85		225	0
Concrete Saw	No	20		89.6	225	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	64.6	60.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	65.7	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	64.2	61.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	71.9	68.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	76.5	69.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	76.5	74.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #7 ----

	Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
At 50 Feet	Residentia	55	55	55

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50	0
Compressor (air)	No	40		77.7	50	0
Concrete Mixer Truck	No	40		78.8	50	0
Concrete Mixer Truck	No	40		78.8	50	0
All Other Equipment >	No	50	85		50	0
Paver	No	50		77.2	50	0
All Other Equipment >	No	50	85		50	0
Concrete Saw	No	20		89.6	50	0

Results

	Calculated (dBA)		Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
All Other Equipment >	85	82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

ATTACHMENT C

Construction Vibration Worksheets

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 2)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	15	0.191	0.048	94
Jackhammer		1	0.035	15	0.075	0.019	85
Large bulldozer		1	0.089	15	0.191	0.048	94
Loaded trucks		1	0.076	15	0.164	0.041	92
Pile Drive (impact)		1	0.644	15	1.386	0.346	111
Vibratory Roller		1	0.210	15	0.452	0.113	101
Small bulldozer		1	0.003	15	0.006	0.002	64

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 3)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	25	0.089	0.022	87
Jackhammer		1	0.035	25	0.035	0.009	79
Large bulldozer		1	0.089	25	0.089	0.022	87
Loaded trucks		1	0.076	25	0.076	0.019	86
Pile Drive (impact)		1	0.644	25	0.644	0.161	104
Vibratory Roller		1	0.210	25	0.210	0.053	94
Small bulldozer		1	0.003	25	0.003	0.001	58

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 4)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	120	0.008	0.002	67
Jackhammer		1	0.035	120	0.003	0.001	58
Large bulldozer		1	0.089	120	0.008	0.002	67
Loaded trucks		1	0.076	120	0.007	0.002	65
Pile Drive (impact)		1	0.644	120	0.061	0.015	84
Vibratory Roller		1	0.210	120	0.020	0.005	74
Small bulldozer		1	0.003	120	0.000	0.000	37

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 5)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	195	0.004	0.001	60
Jackhammer		1	0.035	195	0.002	0.000	52
Large bulldozer		1	0.089	195	0.004	0.001	60
Loaded trucks		1	0.076	195	0.003	0.001	59
Pile Drive (impact)		1	0.644	195	0.030	0.007	77
Vibratory Roller		1	0.210	195	0.010	0.002	68
Small bulldozer		1	0.003	195	0.000	0.000	31

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 6)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	155	0.006	0.001	63
Jackhammer		1	0.035	155	0.002	0.001	55
Large bulldozer		1	0.089	155	0.006	0.001	63
Loaded trucks		1	0.076	155	0.005	0.001	62
Pile Drive (impact)		1	0.644	155	0.042	0.010	80
Vibratory Roller		1	0.210	155	0.014	0.003	71
Small bulldozer		1	0.003	155	0.000	0.000	34

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**

Meridian Consultants LLC

2511 Sunset Mixed Use
Construction Vibration Model
(Site 7)

Equipment		Pieces of Equipment	PPV at 25 feet (in/sec)	Distance from Equipment	PPV at adjusted distance	RMS velocity amplitude in in/sec at adjusted distance[a]	RMS Vibration level in VdB at adjusted distance
Caisson drilling		1	0.089	225	0.003	0.001	58
Jackhammer		1	0.035	225	0.001	0.000	50
Large bulldozer		1	0.089	225	0.003	0.001	58
Loaded trucks		1	0.076	225	0.003	0.001	57
Pile Drive (impact)		1	0.644	225	0.024	0.006	76
Vibratory Roller		1	0.210	225	0.008	0.002	66
Small bulldozer		1	0.003	225	0.000	0.000	29

*** Suggested Vibration Thresholds per the Federal Transit Administration, United States Department of Transportation, Transit Noise and Vibration Impact Assessment**