

1901 PARK BOULEVARD CONDOS PROJECT

CEQA ANALYSIS

City Of Oakland

Bureau of Planning

250 Frank H. Ogawa Plaza, Suite 2114

Oakland, CA 94612

June 2025



338 Spear Street, 15E
San Francisco, CA 94105

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1901 Park Boulevard Condos Project

CEQA Checklist

I. General Project Information

Project Title

1901 Park Boulevard Condos Project

Lead Agency Name and Address

City of Oakland
Bureau of Planning
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, CA 94612

Project Case File Number

PLN22058

Contact Person and Phone Number

Heather Klein, Planner IV
hklein@oaklandca.gov
(510) 238-3659

Project Location

1901 Park Boulevard
Assessor's Parcel No. 021 022901200

Project Applicant Name and Address

Krystal Dong
IvyHills, LLC
605 East 23rd Street, Suite #2
Oakland, CA 94606

Existing General Plan Designation

Neighborhood Center Mixed Use

Existing Zoning

CN-3 (Neighborhood Commercial- 3 Zone)

II. Executive Summary

The Project Sponsor, IvyHills LLC, proposed the 1901 Park Boulevard Condos Project (Project) involving demolition of an auto-repair building and a one-canopy style hand car wash, site remediation activities, and development of a mixed-use residential building on the Project site, located on the northeast corner of East 19th Street and Park Boulevard, Assessor's Parcel Number (APN) 21-0229-12. The triangular-shaped Project site of approximately 7,442 square feet is bounded by East 19th Street, Park Boulevard, and 3rd Avenue. The proposed building would be five stories over a basement (approximately 65-foot-tall) with a total floor area of approximately 39,935 square feet, including a ground floor retail space and a basement garage. The Project would include a total of 23 residential units, including two affordable units designated for very low income households. The Project's residential component would be approximately 23,693 square feet on levels 2 to 5, consisting of a mix of two-bedroom units (10) and three-bedroom units (13). At the ground floor, commercial uses, totaling 3,664 square feet, would have frontage along Park Boulevard and 3rd Avenue. Parking would be provided in the basement, which would include 14 vehicular parking spaces. The ground floor would include a residential lobby and administration room, a trash collection area, and janitor room. A mezzanine level for mechanical utilities would be located above the trash collection area and janitor room. The Project would provide approximately 7,139 square feet of open space through a common open space on the roof (3,173 square feet) and private terraces (3,966 square feet).

This California Environmental Quality Act (CEQA) Analysis evaluates the Project. The Project is eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183 and 15183.3. Section 15183 provides for streamlined review when a project is consistent with a Community or General Plan and its development density, and the impacts of projects implemented under the Plan have been analyzed in a certified program Environmental Impact Report (EIR). Section 15183.3 applies specifically to qualified infill development projects, limiting the topics subject to review at the project level, provided the effects of infill development have been addressed in a planning level decision or by uniformly applying development policies or standards.

This analysis uses CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183 and 15183.3 to tier from the analyses completed for the City of Oakland General Plan Land Use and Transportation Element (LUTE) and its Environmental Impact Report (EIR) and the 2023-2031 Housing Element addressed in the Phase I Oakland 2045 General Plan EIR, which analyzed environmental impacts associated with adoption and implementation of the Housing Element.

This analysis also assumes the implementation of the City's Standard Conditions of Approval (SCAs) included as **Attachment A**, as the Project would be required to implement the uniformly applied SCAs to avoid or reduce potential impact.

III. Background – Program Plans and EIRs

III. Background – Program Plans and EIRs

The Project Applicant is proposing to demolish the auto-repair building and a one-canopy style hand car wash, conduct site remediation activities, and construct a mixed-use residential building on the Project site. The Project site is located on the northeast corner of East 19th Street and Park Boulevard. Current zoning is Neighborhood Commercial-3 Zone (CN-3).

This CEQA Analysis evaluates the Project. The Project is eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183, which provides for streamlined review when a project is consistent with a Community or General Plan and its development density, and the impacts of projects implemented under the Plan have been analyzed in a certified program EIR.

The Project is also eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183.3 for certain qualified infill projects by limiting the topics that are subject to review at the project level, provided the effects of infill development have been addressed in a planning level decision, or by uniformly applying development policies or standards.

This analysis uses CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183 and 15183.3 to tier from the program-level analysis completed in the City of Oakland (City) General Plan Land Use and Transportation Element (LUTE) and its Environmental Impact Report (EIR)¹ and the 2023-2031 Housing Element and analyzed in the Phase I Oakland 2045 General Plan Update EIR,² which analyzed environmental impacts associated with adoption and implementation of the Housing Element.

The following describes the Program EIRs that constitute the previous CEQA documents considered in this CEQA Analysis. Each of the following documents is hereby incorporated by reference and can be obtained from the the City of Oakland Planning and Building Department website at <https://www.oaklandca.gov/resources/environmental-review-docs>

III.1 APPLICABLE PROGRAM EIRS

III.1.1 General Plan Land Use and Transportation Element and EIR Analysis

The City certified the EIR for its General Plan Land Use and Transportation Element (LUTE) in 1998. The LUTE identifies policies for utilizing Oakland’s land as changes occur and sets forth an action program to implement the land use policy through development controls and other strategies.

The Project would be consistent with several 1998 General Plan LUTE objectives and policies. For example, the Project would help the City meet its objectives related to expanding Oakland’s job base and economic strength (Objective I/CI) by providing opportunities for new short- and long-term employment associated with the construction and operation of the Project. The Project would also meet the LUTE objectives related to more efficient land use patterns, redevelopment of underutilized land, transit-oriented development, and additional housing capacity.

¹ City of Oakland, 1998. Land Use and Transportation Element, Final EIR, February.

² ESA. 2023. Phase I Oakland 2045 General Plan Update. Response to Comments/Final Environmental Impact Report. Prepared for the City of Oakland. July.

III. Background – Program Plans and EIRs

The 1998 LUTE EIR is designated as a Program EIR under CEQA Guidelines Sections 15168, 15183, and 15183.3. Thus, the 1998 LUTE EIR provides the basis for use of the CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183 and the Qualified Infill streamlined review provisions under CEQA Guidelines Section 15183.3. As such, subsequent activities under the LUTE are subject to the requirements under each of the applicable CEQA sections.

Applicable mitigation measures identified in the 1998 LUTE EIR remain largely consistent and almost all of them have been integrated into Uniformly Applied Development Standards and applied as Standard Conditions of Approval (SCAs) adopted by the City.

Environmental Effects Summary – 1998 LUTE EIR

The 1998 LUTE EIR (including its Initial Study Checklist) determined that development consistent with the LUTE would result in impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures. Mitigation measures and now SCAs are required for the following resource topics: Aesthetics (views, architectural compatibility and shadow only); Air Quality (construction dust [including particulate matter less than 10 microns in diameter] and odor nuisance); Cultural Resources (except as noted below as less than significant); Hazards and Hazardous Materials; Land Use (use and density incompatibilities); Noise (use and density incompatibilities, including from transit/transportation improvements); Population and Housing (induced growth, policy consistency/clean air plan); Public Services (except as noted below as significant); and Transportation and Circulation (intersection operation Downtown).

In the 1998 LUTE EIR, less-than-significant impacts were identified for the following resources: Aesthetics (scenic resources, light and glare); Air Quality (clean air plan consistency, roadway emissions in Downtown, energy use emissions, local/regional climate change); Biological Resources; Cultural Resources (historic context/settings, architectural compatibility); Energy; Geology and Seismicity; Hydrology and Water Quality; Land Use (conflicts in mixed-use projects and near transit improvements); Population and Housing (exceeding household projections, housing displacement from industrial encroachment); Public Services (water demand, wastewater flows, stormwater quality, parks services); and Transportation and Circulation (transit demand). No impacts were identified for Agricultural and Forestry Resources or Mineral Resources.

Significant unavoidable impacts were identified for the following environmental resources in the 1998 LUTE EIR: Air Quality (regional emissions, roadway emissions Downtown); Noise (construction noise and vibration in Downtown); Public Services (fire safety); Transportation and Circulation (roadway segment operations); Wind Hazards; and Policy Consistency (clean air plan). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

III.1.2 2023-2031 Housing Element and EIR Analysis

On September 26, 2023, the City of Oakland certified the EIR for the Phase I Oakland 2045 General Plan Update³ that included actions outlined in the adopted 2023-2031 Housing Element. The Project would be consistent with the 2023-2031 Housing Element associated with the Phase I Oakland 2045 General

³ ESA. 2023. Phase I Oakland 2045 General Plan Update. Response to Comments/Final Environmental Impact Report. Prepared for the City of Oakland. July.

III. Background – Program Plans and EIRs

Plan Update by virtue of introducing new housing stock in proximity to transit and with a mix of land uses on the same site (2023-2031 Housing Element Action 5.2.2: Promote infill, transit-oriented development, and mixed-use development).

The Phase I Oakland 2045 General Plan Update EIR is designated a Program EIR under State CEQA Guidelines Sections 15168, 15183, and 15183.3. Thus, the Phase I Oakland 2045 General Plan Update EIR provides the basis for use of the CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183 and the Qualified Infill streamlined review provisions under CEQA Guidelines Section 15183.3. As such, subsequent activities under the Housing Element that involve housing are subject to requirements under each of the applicable CEQA sections.

Applicable mitigation measures and SCAs identified in the Phase I Oakland 2045 General Plan Update EIR are considered in the analysis of this document (see **Attachment A**).⁴

Environmental Effects Summary

The Phase I Oakland 2045 General Plan Update EIR, including the Initial Study Checklist, determined that housing developed pursuant to the Housing Element would result in impacts that would be reduced to a less-than-significant level with the implementation of mitigation measures and/or SCAs (described in **Attachment A**). Standard conditions of approval and mitigation measures are required for the following resource topics: Aesthetics (except as noted below) Air Quality (except as noted below); Biological Resources (except as noted below); Cultural Resources (except as noted below); Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials (except as noted below); Hydrology and Water Quality; Land Use and Planning (except as noted below); Noise (except as noted below); Population and Housing (except as noted below); Public Services (except as noted below); Recreation; Transportation and Circulation; Utilities and Service Systems; Wildfire (except as noted below).

Less-than-significant impacts were identified for the following resources in the Phase I Oakland 2045 General Plan Update EIR: Aesthetics (exceptions to policies and regulations); Air Quality (criteria air pollutants, odors); Biological Resources (wetlands); Energy; Hazards and Hazardous Materials (safety hazards near airports, emergency access routes); Land Use and Planning (division of an established community, conflict with applicable plans); Noise (noise exposure in excess of applicable standards, permanent increase in ambient noise, excessive noise near airports) Population and Housing (substantial population growth); Public Services (requirements of new or altered school facilities); Wildfire (installation or maintenance of associated infrastructure, wildfire risk as a result of runoff, slope instability, or drainage changes) No impacts were identified for Agricultural and Forestry Resources or Mineral Resources.

Significant unavoidable impacts were identified for the following environmental resources in the General Plan Update EIR: Aesthetics (shadow and wind only, aesthetics, wind, and shadow in the cumulative condition); Air Quality (average daily emissions, health risk associated with toxic air contaminants and fine particulate matter); Cultural Resources (Historic Resources); Hazards and Hazardous Materials (impairment of an evacuation plan); and Wildfire (cumulative development).

⁴ ESA. 2023. Phase I Oakland 2045 General Plan Update. Response to Comments/Final Environmental Impact Report. Prepared for the City of Oakland. July.

III. Background – Program Plans and EIRs

Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City’s approvals.

III.2 PREVIOUS MITIGATION MEASURES AND CURRENT STANDARD CONDICTIONS OF APPROVAL

As described above, the CEQA Checklist provided in Chapter VII of this document evaluates the potential Project specific environmental effects and evaluates whether such impacts were adequately covered by the Program EIRs, described above, to allow the above-listed provision of CEQA to apply. The analysis conducted incorporates by reference the information contained in each of the Program EIRs. The Project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the Program EIRs if applicable to the Project. As discussed in this analysis, either the mitigations don’t apply or they have been revised into Uniformly Applied Development Standards as Standard Conditions of Approval and are included and required for the Project.

III.2.1 Standard Conditions of Approval Application in General

The City of Oakland established its Standard Conditions of Approval (SCAs) and Uniformly Applied Development Standards in 2008 after certification of the 1998 LUTE EIR. They have since been amended and revised several times. The most recent version of the SCAs was published by the City on December 19, 2024. The City’s SCAs are incorporated into and applied to new and changed projects as conditions of approval, regardless of a project’s environmental determination, pursuant to CEQA Guidelines Sections 15183 and 15183.3. These SCAs incorporate policies and standards from various adopted plans, policies, and ordinances (e.g., Oakland Planning Code and Municipal Code, Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Tree Protection Ordinance, Grading Regulations, National Pollutant Discharge Elimination System [NPDES] permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code). The implementation of these policies and standards have been found to substantially mitigate environmental effects, aligning with CEQA requirements. The SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and would, substantially mitigate environmental effects. It is concluded that there are no peculiar circumstances associated with the project or its site that would result in significant environmental impacts following the implementation of SCAs. Accordingly, no further mitigation measures beyond the identified SCAs and/or mitigation measures in the Program EIRs that have been identified to mitigate those impacts are necessary to reduce project impacts to less than significant levels. In some instances, exact methods for implementing identified measures/conditions await completion of future studies, adhering to legal guidelines where feasible approaches are known, and in compliance with federal, state, or local regulations.

Consistent with the requirements of CEQA, a determination of whether the Project would have a significant impact was made prior to the approval of the Project and, where applicable, SCAs and/or mitigation measures in the Program EIRs have been identified to mitigate those impacts. In some instances, exactly how the measures/conditions identified will be achieved awaits completion of future studies, an approach that is legally permissible where measures/conditions are known to be feasible for the impact identified; where subsequent compliance with identified federal, state, or local regulations or requirements apply; where specific performance criteria are specified and required; and

III. Background – Program Plans and EIRs

where the Project commits to developing measures that comply with the requirements and criteria identified.

All mitigation measures and applicable SCAs for the Project are listed in ***Attachment A: Standard Conditions of Approval and Mitigation Monitoring and Reporting Program***, of this document. Per Planning Code Section 17.130.070, the Project would be subject to the most recent version of City SCAs.

IV. Project Description

IV.1 PROJECT SETTING

IV.1.1 Project Location and Planning Context

The 1901 Park Boulevard Condos Project (Project site) is located on the north corner of East 19th Street and Park Boulevard. The triangular-shaped Project site of approximately 7,442 (0.17 acres) square feet—Assessor's Parcel Number (APN) 021 022901200—is bounded by East 19th Street, Park Boulevard, and 3rd Avenue (see **Figure 1**). The Project site is accessible from 3rd Avenue, East 19th Street, and Park Boulevard. Multiple transit routes serve the Project site, including AC Transit bus Lines 33 and 40. The nearest bus stop to the Project site is located at approximately 0.3 miles.

The Project site is located within the Neighborhood Center Mixed Use General Plan land use designation. The General Plan states that the intent of this designation is to “identify, create, maintain, and enhance mixed use neighborhood commercial centers. Vertical integration of uses, including residential units above street-level commercial space is encouraged.” The parcel at 1901 Park Boulevard is zoned Neighborhood Commercial Zone- 3 (CN-3). The intent of the CN-3 zone is to create, improve, and enhance areas neighborhood commercial centers that have a compact, vibrant pedestrian environment. The Project site is also within the Affordable Housing Combining (S-13) Zone. The S-13 Zone is intended to create and preserve affordable housing restricted for extremely low, very low, low, and/or moderate-income households, (as defined in California Government Health and Safety Code Sections 50093, 50105, 50106, and 50052.5 and in Oakland Planning Code Section 17.107.020). It is an optional zoning for projects with 100% affordable housing.

IV.1.2 Existing Site Conditions and Background

The Project site, of approximately 7,442 square feet, is predominantly flat and developed with an automotive garage, one canopy-style hand car wash, and asphalt pavement. The automotive garage built in 1965 is approximately 1,626 square feet. The remaining portion of the site is paved except for a landscaped planter located at the angle of the site bounded by 3rd Avenue and Park Boulevard. A row of three street trees line Park Boulevard along the southern border of the Project Site. A remaining tree stump and grass are in the planter.

The Project site was formerly occupied by a gas station from 1928 to 1990 and Yuen's Automotive from 1978 to 2020. Four underground storage tanks (USTs) (one 10,000-gallon gasoline tank, one 8,000-gallon gasoline tank, one 6,000-gallon gasoline tank, and one 500-gallon waste oil tank) were formerly located at the Project site. The Project site is currently listed on the Cortese list for known hazardous materials contamination. At present, the building at the Project site is utilized as an office and a shop for car servicing.

The structures on the project site are rated F3 by the Oakland Cultural Heritage Survey (OCHS), which indicates that the structures were less than 45 years or are modernized at the time of the survey and are not within a historical district (“3”). As described in Section VII.5, Cultural and Historic Resources, none of the buildings are designated as a local landmark and none of the buildings are considered historic resources under CEQA.

IV. Project Description Background – Program Plans and EIRs

Existing uses in the Project vicinity include commercial (e.g., retail and restaurants), residential, and recreational uses. An assisted living center is located north of the Project Site on 3rd Avenue. FM Smith Recreational Center is also adjacent to the Project site from the north. The recreational center includes two playgrounds, community gardens, and picnic areas. Commercial uses are located to the southeast, south, and southwest, along Park Boulevard and East 19th Street. Multi-unit residential buildings are located to the west.

The Project site has two actively used curb cuts on each of Park Boulevard and 3rd Avenue. An additional curb cut located on East 19th Street is currently closed with a 6-foot-high steel fence. The steel fence extends on Park Boulevard and 3rd Avenue.

IV.2 PROJECT CHARACTERISTICS

IV.2.1 Project Components

The Project Applicant for the 1901 Park Boulevard Condos Project proposes to develop a five-level building over basement with mixed-use residential building of 23 residential units that include 2 affordable units for very low-income households. The Project's residential component would be approximately 23,693 square feet on levels 2 to 5, consisting of a mix of two-bedroom units (10) and three-bedroom units (13). At the ground floor, commercial uses, totaling 3,664 square feet, would have frontage along Park Boulevard and 3rd Avenue. Parking space in the basement of the proposed building would be approximately 4,970 square feet. The maximum height of the proposed Project building would be approximately 65 feet to the parapet, which exceeds the maximum allowable height at the Project site of 45 feet. The Project characteristics are summarized below in **Table 1**.

TABLE 1
PROJECT CHARACTERISTICS

Lot	Dimensions
Size	7,442 square feet (0.17 acres)
Proposed Building Uses	Area (sf)
Residential	23,693 (23 units)
Retail	3,664
Parking	4,970
Circulation and ancillary space	7,765
Total	39,935
Proposed Parking	
Vehicle Parking Spaces	14
Bicycle Parking Spaces	9 (5 long term/4 short term)
Open Space	
Common Open Space	3,173
Private Terraces	3,966
Total Open Space	7,139

Note: Square feet: sf

SOURCE: C.M. Wong Architecture, March 2023

The ground floor would include a residential lobby and office, a trash collection area, a mailboxes area, a janitor room, two spaces for mechanical utilities, and approximately 3,664 square feet of retail space fronting Park Boulevard, 3rd Avenue, and East 19th Street. The second floor through the fifth floor

IV. Project Description Background – Program Plans and EIRs

would contain approximately 23 residential units with 6 units on the second, third, and fourth floors, and five units on the fifth floor. The residential units would be a mix of two-bedroom units (10) and three-bedroom units (13). Two of the units would be affordable residential units for very-low-income households. Approximately 7,139 square feet of group and private open space would be provided through an open space on the roof and private terraces.

The project site plan, typical floor plans, building elevations, and building renderings are shown on **Figure 2 through Figure 12.**

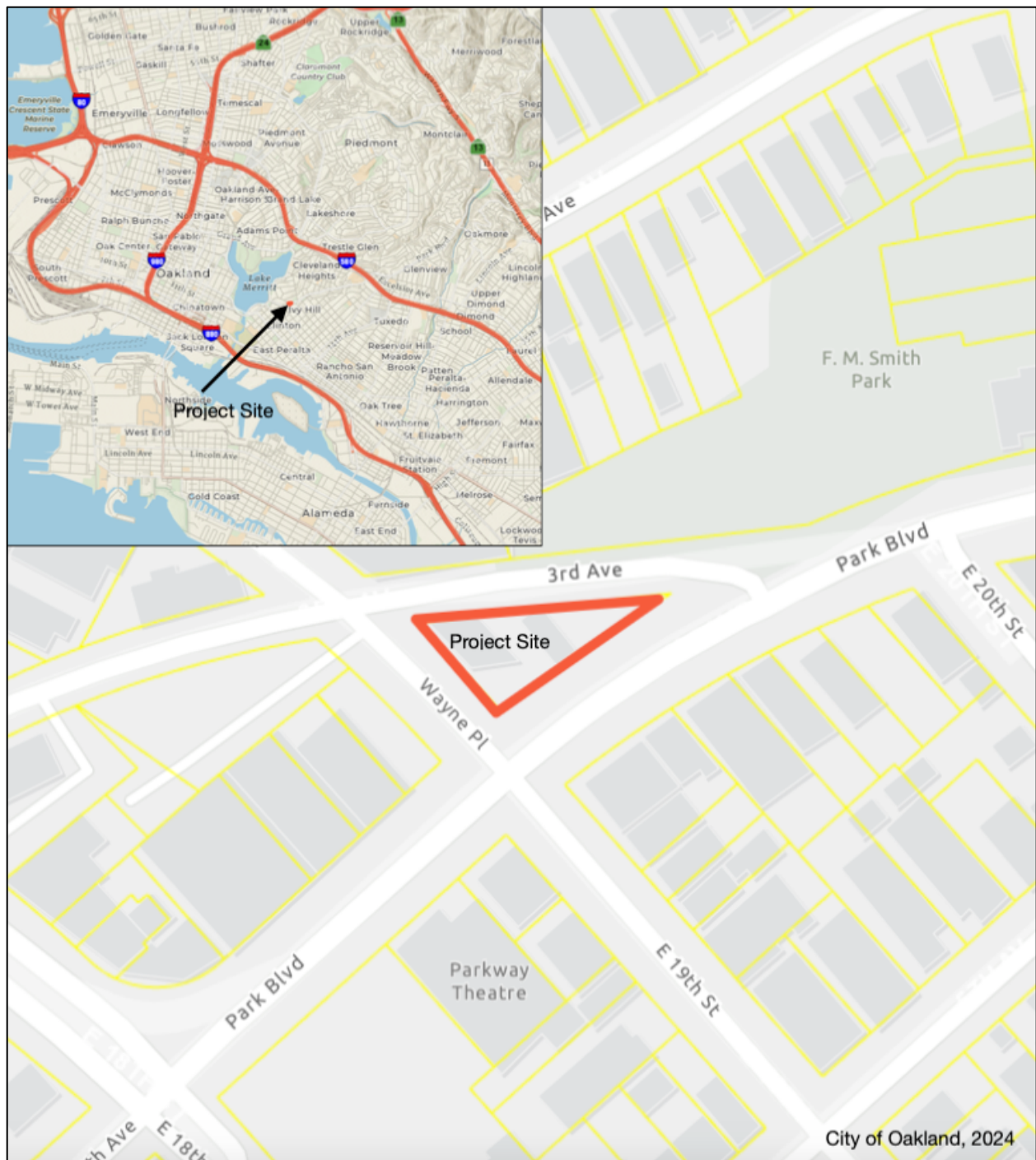
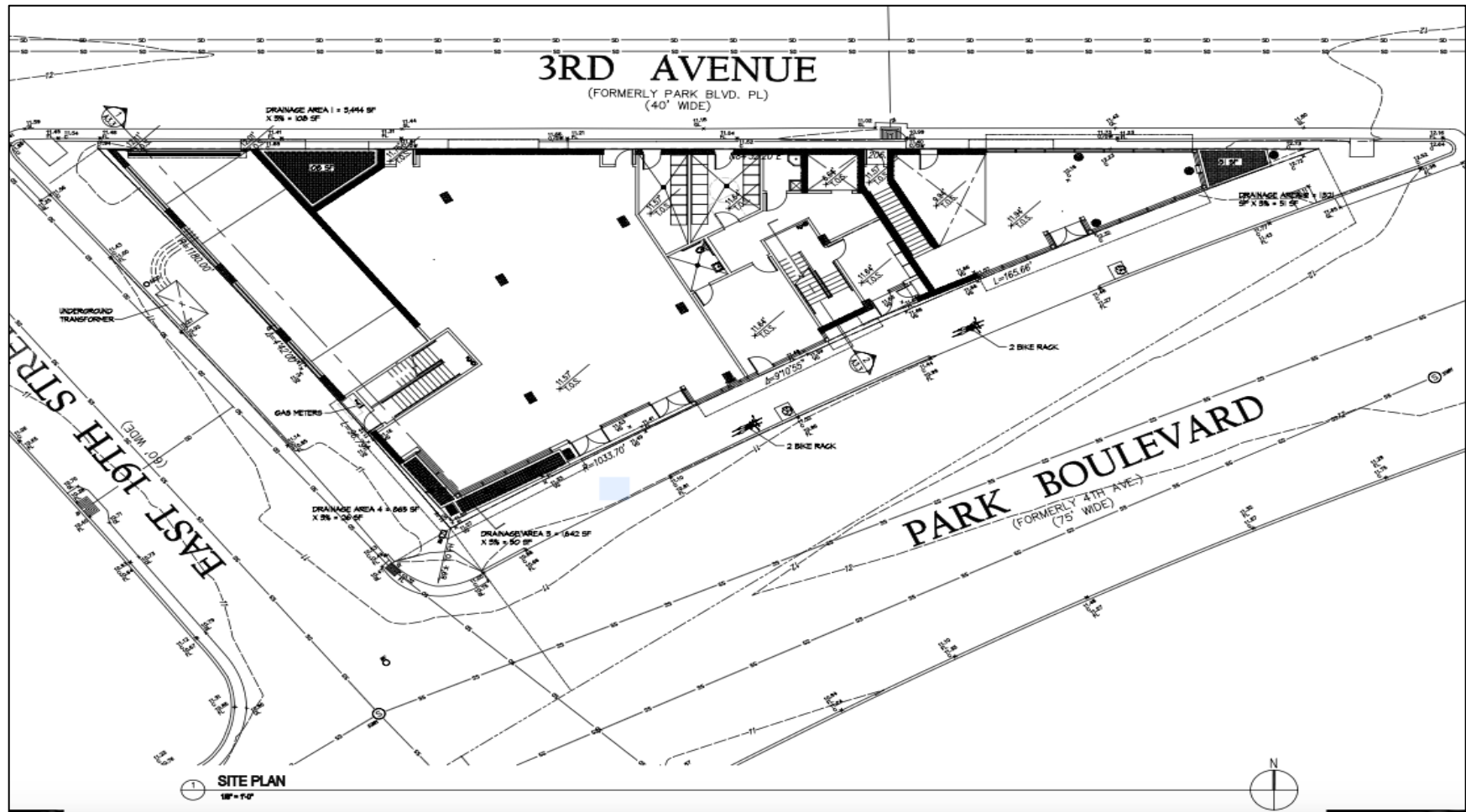


Figure 1
Site Location



Source: Wong Architecture, 2023.

Figure 2
Project Site Plan



E 19TH ST. ELEVATION

1/8" = 1'-0"

Source: Wong Architecture, 2023.

Figure 3
Façade Along East 19th Street



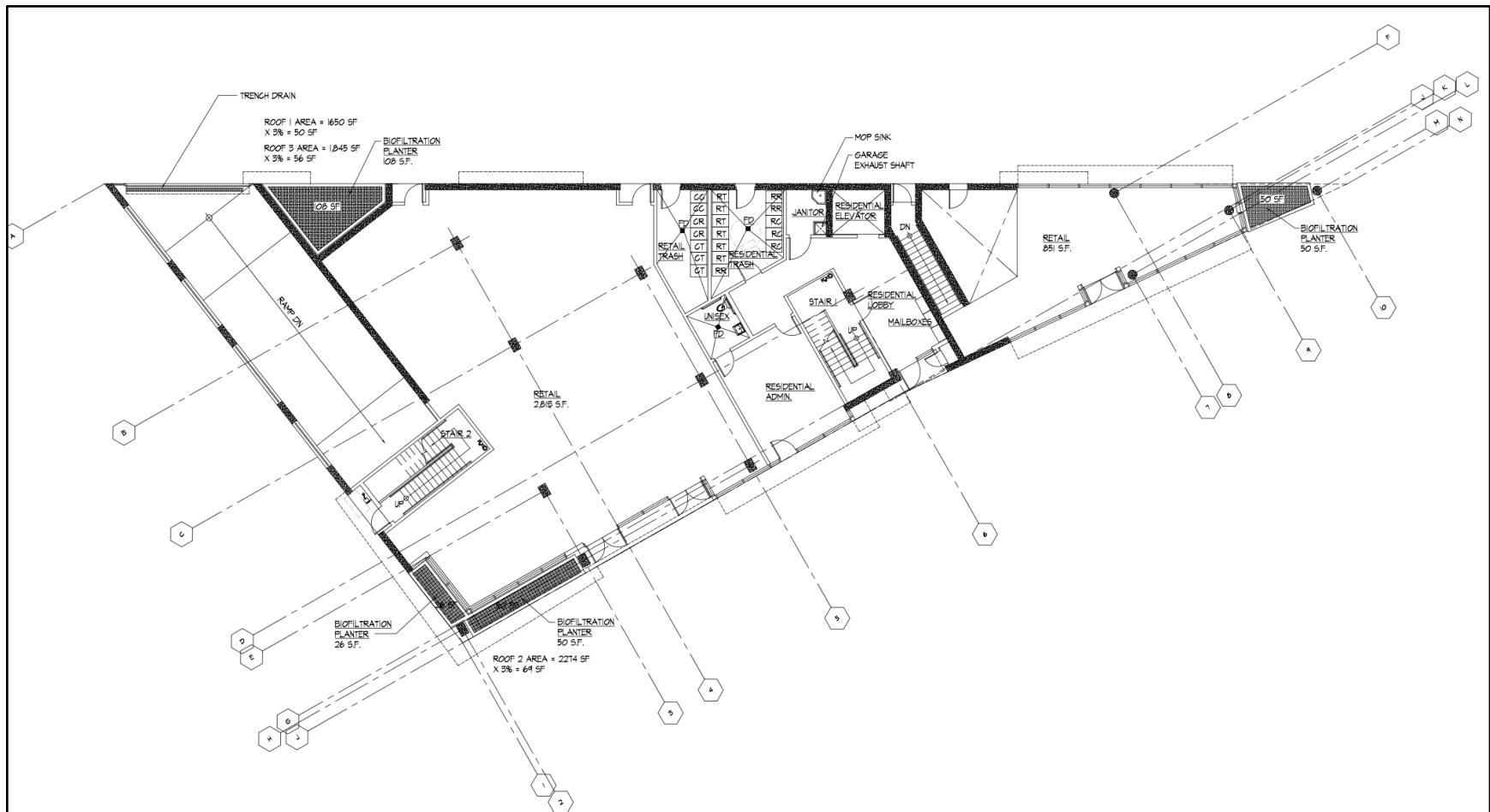
Source: Wong Architecture, 2023.

Figure 4
Façade Along 3rd Avenue



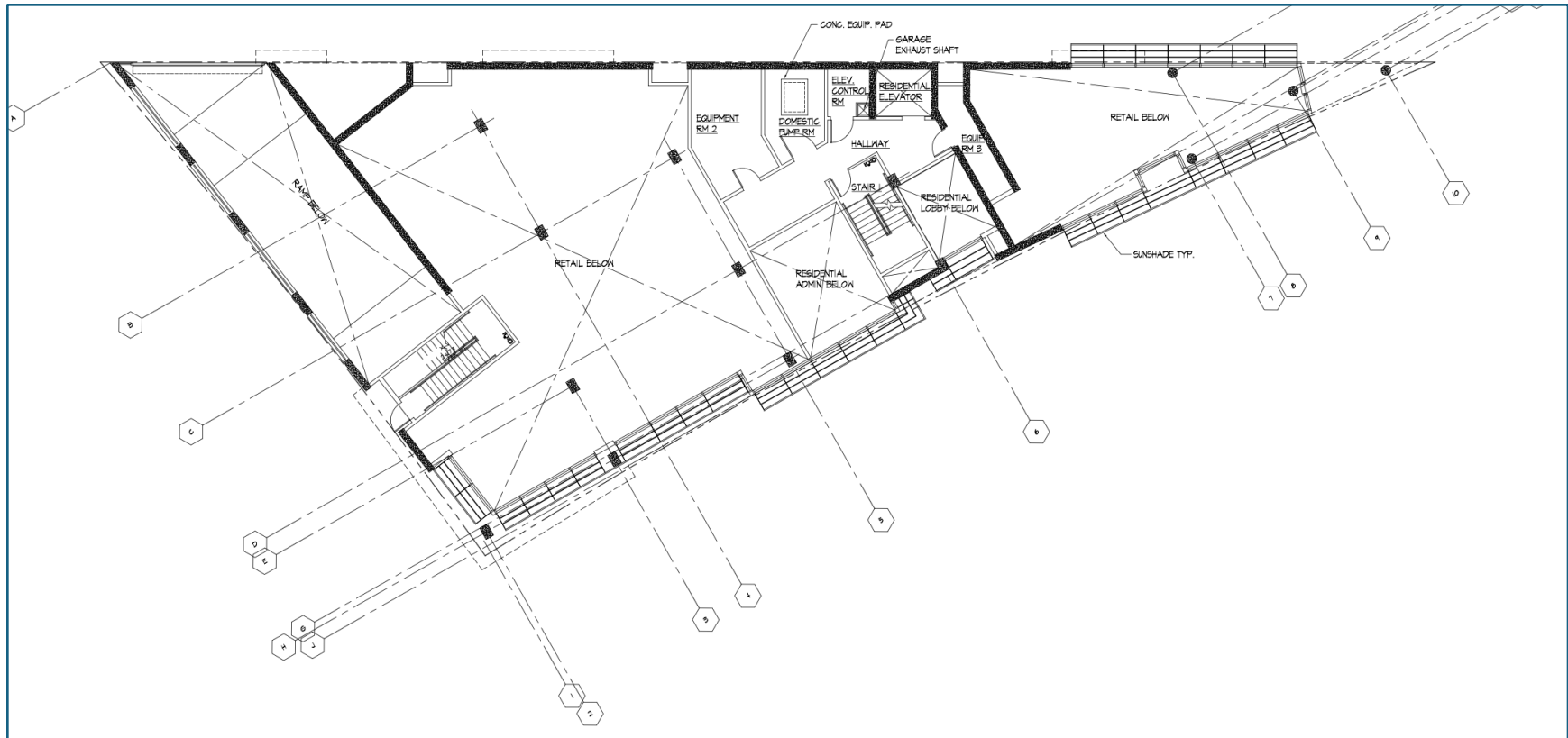
Source: Wong Architecture, 2023.

Figure 5
Façade Along Park Boulevard



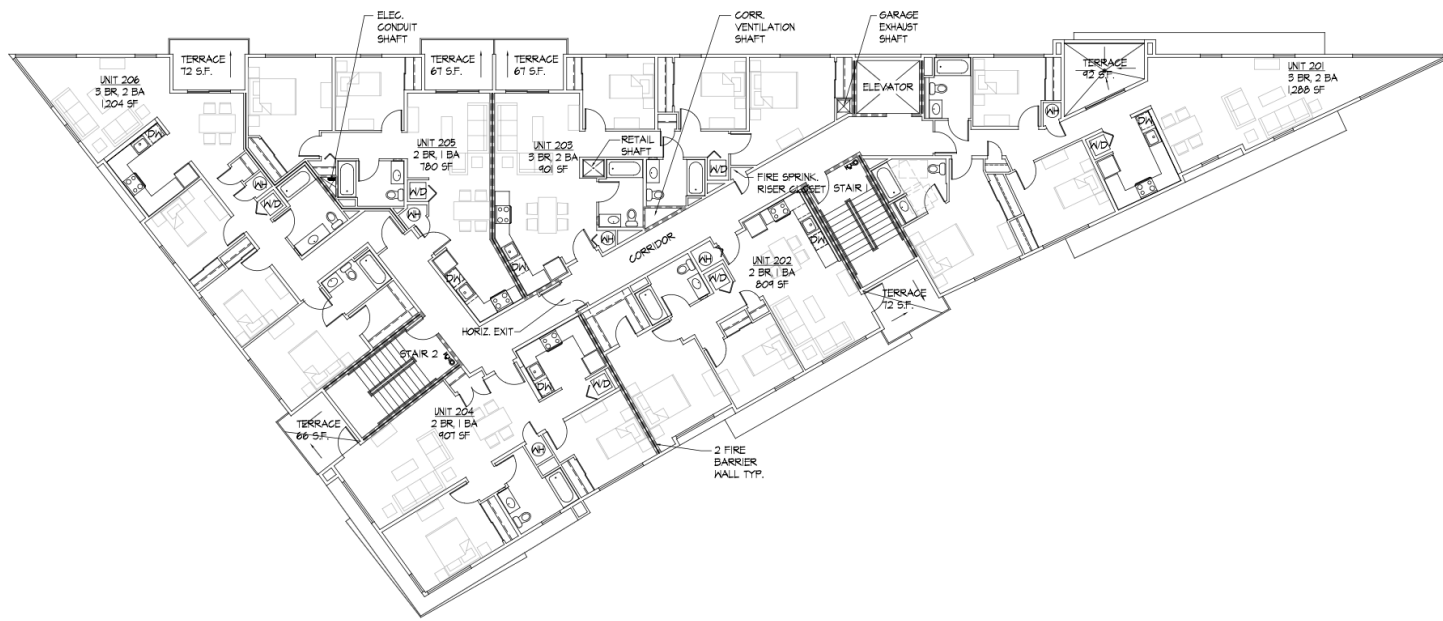
Source: Wong Architecture, 2023.

Figure 6
Project Ground Floor Plan



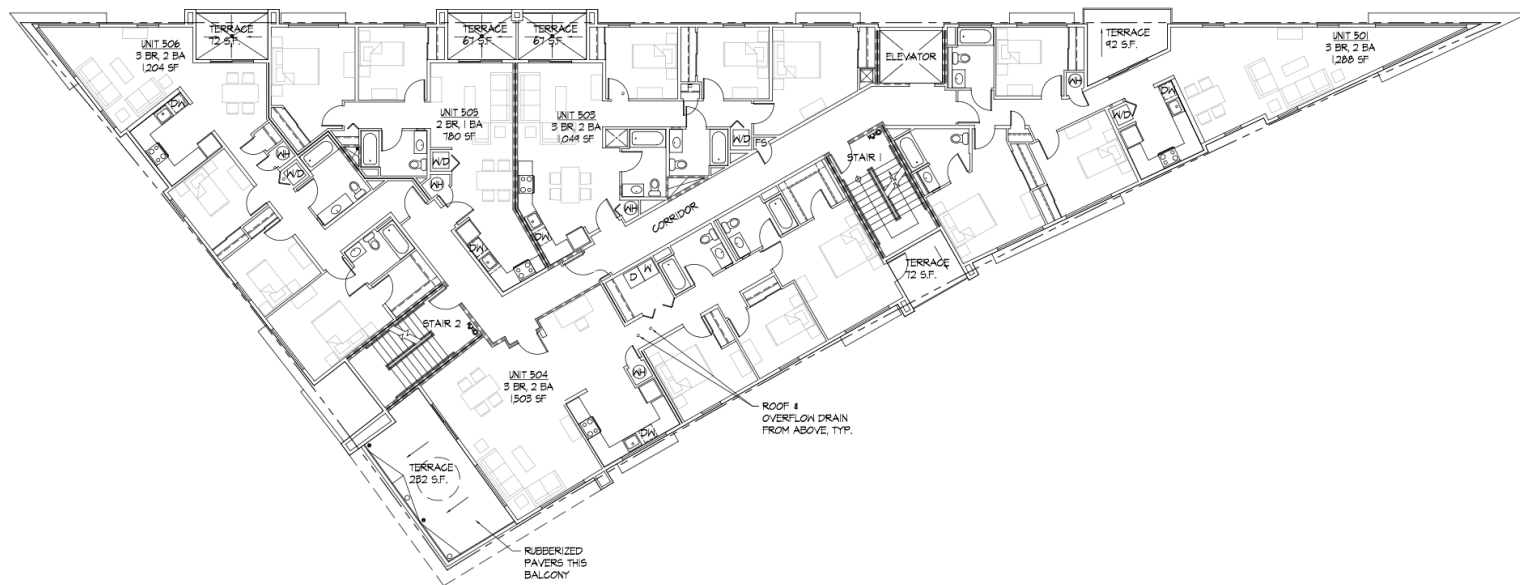
Source: Wong Architecture, 2023.

Figure 7
Project Mezzanine Level



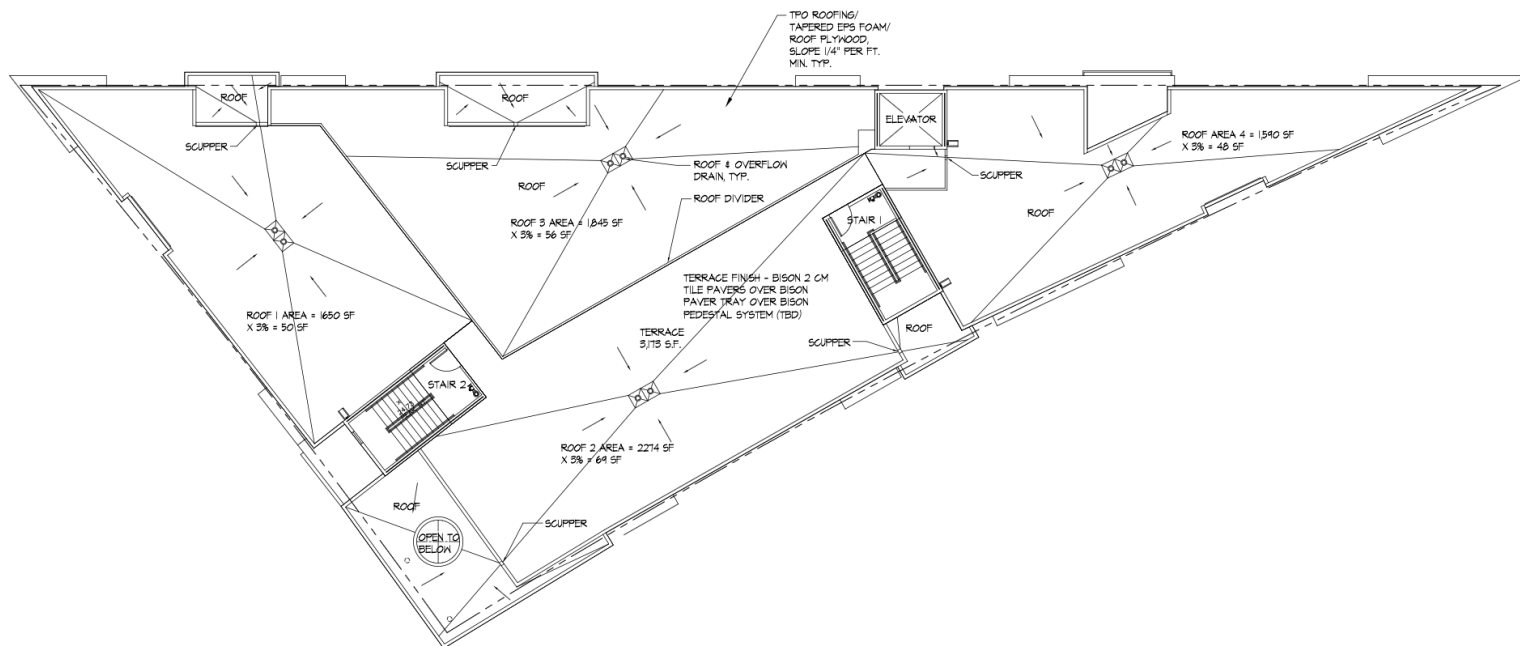
Source: Wong Architecture, 2023.

Figure 8
Project 2nd, 3rd, and 4th Floor Plan



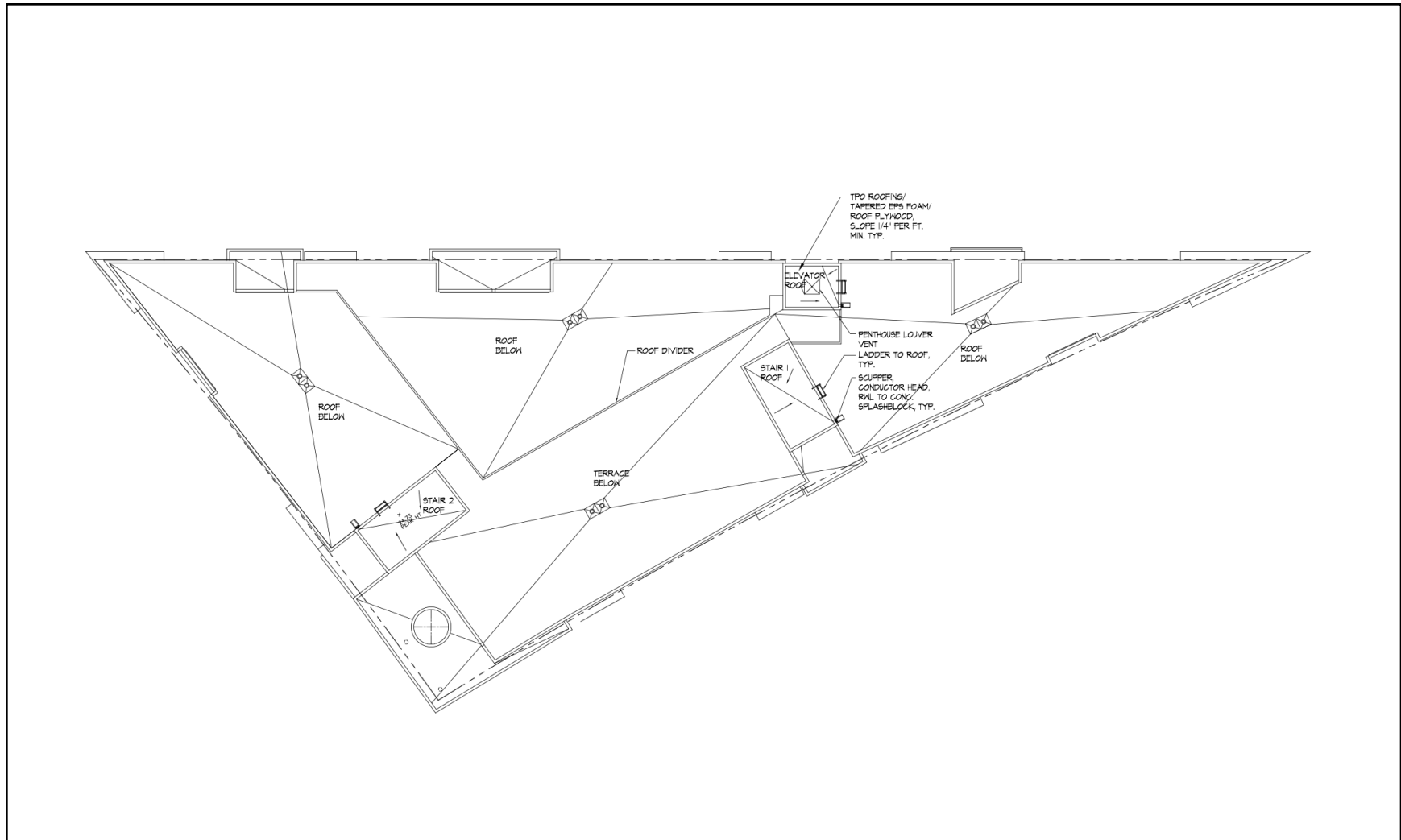
Source: Wong Architecture, 2023.

Figure 9
Project 5th Floor Plan



Source: Wong Architecture, 2023.

Figure 10
Project Roof Plan



Source: Wong Architecture, 2023.

Figure 11
Project Upper Roof Plan



Figure 12

Project Basement Plan

IV.2.2 Density Bonus

The Project Applicant is seeking a density bonus to develop the site with 23 residential units including 2 affordable units designated for very-low-income households. The maximum allowable residential density before the application of the density bonus is 1 unit per 450 square feet of the Project site. This would be equivalent to 17 residential units. The density bonus would permit a 35 percent increase in the total number of units, allowing for a maximum of 23 units, including 2 affordable units designated for very-low-income households.

In conjunction with the density bonus request, the Project Applicant is seeking concessions/waivers for the number of stories, required project height, residential units in the rear yard setback, and location of group open space on the roof.

IV.2.3 Landscaping and Open Space

Three existing street trees along Park Boulevard Street would be preserved in place. As described above, the Project would include approximately 7,139 square feet of group and private open space. The common open space, approximately 3,173 square feet, would be provided on the roof of the proposed Project building. Private terraces, approximately 3,966 square feet, would be provided on the three sides of the building.

IV.2.4 Utilities and Infrastructure Improvements

Utility services are currently provided to the existing structures at the Project site and would be readily available to serve the Project. Water supply and treatment, and wastewater treatment are provided to Oakland by East Bay Municipal Utility District (EBMUD). The project site is currently served by sanitary sewer and water lines. Minor connections or modifications to these existing lines would be required to serve a new structure on the Project site. A gas connection line is currently available at the Project site. The Project would be fully electrical and would not retain the gas connection. The Project Applicant, the Project design, and occupants of the Project site would be required to comply with the waste reduction and recycling regulations outlined in Oakland Municipal Code Chapter 15.34. Impacts related to utilities is described in Section VII.15, Utilities and Service Systems.

IV.2.5 Parking and Circulation

The Project would provide approximately 14 vehicle parking spaces in the basement of the proposed new building. The parking garage would also contain approximately five long-term bicycle parking spaces. Approximately 4 short-term bicycle parking spaces would be provided in bike racks along the sidewalk on Park Boulevard. Vehicular access to the proposed parking garage would be through a ramp accessed via a proposed curb cut on 3rd Avenue near the intersection with East 19th Street (**Figure 6**). Primary pedestrian access to the retail component of the Project would be via entrances on 3rd Avenue and Park Boulevard. Primary pedestrian access to the residential component of the Project would be through the residential lobby on Park Boulevard (**Figure 6**). Pedestrian access to the parking garage would be provided via stairs accessed from East 19th Street.

IV.2.6 Project Construction

Construction activities would consist of grading and site preparation (including demolition of existing structures and parking asphalt as well as site remediation activities); foundation and below-grade construction; and construction of the building and interiors. Project construction is expected to occur over approximately 12 months, with construction scheduled to commence in the fourth quarter of 2025 and be completed in 2026.

Site preparation is anticipated to require excavation and off-haul of approximately 4,000 cubic yards of soil and approximately 167 tons of construction debris. Groundwater in the vicinity of the Project site is expected to be approximately 4 to 5.5 feet below ground surface⁵ (bgs). Foundation columns are anticipated to potentially reach a depth of 12 feet; therefore, dewatering during construction may be required.

IV.2.7 Project Site Issues

As noted above in Section IV.1.2, Existing Site Conditions and Background, the Project site is currently an Open Leaking Underground Storage Tank (LUST) Cleanup Case with Alameda County Environmental Health Department (ACEHD). The Project site was formerly occupied by a gas station from 1928 to 1990 and Yuen's Automotive from 1978 to 2020. All underground storage tanks were removed in 1994, and 1997, and the Project site received closure via Remedial Action Completion Certification from the ACEHD for the LUST case.^{6,7} A site investigation conducted in 2021 identified high concentrations of residual petroleum hydrocarbons in soil, groundwater, and soil gas associated with the previously closed leaking UST case.⁸ In October 2021, ACEHD reached the determination to reopen the closed leaking UST case.⁹

On February 12, 2024, the Project Applicant submitted a *Corrective Action Plan* (plan) to ACEHD.¹⁰ The plan outlined additional assessment to determine the extent of contamination and described several methods to remove the residual petroleum contamination at the site.

On April 3, 2024, ACEHD concurred with the proposed remedial activities using the excavation method and approved the Corrective Action Plan to address the residual petroleum contamination at the project site.¹¹

The Project will be required to implement all recommendations of the Corrective Action Plan, as required by the ACEHD.

⁵ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

⁶ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

⁷ Alameda County Health Services Agency. 1997. Remedial Action Completion Certification. Yuen's Exxon Service, 1901 Park Boulevard, Oakland, Ca 94606. August 12.

⁸ Pangea. 2022. Assessment Report. 1901 Park Boulevard, Oakland CA. LOP Case No. RO0000912. July 29.

⁹ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

¹⁰ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

¹¹ Alameda County Environmental Health Department. 2024. Agency Approval of the Corrective Action Plan. April 3.

IV.3 REQUESTED PERMITS

IV.3.1 Actions by the City of Oakland

- **Bureau of Planning**—Regular Design Review, Tentative Parcel Map (for condominiums) and CEQA determination.
- **Oakland Public Works Department** – Tree Removal/Preservation Permit, Final Map (for condominiums)
- **Oakland Department of Transportation (OakDOT)** - Encroachment permits for work within and close to public rights-of-way (Chapter 12.08 of the Oakland Municipal Code)
- **Building Department**—grading permit, building permit, infrastructure permits, approval of Post-Construction Stormwater Control Plan demonstrating compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP).
- All other necessary development permits and entitlements from the City.

IV.3.2 Actions by Other Agencies

- **East Bay Municipal Utility District** – Grant a Special Discharge Permit to discharge construction dewatering to the sanitary sewer (if needed) and/or approval of new service requests and new water meter installations.
- **Alameda County Department of Environmental Health** – The Project Applicant has entered into the Voluntary Site Cleanup Program with the ACDEH, which oversees remediation of sites under a voluntary remedial action agreement. The purpose of entering into the Voluntary Cleanup Program is to receive a No Further Action letter from a regulatory agency certifying that the Project development site is not contaminated and/or the site conditions do not pose a human health and safety risk.

V. Summary of Findings

An evaluation of the Project is provided in the CEQA Analysis below. This evaluation concludes that the Project required no additional environmental review and the Project is consistent with the development density and land use characteristics established by existing zoning and General Plan policies for which an EIR was certified (i.e., the Program EIRs). As such, the Project would be required to comply with the applicable City of Oakland SCAs (see **Attachment A** for a complete list of SCAs referred to and required by this CEQA Analysis). With implementation of the applicable SCAs, the Project would not result in a substantial increase in the severity of significant impacts that were previously identified in the General Plan or any new significant impacts that were not previously identified in the Program EIRs.

In accordance with Public Resources Code Sections 21083.3 and 21094.5, and State CEQA Guidelines Sections 15183 and 15183.3, and as set forth in this CEQA Analysis, the Project qualifies for CEQA tiering/streamlining because the following findings can be made:

- **Consistency with Community Plan or Zoning (CEQA Guidelines Section 15183):** The following analysis demonstrates that the Project is consistent with the development density established by existing zoning and General Plan policies for which an EIR was certified (i.e., the Program EIRs). The Project is consistent with the LUTE and will not result in significant impacts that were not previously identified as significant project-level, cumulative, or offsite effects in the LUTE EIR.

The Project is permitted in the zoning district where the Project site is located (CN-3) and is consistent with the bulk, density, and land use standards envisioned in the General Plan, LUTE, and the Municipal Code. The analysis presents substantial evidence that there would be no significant impacts peculiar to the Project or its site, and that the Project's potentially significant effects have already been addressed as such in the LUTE EIR, or will be substantially mitigated by the imposition of SCAs, as further described in **Attachment A**. No further environmental documents are required in accordance with CEQA Guidelines Section 15183.

- **Streamlining for Qualified Infill Projects (CEQA Guidelines Section 15183.3):** The following analysis demonstrates that the Project is located in an urban area on a site that has been previously developed; satisfies the performance standards provided in CEQA Guidelines Appendix M; and is consistent with the General Plan land use designation, density, building intensity and applicable policies. As such, this environmental review is limited to an assessment of whether the project may cause any project-specific effects, and relies on uniformly applicable development policies or standards to substantially mitigate cumulative effects.

Each of the above findings provides a separate and independent basis for CEQA compliance.

Lauren B. Koninski

for Edward Manasse

6/5/2025

Environmental Review Officer

Date

VI. Project Consistency with Community Plan or Zoning

CEQA Guidelines Section 15183

CEQA Guidelines Section 15183 allow streamlined environmental review for projects that are “consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site.” Section 15183(c) specifies that an EIR does need to be prepared for the project “if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards.”

The following analysis provides substantial evidence to support a conclusion that the Project qualifies for streamlined review under CEQA Guidelines Section 15183 as a project consistent with the development density established by existing zoning community plan, or general plan policies for which an EIR was certified.

Criterion Section 15183 (a): General Plan, Community Plan, and Zoning Consistency

Yes

No



The Project is consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified.

The Project site is located in a Neighborhood Commercial area, where the existing land use pattern consists of a mix of residential uses and commercial uses. The General Plan land use designation for the Project site is Neighborhood Center Mixed Use. The Neighborhood Center Mixed Use classification allows commercial or mixed uses that are pedestrian-oriented and serve nearby neighborhoods, or urban residential with ground floor commercial. These centers are typically characterized by smaller scale pedestrian-oriented, continuous street frontage with a mix of retail, housing, office, active open space, eating and drinking places, personal and business services, and smaller scale educational, cultural or entertainment uses. The Project site is within the Neighborhood Commercial – 3 Zone (CN-3). The intent of the CN-3 zone is to create, improve, and enhance neighborhood commercial centers that have a compact, vibrant pedestrian environment. The Project would develop the site with a mixed-use residential and commercial building with retail stores fronting 3rd Avenue and Park Boulevard.

VI. Project Consistency with Community Plan or Zoning

As **Table 2** demonstrates, the Project would be consistent with the relevant policies of the 1998 LUTE EIR.

TABLE 2
EVALUATION OF CONSISTENCY WITH GENERAL PLAN LUTE

Relevant Policies, Principles and Guidelines of the General Plan (LUTE)	Project Consistency
Policy N1.1 Concentrating Commercial Development. Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail.	Consistent. The proposed ground-floor commercial space would be accessible directly by pedestrians from the sidewalk and therefore neighborhood-oriented.
Policy N1.2 Placing Public Transit Stops. The majority of commercial development should be accessible by public transit	Consistent. Numerous AC Transit bus routes are within 0.25 mile of the Project site, including bus Lines 33 and 40.
Policy N1.5 Designing Commercial Development. Commercial development should be designed in a manner that is sensitive to surrounding residential uses.	Consistent. The design and scale of the proposed ground floor commercial space would not be visually discordant with the mixed commercial and residential character of the surrounding blocks.
Policy N1.6 Reviewing Potential Nuisance Activities. The City should closely review any proposed new commercial activities that have the potential to create public nuisance or crime problems, and should monitor those that are existing. These may include isolated commercial or industrial establishments located within residential areas, alcoholic beverage sales activities (excluding restaurants), adult entertainment, or other entertainment activities.	Consistent. No specific tenant has been identified for the proposed ground floor commercial space. No alcoholic beverage sales, adult entertainment, or other entertainment uses are proposed.
Policy N3.1: Facilitating Housing Construction. Facilitating the construction of housing units should be considered a high priority for the City of Oakland.	Consistent: The Project would provide 23 residential units, including 2 affordable units for very-low-income households.
Policy N3.2: Encouraging Infill Development. In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City of Oakland.	Consistent. The Project site is surrounded by development and represents an infill development opportunity
Policy N3.5: Encouraging Housing Development. The City should actively encourage development of housing in designated mixed housing type and urban housing areas through regulatory	Consistent: The Project would provide 23 residential units, including 2 affordable units for very-low-income households.

VI. Project Consistency with Community Plan or Zoning

and fiscal incentives, assistance in identifying parcels that are appropriate for new development, and other measures.	
Policy N3.8: Required High Quality Design: High-quality design standards should be required of all new residential construction.	Consistent. The Project's choice of materials, design features would be subject to Design Review approval by the City.
Policy N3.9: Orienting Residential Development: Residential Development should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure.	Consistent. All residential units would face the surrounding project streets.
Policy N7.2 Defining Compatibility. Infrastructure availability, environmental constraints and natural features, emergency response and evacuation times, street width and function, prevailing lot size, predominant development type and height, scenic values, distance from public transit, and desired neighborhood character are among the factors that could be taken into account when developing and mapping zoning designations or determining compatibility. These factors should be balanced with the citywide need for additional housing	Consistent. The Project design would be consistent with the values that define compatibility. The Project is located near infrastructure for utilities, transit, and community services. In height, scale, and development type, the Project would be consistent with existing community character.
Policy N9.7 Creating Compatible but Diverse Development. Diversity in Oakland's built environment should be as valued as the diversity in population. Regulations and permit processes should be geared toward creating compatible and attractive development, rather than "cookie cutter" development.	Consistent. The Project's scale of development would be compatible with existing character of surrounding development and is subject to Design Review approval by the City.
Policy C.2.1 Pursuing Environmental Cleanup. The environmental cleanup of contaminated industrial properties should be actively pursued to attract new users in targeted industrial and commercial areas.	Consistent. Prior use of the site as a gasoline service station included four underground storage tanks, with three tanks used for gasoline and one tank used for waste oil. Following removal of these tanks, the project site received closure for Leaking Underground Storage Tanks (UST), in 1997, via Remedial Action Completion Certification from the Alameda County

VI. Project Consistency with Community Plan or Zoning

	<p>Environmental Health Department. However, in 2021, ACEHD reached the determination to reopen the closed leaking UST case following a site investigation that identified high concentrations of residual petroleum hydrocarbons in soil, groundwater, and soil gas. A Corrective Action Plan submitted on February 12, 2024 to ACEHD outlined additional assessment to determine if groundwater monitoring wells, formerly installed at the Project site, were properly destroyed, and to help delineate the extent of the soil contamination. The plan described several methods to remove the residual petroleum contamination at the site and recommended the excavation method given the soil type and the shallow depth to hydrocarbon impact and groundwater. On April 3, 2024, ACEHD concurred with the proposed remedial activities and approved the corrective action plan to address the residual petroleum contamination at the project site.¹² ACEHD approval required the submittal of the following deliverables:</p> <ul style="list-style-type: none">- Geotracker Database Compliance Certification Letter- Retainment of a Public Outreach Specialist- Draft fact sheet outlining the approved corrective action plan- Draft certification of fact sheet mailing- Response to public comment document (as needed)- Baseline project schedule- Geotracker database compliance <p>The Project will be required to obtain all necessary permits and submitting evidence of approved permits/authorization to the City of Oakland. The Project will also be required to implement an approved plan to protect Project construction workers from risks associated with hazardous materials. In addition, the Project will be required to ensure that BMPs are implemented by the contractor during construction to minimize potential hazards related to contaminated soil and groundwater.</p>
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As demonstrated in **Table 2** above, the Project is consistent with the development density established by existing zoning, community plan or General Plan policies for which an EIR was certified, and the Project qualifies as a Project Consistent with a Community Plan or Zoning pursuant to CEQA Guidelines Section 15183. Since the Project is consistent with the development assumptions for the land use classification and the site as provided under the LUTE EIR, the Project's potential contribution to cumulatively significant effects has already been addressed in the LUTE EIR. CEQA Guidelines Section 15183 applies to the Project, which allows for streamlined environmental review. This

¹² Alameda County Environmental Health Department. 2024. Agency Approval of the Corrective Action Plan. April 3.

VI. Project Consistency with Community Plan or Zoning

document considers whether there are project-specific effects peculiar to the Project or its site, and relies on the streamlining provisions of CEQA Guidelines Section 15183 to address cumulative effects. Therefore, the Project is eligible for consideration of an exemption under California Public Resources Code Section 21083.3 and Section 15183 of the CEQA Guidelines. The Project also qualifies as an infill project under CEQA Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M, as demonstrated in **Attachment B**.

VII. CEQA Checklist

VII.1 OVERVIEW

The CEQA Checklist summarizes the potential environmental impacts that could result from approval and implementation of the Project. The analysis of this CEQA Checklist also summarizes the impacts and findings of Program EIRs that covered, specifically or as part of the cumulative analyses, the environmental effects of the Project and that are still applicable to the Project. As previously indicated, the Program EIRs include the 1998 LUTE EIR and Phase I Oakland 2045 General Plan Update EIR. Given the timespan between the preparations of these EIRs, there are variations in the specific environmental topics addressed and in the significance criteria; however, the overall environmental effects identified in each are largely the same and any significant differences are noted.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of the Program EIRs for all potential environmental impact topics. The EIR significance criteria have been consolidated and abbreviated in this CEQA Checklist for administrative purposes.

This CEQA Checklist provides a determination of whether the Project would result in:

- Equal or Less Severity of Impact Previously identified in Program EIRs
- Substantial Increase in Severity of Previously Identified Significant Impact in Program EIRs
- New Significant Impact

Where the severity of the impacts of the Project would be the same as or less than the severity of the impacts described in the Program EIRs, the checkbox for Equal or Less Severity of Impact Previously identified in Program EIRs is checked. The checkboxes for Substantial Increase in Severity of Previously Identified Significant Impact in Program EIRs or New Significant Impact are checked if there are significant impacts that are one or more of the following:

- Peculiar to Project or Project site (per CEQA Guidelines Sections 15183)
- Not identified in the Program EIRs (per CEQA Guidelines Section 15183), including cumulative impacts (per CEQA Guidelines Section 15183)
- Due to substantial changes in the Project (per CEQA Guidelines Section 15162)
- Due to substantial changes in circumstances under which the Project will be undertaken (per CEQA Guidelines Section 15162)
- Due to substantial new information not known at the time the Program EIRs were certified (per CEQA Guidelines Section 15162 or 15183)

In such a circumstance, a new EIR would be required for the Project. None of these conditions were found for the Project, as demonstrated throughout the following CEQA Checklist. The Project is required to comply with applicable mitigation measures identified in the Program EIRs and with City of Oakland SCAs. The Project sponsor has agreed to incorporate and/or implement the required mitigation measures and SCAs as part of the Project. This CEQA Checklist includes references to the applicable mitigation measures and/or corresponding SCAs.

ATTACHMENTS

The following attachments are included at the end of this CEQA Checklist:

VII. CEQA Checklist

- A. Standard Conditions of Approval and Mitigation Monitoring and Reporting Program
- B. Infill Performance Standards, per CEQA Guidelines Section 15183.3
- C. Air Quality Technical Analysis
- D. ECAP Checklist
- E. Project Noise Management Plan

VII.2 AESTHETICS, SHADOW, AND WIND

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Have a substantial adverse effect on a public scenic vista; Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code sections 25980-25986);	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Since certification of the Program EIRs, the CEQA statutes have been amended related to assessment of aesthetics impacts. CEQA Guidelines Section 21099(d) states, “Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.”¹³ Accordingly,

¹³ CEQA Guidelines Section 21099(d)(1), op. cit.

VII. CEQA Checklist

aesthetics is no longer considered in determining if a project has the potential to result in significant environmental effects for projects that meet all three of the following criteria:

- a. The project is in a transit priority area.¹⁴
- b. The project is on an infill site.¹⁵
- c. The project is residential, mixed-use residential, or an employment center.

The Project meets all three criteria:

- (a) It would be located within approximately 0.3 miles walking distance from AC Transit Line 40 bus stops, which operates along Foothill Boulevard in the westbound direction and along East 15th Street in the eastbound direction; The Project would be also approximately 300 feet walking distance from AC Transit Line 33, which operates along Park Avenue and serves the 19th Street and 12th Street BART stations.
- (b) The Project site is located on an infill site that is currently developed with a with an automotive garage, one canopy-style hand car wash, and asphalt pavement. Also, the Project site is located in a developed urban area of Oakland that includes commercial uses; and
- (c) The Project would be a mixed-use residential project. Therefore, this CEQA document does not consider scenic resources, visual character, and the adequacy of parking in determining the significance of Project impacts under CEQA. Nonetheless, the City of Oakland recognizes that the public and decision makers may be interested in information pertaining to the aesthetic effects of a project and may desire that such information be provided as part of the environmental review process.

Because the Project meets these criteria as described above, the information below related to aesthetics is provided solely for informational purposes and is not used to determine the significance of the environmental impacts, pursuant to CEQA.

VII.2.1 Program EIR Findings

Scenic vistas, scenic resources, visual character, light and glare, shadow, and wind were analyzed in the Program EIRs, which found that the effects to these topics, except for wind, would be less than significant with mitigation and applicable SCAs. The Phase I Oakland 2045 General Plan Update EIR found all impacts to wind and shadow to be significant and unavoidable and all remaining impacts to aesthetics criteria to be less than significant or less than significant with applicable SCAs.

The 1998 LUTE EIR identified potentially significant and unavoidable impacts related to wind hazards. The 1998 LUTE EIR identified impacts related to scenic resources as less than significant. The LUTE EIR identified potentially significant impacts to visual character by new development that could block views, cast shadows, appears visually incongruous with adjacent low-rise development. Mitigation measures recommended development of zoning standards to reduce certain potential aesthetic

¹⁴ CEQA Guidelines Section 21099(a)(7), op. cit.

¹⁵ CEQA Guidelines Section 21099(a)(4), op. cit.

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effects to less-than-significant levels. Mitigation Measure N.1 of the 1998 LUTE EIR requires site specific studies and incorporation of specific design elements to reduce impacts related to wind hazards. The significant and unavoidable findings related to wind, recognize that in some instances wind impacts may not be reduced to a less-than-significant level, even with implementation of feasible wind reducing design elements.

In September of 2023, the City of Oakland revised the CEQA Thresholds of Significance, removing wind and shadows on public parks and historic resources as potential environmental impacts; hence they are no longer evaluated.

VII.2.2 Project Analysis

Scenic Vistas, Scenic Resources, Visual Character, and Light and Glare (Criterion 6.2.a)

The Project involves construction of an approximately 65-foot, five-level residential building including a ground floor retail space on a site outside of Downtown Oakland that is generally flat. The Project site has been previously developed and is currently occupied by an automotive garage, one canopy-style hand car wash, and asphalt pavement. The Project site is within an urban context surrounded by one to three-story residential and commercial buildings. Primary land uses around the Project site include retail and restaurant uses, recreational and education uses, as well as residential uses and parking.

Scenic Vistas and Resources

The Open Space, Conservation, and Recreation (OSCAR) Element of the City of Oakland General Plan identifies views of downtown and Lake Merritt, the Oakland Hills, and panoramic views from Skyline Boulevard and Grizzly Peak Road as scenic resources that need to be protected. Given the urban nature of the Project's area and existing development on the Project site, views through and from the project site are primarily limited to the immediate developments adjacent to the site due to the flat topography and varied heights of buildings in the area. Therefore, like the findings of the Program EIRs, the Project would not obstruct any scenic vistas or scenic vistas or resources.

State Scenic Highway

The Project site is approximately 0.8 miles south of the State Scenic Highways segment of I-580 that terminates at State Route (SR) 24. The Project is not expected to damage view of scenic resources for motorists on I-580/SR-24 because its size and scale would not interfere with the view from the I-580/SR 24 interchange. Therefore, the Project would not impact State Scenic Highways and associated resources.

Visual Character

The LUTE EIR concluded that policies of the LUTE would encourage midrise, pedestrian-scale mixed-use development along transit-oriented corridors within the City, but that development of this scale would generally have positive visual impacts, even though it may interrupt views and create the potential for architecturally incompatible development. Mitigation included the development of standard design guidelines for all Neighborhood Commercial areas that require continuous or nearly continuous storefronts located along the front yard setback, promotion of small scale commercial activities rather than large scale establishments at the ground level, restriction of front yard parking

VII. CEQA Checklist

lots and driveways, requirement of small scale pedestrian oriented signage, have a relatively low height limit, and promotion the development of pedestrian friendly amenities at the street level.

The Project site is located in a Neighborhood Commercial area and is immediately surrounded by several 1- to 2-story older commercial structures and residences to the east, south, and west, 3-story residential buildings to the northwest and north, a recreational park to the north, and a surface parking to the southwest.

The Project's new mixed-use building in place of an automotive repair shop, one-canopy car wash, and the asphalt pavement would improve the visual character of the Project area. With the use of the state density bonus, the Project requests a height waiver, which allow for the new building to exceed the maximum height limit of 45 feet. However, the Project design and height would not affect the visual character of the Project area and would be compatible with the nearby mid-rise residential buildings. Such changes were anticipated under the LUTE EIR which found that mid-rise development could obstruct views and change the character of low-density residential areas. The LUTE policies recommend design and development review practices which ensure that new development is visually compatible with its surroundings and does not obstruct views. The City has since adopted such standards as part of its development standards and zoning. As a result, the Project would not substantially degrade the existing visual character or quality of the site and its surroundings.

Furthermore, the building has two retail areas along both frontages to provide small scale commercial activities, and underground parking consistent with the mitigation.

Light and Glare (6.2.c)

The Project would result in additional lighting. While new sources of light would be installed as part of the new building and site improvements, these new lighting sources would be consistent with typical light and glare conditions with other multiple-story residential developments in the area and other non-residential uses and would not create new sources of substantial light and glare that would substantially and adversely affect nighttime views in the area. In addition, implementation of SCA-AES-1: Lighting, which would require exterior lighting fixtures to be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties, would further reduce impacts on visual quality and character associated with lighting and glare.

VII.2.3 Conclusion

Consistent with the findings of the Program EIRs, the Project would not result in any new or more severe significant impacts related to aesthetics, shadow, or wind. No new significant impacts related to aesthetics or visual resources have been identified beyond those considered in the Program EIRs. The Project would be required to implement SCA-AES-1: Lighting. In addition, implementation of the following SCAs would further reduce impacts of the project to aesthetics, including: SCA-AES-2: Landscape Plan, SCA-AES-3: Trash and Blight Removal, and SCA-AES-4: Graffiti Control Please see ***Attachment A*** for a full description of these SCAs.

VII.3 AGRICULTURE AND FORESTRY RESOURCES

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?			
Result in the loss of forest land or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.3.1 Program EIR Findings

Both the LUTE EIR and the Phase I Oakland 2045 General Plan Update EIR found no impacts related to Agriculture and Forestry Resources.

VII.3.2 Project Analysis

The Project site is located within the City of Oakland and is not classified as an agricultural or forest land.

VII.3.3 Conclusion

Consistent with the findings of the Program EIRs, the Project would not result in any new or more severe significant impacts related to agriculture and forestry resources.

VII.4 AIR QUALITY

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. During project construction result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. During project operation result in average daily emissions of 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10; or result in maximum annual emissions of 10 tons per year of ROG, NOx, or PM2.5 or 15 tons per year of PM10;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Contribute to carbon monoxide (CO) concentrations exceeding the California Ambient Air Quality Standards (CAAQS) of nine parts per million (ppm) averaged over eight hours and 20 ppm for one hour [NOTE: Pursuant to BAAQMD CEQA Guidelines, localized CO concentrations should be estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria.];	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. For new sources of Toxic Air Contaminants (TACs), during either project construction or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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<p>project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10 in one million, (b) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average PM2.5 of greater than 0.3 micrograms per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 0.8 micrograms per cubic meter [NOTE: Pursuant to the BAAQMD CEQA Guidelines, when siting new TAC sources consider receptors located within 1,000 feet. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers. The cumulative analysis should consider the combined risk from all TAC sources.];</p>			
<p>e. Expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average PM2.5 of greater than 0.8 micrograms per cubic meter [NOTE: Pursuant to the BAAQMD CEQA Guidelines, when siting new sensitive receptors consider TAC sources located within 1,000 feet including, but not limited to, stationary sources, freeways, major roadways (10,000 or greater vehicles per day), truck distribution centers, airports, seaports, ferry terminals, and rail lines. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.]; or</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>f. Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people [NOTE: For this threshold, sensitive receptors include residential uses,</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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schools, daycare centers, nursing homes, and medical centers (but not parks).].			
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VII.4.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR identified a significant impact related to air pollutants resulting from construction and a carbon monoxide impact resulting from mobile sources. However, these impacts were determined to be less than significant with the implementation of applicable SCAs. The Phase I Oakland 2045 General Plan Update EIR determined that air pollutants resulting from operation as well as air emission impact on sensitive receptors would be significant and unavoidable even with the implementation of applicable SCAs.

The 1998 LUTE EIR identified mitigation measures to reduce the impact of criteria pollutant emissions from construction equipment and stationary sources to a less-than-significant level; however, the 1998 LUTE EIR found that increased criteria pollutant emissions from increased traffic, including reduced emissions after implementation of identified mitigation measures, would result in a significant and unavoidable impact. The 1998 LUTE EIR did not quantify or address cumulative health risks as such analysis was not required when that EIR was prepared.

VII.4.2 Project Analysis

The Project site is in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The California Air Resources Board (CARB) and United States Environmental Protection Agency (EPA) focus on the following air pollutants as regional indicators of ambient air quality:

- Carbon monoxide (CO)
- Ozone
- Suspended particulate matter—both respirable (PM10) and fine (PM2.5)
- Nitrogen dioxide
- Sulfur dioxide
- Lead

Because these are the most prevalent air pollutants known to be harmful to human health, based on extensive criteria documents, they are referred to as “criteria air pollutants.” In the SFBAAB, the primary criteria air pollutants of concern are CO, ground-level ozone formed through reactions of oxides of nitrogen (NOx) and reactive organic gases (ROG), PM10, and PM2.5. The BAAQMD adopted thresholds of significance to assist lead agencies in the evaluation and mitigation of air quality impacts under CEQA¹⁶ were utilized by the City of Oakland in establishing its own thresholds of significance levels¹⁷ at which emissions of ROG, NOx, suspended particulate matter, carbon monoxide, TACs, and odors could cause significant air quality impacts. Two fractions of particulate matter emissions are regulated based on aerodynamic resistance: those with diameters equal to or less than 10 microns (PM10) and those with diameters equal to or less than 2.5 microns (PM2.5). These thresholds were

¹⁶ BAAQMD. 2022 CEQA Guidelines.

¹⁷ City of Oakland. 2023. City of Oakland CEQA Thresholds of Significance Guidelines. September 26.

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developed to represent a cumulatively considerable contribution to regional air quality, and therefore, reflect not only project-level thresholds but also cumulative thresholds.

The BAAQMD's thresholds of significance adopted by the City of Oakland that are used in this CEQA document are summarized in **Table 3** below.

TABLE 3
CITY OF OAKLAND THRESHOLDS OF SIGNIFICANCE

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82	82	15
PM _{2.5}	54	54	10
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Health Risks and Hazards	Single Sources	Combined Sources	
Excess Cancer Risk	>10 per one million	>100 per one million	
Hazard Index	>1.0	>10.0	
Incremental annual PM _{2.5}	>0.3 µg/m ³	>0.8 µg/m ³	

Note:

Pounds per day: lbs/day

Microgram per meter cube: µg/m³

Parts per million: ppm

SOURCE: City of Oakland, 2023

Criteria Air Pollutant (6.3.a, and 6.3.b)

Criteria Air Pollutants from Construction

Construction activities generate criteria air pollutant emissions, which can adversely affect regional air quality if emissions exceed the BAAQMD's thresholds of significance. Project construction activities would include site preparation and remediation, grading, building construction, paving, and applications of architectural coatings. The primary pollutant emissions of concern during project construction would be ROG, NO_x, PM₁₀, and PM_{2.5} from the exhaust of off-road construction equipment and on-road vehicles related to worker vehicles, vendor trucks, and haul trucks. In addition, fugitive dust emissions of PM₁₀ and PM_{2.5} would be generated by soil disturbance and demolition activities and fugitive ROG emissions would result from the application of architectural coatings and paving. During the site preparation, Project excavation would include remedial activities to residual petroleum contamination at the Project site, as approved by the ACEHD.¹⁸ Section VII.8, Hazards and Hazardous materials, addresses air quality including dust management during the

¹⁸ Alameda County Environmental Health Department. 2024. Agency Approval of the Corrective Action Plan. April 3.

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remedial excavation and requires the preparation of Remedial Excavation Plans and Specifications that would be reviewed and approved by ACEHD.

The BAAQMD currently recommends using the most recent version of the California Emissions Estimator Model (CalEEMod version 2022) to estimate construction and operational emissions of criteria air pollutants and precursors for a project.

Project construction is expected to occur over approximately 12 months, with construction scheduled to commence in the fourth quarter of 2025 and be completed in 2026. Site preparation is anticipated to require excavation and off-haul of approximately 4,000 cubic yards of soil and approximately 167 tons of construction debris.

Average daily construction emissions were estimated for the total duration of the project (approximately 264 days). **Table 4** shows the annual average daily construction emissions and average daily project emissions of ROG, NOx, PM₁₀ exhaust, and PM_{2.5} exhaust during construction. As shown in **Table 4**, the project's estimated emissions for ROG, NOx, and exhaust PM₁₀ and PM_{2.5} during construction would be below the applicable thresholds. Furthermore, the City's SCA-AIR-1: Criteria Air Pollutant Controls – Construction and Operation Related would apply to the Project and require Project construction to limit engine idling time, to tune and maintain construction equipment, to only use diesel engines when electric, propane, or natural gas alternatives are not feasible, and to use low ROG coatings on structures. Therefore, emissions of criteria air pollutants from Project construction would have a less-than-significant impact on regional air quality.

TABLE 4
PROJECT CONSTRUCTION EMISSIONS

Year	ROG	NOx	PM₁₀ Exhaust	PM_{2.5} Exhaust
<i>Construction Emissions Per Year (Tons)¹</i>				
	0.39	1.29	0.05	0.05
<i>Average Daily Construction Emissions Per Year (lbs/day)</i>				
264 construction workdays	2.98	9.79	0.38	0.35
<i>BAAQMD Thresholds (pounds per day)</i>	54 lbs/day	54 lbs/day	82 lbs/day	54 lbs/day
Exceed Threshold?	No	No	No	No

Note:

Lbs/day: Pounds per day

SOURCE: Illingworth & Rodkin, 2024

Fugitive Dust from Construction

Site preparation is anticipated to require excavation and off-haul of approximately 4,000 cubic yards of soil. Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM₁₀ and PM_{2.5}. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD recommends all projects include a “basic” set of best management practices (BMPs) to manage fugitive dust and considers impacts from dust (i.e., fugitive PM₁₀ and PM_{2.5}) to be less than significant if these BMPs are implemented. During all phases of construction, the Project would be required to implement SCA-AIR-2: Dust Controls -Construction

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Related which is consistent with the basic BMPs recommended by BAAQMD. With implementation of SCA-AIR-2, impact on air quality from dust generated during project construction would be less than significant. As noted above, Section VII.8, Hazards and Hazardous materials, addresses air quality including dust management during the remedial excavation and requires the preparation of Remedial Excavation Plans and Specifications that would be reviewed and approved by ACEHD.

Asbestos in Existing Structures

The Project would include the demolition of the existing structures at the Project site that include the automotive repair shop (built in 1965), one-canopy car wash, and the asphalt pavement. SCA-AIR-3: Asbestos in Structures would apply to the Project and would require compliance with all applicable laws and regulations regarding demolition of asbestos-containing materials.

With implementation of SCA-AIR-1: Criteria Air Pollutant Controls – Construction and Operation Related, SCA-AIR-2: Dust Controls - Construction Related, and SCA-AIR-3: Asbestos in Structures, construction of the Project would not substantially increase the severity of significant impacts, identified in the Program EIRs, related to criteria air pollutants, fugitive dust, or asbestos in structures, nor would it result in new significant impacts not previously identified.

Criteria Air Pollutants from operation.

Operational activities generate criteria air pollutant emissions, which can adversely affect regional air quality if emissions exceed the BAAQMD's thresholds of significance. The primary pollutant emissions of concern during the Project's operation would be ROG, NOx, and exhaust PM10 and PM2.5 from mobile sources, energy use, area sources (e.g., consumer products and architectural coatings), and stationary sources.

The BAAQMD CEQA Guidelines included screening sizes to assess project's criteria air pollutants impact from operation. The Project size is well below the screening size for operational emissions. However, the Project would have mixed land uses for which the Guidelines recommend using their *Mixed Land Use Screening Tool for Criteria Pollutants and Precursors* to determine whether implementing a proposed mixed land use project could result in potentially significant criteria air pollutants and precursors impacts. The BAAQMD screening tool indicated that the Project would not exceed operational criteria air pollutant emission thresholds and no further analysis was required. Results of the screening tool are included in **Attachment C**. As a result, operation of the Project would not substantially increase the severity of significant impacts identified in the Program EIRs, nor would it result in new significant impacts related to criteria pollutant emissions that were not identified in the Program EIRs.

Carbon Monoxide (6.3.c)

Pursuant to BAAQMD CEQA Guidelines, localized CO concentrations are estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In

Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria. Traffic generated by the Project would be approximately 230 daily trips per day,^{19, 20} which is well below the criteria that would trigger an effect at any CO hot spot.

Health Risk Impact to Existing Sensitive Receptors (6.3.d)

Construction TAC Emissions

In addition to criteria air pollutants, local emissions of toxic air contaminants (TACs), such as diesel particulate matter (DPM), are a concern for nearby receptors. TACs include a diverse group of air pollutants that can adversely affect human health. Unlike criteria air pollutants, which generally affect regional air quality, TAC emissions are evaluated based on estimations of localized concentrations and health risk assessments. The adverse health effects a person may experience following exposure to any chemical depend on several factors, including the amount (dose), duration, chemical form, and any simultaneous exposure to other chemicals. For risk assessment purposes, TACs are separated into carcinogens and non-carcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per 1 million exposed individuals over a lifetime of exposure. Non-carcinogenic substances are generally assumed to have a safe threshold below which health impacts would not occur. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the sum of expected exposure levels divided by the corresponding acceptable exposure levels.

In the SFBAAB, adverse air quality impacts on public health from TACs are predominantly from DPM. In 1998, the CARB identified DPM from diesel-powered engines as a TAC based on its potential to cause cancer and other adverse health effects.²¹

DPM and PM_{2.5} emissions would be generated from Project construction. Project construction would generate DPM and PM_{2.5} emissions from the excavation of the site, exhaust of off-road diesel construction equipment and on-road vehicles (worker, vendor, and haul trucks) accessing the Project site. DPM and PM_{2.5} from diesel-powered engines are a complex mixture of soot, ash particulates, metallic abrasion particles, volatile organic compounds, and other components that can contribute to a range of health problems.

The emissions of DPM and PM_{2.5} from diesel exhaust during construction activities could pose a health risk to nearby sensitive receptors if the associated health risks exceed the BAAQMD's thresholds of significance. The term sensitive receptor refers to a location where individuals are more susceptible to poor air quality. Sensitive receptors include schools, convalescent homes, and hospitals because the very young, the old, and the infirm are more susceptible than the rest of the public to air-quality-related health problems. Residential areas are also considered sensitive to poor air quality because people are often at home for extended periods, thereby increasing the duration of exposure to potential air contaminants. The BAAQMD recommends evaluating the potential health risks to sensitive receptors located within 1,000 feet of a project's property boundary that could be exposed to

¹⁹ Fehr & Peers. 2024. Memorandum – 1901 Park Boulevard Project – Transportation Impact Review Assumptions. March 19.

²⁰ The transportation analysis was conducted based on a larger project initially proposed for the site. To adopt a conservative approach, the findings from this analysis are applied to the proposed project, which is anticipated to have reduced transportation impacts compared to the original project.

²¹ California Air Resources Board (CARB), 1998. Initial Statement of Reasons for Rulemaking; Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, June.

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TACs, such as DPM and PM_{2.5}. The existing sensitive receptors in the Project's vicinity include multi-family residences and schools, as shown on **Figure 13**. Residential receptors are assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to Project emissions. As shown on **Figure 13**, sensitive receptors near the Project site include residences to the north, east, south, and west, as well as a preschool (Lake School) located approximately 570 feet north of the Project site.

A health risk assessment was prepared to address Project construction impacts on the surrounding off-site sensitive receptors.²² Health risk impacts are addressed by predicting increased lifetime cancer risk, the increase in annual PM_{2.5} concentrations, and computing the Hazard Index (HI) for non-cancer health risks. This assessment analyzed lifetime cancer risks and non-cancer health effects by predicting construction emissions and employing dispersion modeling to evaluate offsite concentrations arising from the Project's construction activities.

The CalEEMod model provided total annual PM₁₀ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles,²³ with total emissions from all construction stages being 0.05 tons (99 pounds). The on-road vehicle emissions are a result of haul truck travel on-site during demolition and grading activities, worker travel on-site, and vendor travel on-site during construction. A trip length of a half-mile was used to represent vehicle travel while at or near the construction site. Fugitive PM_{2.5} dust emissions were calculated by CalEEMod as less than 0.01 tons (24 pounds) for the overall construction period.

The U.S. EPA AERMOD dispersion model was used to predict DPM and PM_{2.5} concentrations at sensitive receptors (i.e., residences and schools) in the vicinity of the Project site. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.²⁴ Emission sources for the construction site were grouped into two categories: exhaust emissions of DPM and fugitive PM_{2.5} dust emissions.

Combustion equipment DPM exhaust emissions were modeled as an array of point sources to reflect construction equipment and trucks operating at the Project site. These sources included nine-foot release heights (construction equipment exhaust stack height) that were placed at 20 feet intervals throughout the Project site. This resulted in 22 individual point sources being used to represent mobile equipment DPM exhaust emissions. The total DPM emissions were divided into each of the point sources that were spread throughout the Project site. In addition, the following stack parameters were used for each point source: stack diameter of 2.5 inches, an exhaust temperature of 918-degree Fahrenheit, and an exit velocity of 309 feet per second. Since these are point sources, plume rise was calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources throughout the Project site.

²² The health risk assessment was conducted based on a larger project initially proposed for the site. To adopt a conservative approach, the findings from this analysis are applied to the proposed project, which is anticipated to have reduced health risk impacts compared to the original project.

²³ CalEEMod also computes dust emissions from construction equipment and those were included. Best Management Practices required by the City, that greatly reduce dust emissions, are included in the modeling per BAAQMD guidance.

²⁴ BAAQMD, Appendix E of the 2022 BAAQMD CEQA Guidelines, April 2023.

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For modeling fugitive PM_{2.5} emissions, an area source with a near-ground level release height of 7 feet was used.²⁵ Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exit the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the Project site.

The dispersion modeling used a five-year data set (2013 - 2017) of hourly meteorological data from the Oakland International Airport prepared for use with the AERMOD model by BAAQMD. Construction emissions were modeled as occurring Monday through Friday between 7:00 a.m. to 7:00 p.m., when most of the construction activities would occur. Annual DPM and PM_{2.5} concentrations from construction activities during the 2024-2025 period were calculated at nearby sensitive receptors using the model. Receptor heights of 5 feet, 15 feet, and 25 feet were used to represent the breathing heights on the first through third floors of nearby single and multi-family residences.²⁶ Receptor height of 3 feet was used to represent the breathing height of children at the nearby preschool.

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the BAAQMD CEQA guidance for age sensitivity factors and exposure parameters. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period, while child exposures were assumed to occur at the nearby preschool.

Non-cancer health hazards and maximum PM_{2.5} concentrations were also calculated. The maximum modeled annual PM_{2.5} concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI value was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation reference exposure level of 5 microgram per meter cube ($\mu\text{g}/\text{m}^3$).

²⁵ Most of the emissions would be generated from ground disturbances and an average release height has to be selected for modeling the emissions. As a conservative approach, an average of 7 feet height of a dust cloud from ground disturbances is generally used in calculating health risk; a higher release height would result in lower emissions.

²⁶ BAAQMD, Appendix E of the 2022 BAAQMD CEQA Guidelines, April 2023.



Figure 13
Off-Site Sensitive Receptors

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The modeled maximum annual DPM and PM_{2.5} concentrations were identified at nearby sensitive receptors (as shown in **Figure 13**) as the maximally exposed individuals (MEI). Results of this assessment indicated that the construction MEI was located at two different receptors. The cancer risk MEI was located southeast of the Project site on the third floor (25 feet above the ground) of a multi-family residence located on Park Boulevard (**Figure 13**). The annual PM_{2.5} concentration MEI was located at the same receptor on the second floor (15 feet above the ground). **Table 5** summarizes the maximum cancer risks, PM_{2.5} concentrations, and HI for Project related construction activities affecting the construction MEIs. **Attachment C** to this report includes the emission calculations used for the construction modeling and the cancer risk calculations.

Additionally, modeling was conducted to predict the cancer risks, non-cancer health hazards, and maximum PM_{2.5} concentrations associated with construction activities at the nearby preschool. The maximum increased cancer risks were adjusted using child exposure parameters. The maximum cancer risk, PM_{2.5} concentration, and HI at the nearby preschool would not exceed their respective BAAQMD single-source significance thresholds, as shown in **Table 5**.

As shown in **Table 5**, without SCAs applied, the maximum cancer risks and annual PM_{2.5} concentration from construction activities at the construction MEIs would exceed the City's single-source significance thresholds. The Project would be required to implement SCA-AIR-2: Dust Controls - Construction Related and SCA-AIR 4: Toxic Air Contaminant Controls-Construction Related. Dispersion modeling and cancer risk were calculated with the incorporation of the basic dust control and TAC control measures in the form of equipment meeting Tier 4 standards. With these measures implemented, the Project's construction cancer risk levels (assuming infant exposure) would be reduced by 85 percent to 7.16 per million and the PM_{2.5} concentrations would be reduced by 56 percent to 0.15 µg/m³. Therefore, with implementation of SCA-AIR-2 and SCA-AIR-4, the Project construction health risk impact would be reduced below the City's single-source significance thresholds and would be less than significant. The HI without SCAs from construction activities would be below the City's single-source significance threshold.

TABLE 5
CONSTRUCTION HEALTH RISK IMPACT AT THE OFF-SITE MEIs

Source		Cancer Risk ¹ (per million)	Annual PM _{2.5} ¹ (µg/m ³)	Hazard Index
Project Impact				
Project Construction	Without SCAs	47.69 (infant)	0.34	0.05
	With SCAs ²	7.16 (infant)	0.15	0.01
Oakland's Single-Source Threshold		10.0	0.3	1.0
Exceed Threshold?	Without SCAs	Yes	Yes	No
	With SCAs ²	No	No	No
Most Impacted School Receptor – San Jose Head Start				
Project Construction	Without SCAs	0.52 (child)	0.01	<0.01
	Oakland's Single-Source Threshold	10	0.3	1.0
Exceed Threshold?		Without SCAs	No	No

Notes: ¹ Maximum cancer risk and PM_{2.5} concentration occur at the same receptor on different levels.

² Construction equipment with Tier 4 Final engines and basic dust controls as SCAs.

µg/m³: Microgram per meter cube

MEI: Maximally Exposed Individuals

SOURCE: Illingworth & Rodkin, 2024

Operational TAC Emissions

The Project would not include any stationary source of TAC emissions, as it does not include any backup generators, and therefore, would not contribute to any potential health risks to sensitive receptors. The Project is primarily a residential development Project with a retail component approximately 3,664 square feet in area. Diesel vehicle traffic associated with the retail uses would be limited to a small number of delivery and service vehicle trips, which would not contribute a substantial amount to the health risk exposure of the Project or offsite receptors. Therefore, the Project would result in a less-than- significant impact with respect to operational TAC emissions, and an operational health risk analysis would not be required.

Cumulative Health Risks During Project Construction

Cumulative health risk assessments consider all substantial sources of TACs located within 1,000 feet of a project site (i.e., influence area) that can affect sensitive receptors. These sources include rail lines, highways, busy surface streets, and stationary sources identified by BAAQMD.

A review of the Project area using BAAQMD's geographic information systems (GIS) screening tools indicated that there are no local roadways within the 1,000-foot influence area that could have cumulative health risk impacts at the MEIs. One stationary source with the potential to affect the MEIs was located within 1,000 feet of the Project site. **Figure 14** shows the locations of the sources affecting the MEIs within the influence area. Health risk impacts from these sources upon the MEIs are reported in **Table 6**. Details of the cumulative screening and health risk calculations are included in **Attachment C**.

Cancer risk, PM_{2.5} concentrations, and HI associated with local traffic were estimated using BAAQMD screening values provided via GIS data files (i.e., raster files). BAAQMD raster files provide screening-level cancer risk, PM_{2.5} concentrations, and HI for roadways within the Bay Area. Screening-level cancer risk, PM_{2.5} concentration, and HI for the nearby local roadways at the MEIs are listed in **Table 6**.

Permitted stationary sources of air pollution near the Project site were identified using BAAQMD's *Permitted Stationary Sources 2021* GIS map website.²⁷ This mapping tool identifies the location of nearby stationary sources and their estimated risk and hazard impacts, based on emissions and adjustments to account for risk guidance of the Office of Environmental Health Hazard Assessment (OEHHA). One source was identified using this tool, a diesel emergency generator. The BAAQMD GIS website provided screening risks and hazards for this source. Therefore, a stationary source information request was not required to be submitted to BAAQMD. The screening risk and hazard levels provided by BAAQMD for the stationary source was adjusted for distance using BAAQMD's *Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines*. Health risk impacts from the stationary sources upon the MEIs are reported in **Table 6**.

Table 6 reports both the Project and cumulative health risk impacts at the modeled MEIs. The cumulative annual cancer risk, maximum PM_{2.5} concentration, and HI values would not exceed the City's cumulative source health risk thresholds. With the implementation of SCA-AIR-2: Dust Controls – Construction Related and SCA-AIR 4: Toxic Air Contaminant Controls-Construction Related , the

²⁷ BAAQMD, Web:

<https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3>

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Project's cancer risk and PM_{2.5} concentration would further reduce the Project's cumulative construction health risk and this impact would be less than significant.

Cumulative Health Risk Impacts to New Project Receptors (6.3.e)

The Project proposes residential uses would introduce sensitive receptors to the area. In addition, a screening analysis was conducted in accordance with the BAAQMD CEQA Guidelines to determine if the Project exceeds the health risk screening criteria. **Table 7** summarizes the results of the screening analysis and summarizes cumulative health risks to Project receptors from existing and reasonably foreseeable sources within 1,000 feet of the Project site. The screening analysis shows that health risks to the Project receptors would be below the City's cumulative thresholds.

Project health risk impacts from nearby roadways and stationary sources are presented in **Table 7**. As shown in **Table 7**, the combined existing sources of TAC emissions do not exceed the City's cumulative-source thresholds for cancer risk, annual PM_{2.5} concentration, or HI. Therefore, health risks to the Project receptors would be less than significant.

**TABLE 6
CUMULATIVE CONSTRUCTION HEALTH RISK IMPACT AT THE MEIs**

Source		Cancer Risk (per million)	Annual PM _{2.5} (µg/m ³)	Hazard Index
Project Impact				
Project Construction	Without SCAs			
	With SCAs	47.69 (infant) 7.16 (infant)	0.34 0.15	0.05 0.01
Oakland's Single-Source Threshold		10.0	0.3	1.0
Exceed Threshold?	Without SCAs			
	With SCAs	Yes No	Yes No	No No
Cumulative Impact				
BAAQMD Local Roadways Cumulative Risk - Raster Data		17.96	0.32	0.05
Lucky #736 (Facility #19564, Generator), MEI at 930 feet		<0.01	-	-
Cumulative Total	Without SCAs			
	With SCAs	<65.66 <25.13	0.66 0.47	0.10 0.06
Oakland's Cumulative Source Threshold		100	0.8	10.0
Exceed Threshold?	Without SCAs			
	With SCAs	No No	No No	No No

Note:

µg/m³: Microgram per meter cube

MEIs: Maximally Exposed Individuals

SOURCE: Illingworth & Rodkin, 2024

TABLE 7
IMPACTS FROM CUMULATIVE SOURCES TO PROJECT SITE RECEPTORS

Source	Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
BAAQMD Local Roadways Cumulative Risk - Raster Data	15.67	0.27	0.04
Lucky #736 (Facility #19564, Generator), Project Site at 790 feet	<0.01	-	-
Cumulative Total	<15.68	0.27	0.04
<i>Oakland's Cumulative Source Threshold</i>	100	0.8	10.0
<i>Exceed Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>

Note:

µg/m³: Microgram per meter cube

SOURCE: Illingworth & Rodkin, 2024

Objectionable Odors 9.6.3.f)

Project construction would be a localized source of odors. These odors would not frequently expose sensitive receptors to substantial objectionable odors and the duration would be temporary. Operation of the Project would not generate odors known to cause odor complaints on a frequent basis to a substantial number of sensitive receptors.

VII.4.3 Conclusion

Consistent with the findings of the Program EIRs, the Project would not result in any new or more severe significant impacts related to criteria air pollutants, TACs emissions, or cumulative TAC emissions. The Project would be required to implement SCA-AIR-1: Criteria Air Pollutant Controls – Construction and Operation Related), SCA-AIR-2: Dust Controls - Construction Related , SCA-AIR-3: Asbestos in Structures , and SCA-AIR 4: Toxic Air Contaminant Controls-Construction Related , which would reduce Project impact to air quality to a less-than-significant level. Please see **Attachment A** for a full description of the applicable SCAs.



Figure 14
Nearby TAC and PM_{2.5} Sources

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VII.5 BIOLOGICAL RESOURCES

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands (as defined by section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code (OMC) Chapter 12.36) by removal of protected trees under certain circumstances [NOTE: Factors to be considered in determining significance include the number, type, size, location and condition of (a) the protected trees to be removed and/or impacted by construction and (b) protected trees to remain, with special consideration given to native trees. Protected trees include <i>Quercus agrifolia</i> (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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eucalyptus and <i>Pinus radiata</i> (Monterey pine); provided, however, that Monterey pine trees on City property and in development-related situations where more than five Monterey pine trees per acre are proposed to be removed are considered to be protected trees.]; or			
g. Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. [NOTE: Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of riparian and/or aquatic habitat through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of the water, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) adversely impacting the riparian corridor by significantly altering vegetation or wildlife habitat.]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.5.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found all biological resources topics to either have less-than-significant or less than significant impacts with implementation of applicable SCAs.

The 1998 LUTE EIR found all potential biological resources impacts to be less than significant and therefore no mitigation measures were required.

VII.5.2 Project Analysis

Special-Status Species, Wildlife Corridors, Riparian and Sensitive Habitat, Wetlands, Tree and Creek Protection (Criteria 6.4.a through 6.4.g)

The Project site is located within a developed area, the majority of which is covered with impervious surfaces. There are no creeks, and the site does not contain vegetation or hydrology conditions suitable for sustaining wetlands. There are no known special status species or sensitive habitats, including those that could support migratory fish or birds, located on the site. There is no habitat conservation plan within the City of Oakland.

Three street trees line Park Boulevard along the southern border of the Project Site. A tree stump and grass are in the planter located at the corner of the site on Park Boulevard and 3rd Avenue. The Project site is located near the FM Smith Recreational Center which contain several large trees where birds would be nesting. The Project would be required to implement SCA BIO-1, Bird Collision Reduction Measures, that includes construction features in compliance with Best Management Practice strategies to limit bird strikes.

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The existing automotive garage and one canopy-style hand car wash, may provide suitable habitat for bats and could contain active roost sites at the time of demolition. The Project would be required to implement SCA BIO-2, Avoid and Minimize Impacts on Special-Status Roosting Bats in Buildings, to avoid and minimize impacts on special-status roosting bat species.

The three trees located at the site along Park Boulevard would be preserved in place. The Project would be required to implement SCA BIO-3: Tree Permit, to protect the trees during construction. Implementation of SCA-BIO-3 would reduce this impact to less than significant.

Although there are trees present on properties adjacent to the Project site and along sidewalks in front of adjacent properties, they are not connected to other nearby natural habitats, and therefore, do not constitute a wildlife corridor. There are no natural sensitive communities in the Project vicinity.

As discussed in Section VII.2 - Aesthetics above, the Project would not create a new source of substantial light or glare. Therefore, the Project would not cause an adverse impact to birds from light or glare.

VII.5.3 Conclusion

Based on an examination of the analysis, findings, and conclusions of the Previous CEQA Documents, the Project would not result in any new or more severe significant impacts related to biological resources than those identified in the Program EIRs. Implementation SCA BIO-1, Bird Collision Reduction Measures, SCA BIO-2: Avoid and Minimize Impacts on Special-Status Roosting Bats in Building, and SCA BIO-3: Tree Permit(see **Attachment A**) would be applicable to the Project and would further ensure that Project impacts related to biological resources would be less than significant. Therefore, no mitigation measures are required.

VII.6 CULTURAL AND HISTORIC RESOURCES

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines section 15064.5.13 Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be “materially impaired.” The significance of an historical resource is “materially impaired” when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance and that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historical Resources, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5);	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of formal cemeteries.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.6.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR identified significant unavoidable impacts to historical resources and less-than-significant effect to archaeological resources and human remains with the incorporation of City of Oakland SCAs.

The 1998 LUTE EIR, which analyzed cultural and historic resources, found that impacts to these topics would be either significant but mitigable, or less than significant. The 1998 LUTE EIR also found impacts related to archeological resources and demolition of historic resources would be less than

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significant with implementation of mitigation measures. These mitigation measures are now functionally equivalent to current SCAs.

Significant but mitigable impacts included:

G.2: Excavation of development sites consistent with the Land Use and Transportation Element could unearth archeological resources. Some of these remains could have scientific or cultural importance.

G.3: Many of the City's historic resources are located Downtown and along transit corridors. Higher density uses are proposed in these areas and redevelopment is encouraged. This could have direct impacts by increasing the pressure to remove or demolish older buildings, including some historic structures.²⁸

Mitigation measures proposed for significant impacts G.2 and G.3 included:

G.2: Establish criteria and interdepartmental referral procedures for determining when discretionary City approval of ground-disturbing activities should be subject to special conditions to safeguard potential archaeological resources.

G.3a: Amend the Zoning Regulations text to incorporate the new preservation regulations and incentives.

G.3b: Develop and adopt design guidelines for Landmarks and Preservation Districts.²⁹

Less than significant impacts included:

G.1: Excavation of development sites consistent with the Land Use and Transportation Element could unearth palaeontologic remains. Some of these remains could have scientific importance. However, adoption of the proposed Element would not significantly affect these resources.

G.4: Increased development and more intense development in areas with high concentrations of older structures could have indirect impacts on these structures by changing their context and setting. Even if left intact, the integrity of older buildings could be compromised as larger, modern buildings are erected on adjoining properties. None required.

G.5: The Element's emphasis on adaptive re-use and live-work development could result in alteration of older buildings and historic structures in a manner that is architecturally incompatible with the structure.³⁰

Mitigation measures were not proposed for any less than significant impacts.

²⁸ LUTE EIR, S-19 and S-20.

²⁹ Ibid.

³⁰ LUTE EIR, S-28

VII.6.2 Project Analysis

Historical Resources (Criterion 6.5.a)

Implementation of the Project would include the demolition of the existing automotive repair shop (built in 1965), one-canopy car wash, and the asphalt pavement at the Project site.

The structures at the Project site were assigned an Oakland Cultural Heritage Survey (OCHS) rating of F3 in 1997, which means that the structures were less than 45 years old and not located in a historic district when they were originally surveyed. The structures are now 59 years old, but have not been re-surveyed. The building does not exhibit a superior design, has no association with a person, organization, or important event, and the structures are not currently a Designated Historic Property (local landmark or Heritage Property). The Project site is not within the boundaries a Designated Historic District. Furthermore, the structures are not located within Areas of Primary or Secondary Importance. Therefore, the Project would not result in a substantial adverse change to a historical resource.

Archaeological and Paleontological Resources and Human Remains (Criteria 6.5.b, 6.5.c, and 6.5.d)

The Project site is located within an urbanized portion of the City of Oakland, has been previously developed, and is surrounded by other urban development; therefore, it is not considered unique. Archaeological studies conducted for the Lake Merritt Station Area Plan, located approximately 1,800 feet southwest of the Project site indicate that the general area is potentially sensitive for archaeological and buried sites that are not visible due to urban development, that the area is identified as having low to moderate paleontological sensitivity and it is possible that fossils could be discovered during excavation, and that the inadvertent discovery of human remains during ground-disturbing activities cannot be entirely discounted. The City's SCAs relevant to archaeological or paleontological resources that might be impacted by the Project are listed below. All applicable SCAs would be adopted as part of the Project to eliminate significant impacts to archaeological and paleontological resources.

The Project would be required to implement the City's SCAs related to the discovery of archaeological resources, paleontological resources, and human remains during Project-related construction, as identified in **Attachment A**, including: SCA-CULT-1: Archaeological and Paleontological Resources – Discovery During Construction, SCA CULT-2: Archaeologically Sensitive Areas – Pre-Construction measures, and SCA-CULT-3: Human Remains – Discovery During Construction. Implementation of these SCAs during Project-related ground disturbance would reduce potential adverse effects that could result from Project activities to a less-than-significant level. Therefore, the Project would have a less-than-significant impact to previously unrecorded archaeological or paleontological resources.

VII.6.3 Conclusions

Implementation of the Project would not result in any new or more severe significant impacts related to historical resources or archaeological and paleontological resources than those identified in the Program EIRs. In addition, the Project would not demolish any built environment historical resources. Implementation of Mitigation Measure G.2 identified in the LUTE EIR pertaining to historic resources apply to the Project, which has been incorporated into City SCAs related to cultural resources SCA-

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CULT-1: Archaeological and Paleontological Resources – Discovery During Construction, SCA CULT-2: Archaeologically Sensitive Areas – Pre-Construction measures, and SCA-CULT-3: Human Remains – Discovery During Construction, would reduce Project impact to cultural resources to a less-than-significant level. Please see **Attachment A** for a full description of the applicable SCAs.

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VII.7 GEOLOGY AND SOILS

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Expose people or structures to substantial risk of loss, injury, or death involving: <ul style="list-style-type: none"> Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault [NOTE: Refer to California Geological Survey 42 and 117 and Public Resources Code section 2690 et. seq.]; 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Strong seismic ground shaking; 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Landslides; 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on expansive soil, as defined in section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be located above landfills for which there is no approved closure and post-closure plan, or unknown fill soils, creating substantial risks to life or property; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.7.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR included an analysis of geology, soils, and geohazards and found that impacts to these topics would be less than significant with implementation of SCAs.

The 1998 LUTE EIR included an analysis of geology, soils, and geohazards and found that impacts to these topics would be less than significant and would not require mitigation measures.

VII.7.2 Project Analysis

Exposure to Risk of Loss, Injury, or Death Involving Fault Rupture, Seismic-Related Shaking, Liquefaction, Lateral Spreading, Subsidence, or Collapse, or Landslides (Criterion 6.6.a)

The Project site is in a seismically active region, and the nearest active fault is the Hayward Fault, which is located approximately 2.7 miles northeast of the Project site. The Project site would experience strong to very strong shaking in the event of a major earthquake on a nearby active fault.³¹

The Project site is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone. Therefore, the Project would not result in significant impacts with respect to rupture of a known earthquake fault. The Project site is also not within an earthquake-induced landslides hazard zone mapped by the California Geological Survey (CGS).³² Based on the relatively flat topography of the Project site and surrounding area, landslides would not pose a risk to the Project. The Project site is fairly level, and there are no free faces that could be susceptible to lateral spreading near the Project site.

The Project site is within a liquefaction zone as mapped by the California Department of Conservation CGS, dated February 11, 2022.³³ In addition, the Project site is mapped by the Association of Bay Area Governments to be within a moderate liquefaction zone.³⁴ Soil investigations conducted at the Project site identified groundwater as being unconfined and present between 4 to 5.5 feet below ground surface³⁵ (bgs). Groundwater flow direction was found to be to northwest.³⁶

Hazards associated with the Project site location in a Seismic Hazard Zone would be fully addressed through compliance with the California Building Code, compliance with the seismic requirements of the City of Oakland Building Code pursuant to SCA-GEO-1: Construction – Related Permit(s), compliance with the recommendation of a soil report prepared for the site pursuant to SCA-GEO-2: Soils Report, and compliance with recommendations of a site-specific geotechnical investigation as

³¹ California Geological Survey. 2024. Fault Activity Map of California. <https://maps.conservation.ca.gov/cgs/fam/App/>. Accessed March 12, 2024.

³² California Geological Survey (CGS), 2022. CGS Seismic Hazards Program: Landslides Zones. <https://gis.data.ca.gov/datasets/cadoc::cgs-seismic-hazards-program-landslide-zones/explore?location=37.799300%2C-122.249082%2C17.00>. April 11.

³³ CGS, 2022. CGS Seismic Hazards Program: Liquefaction zones. https://gis.data.ca.gov/datasets/b70a766a60ad4c0688babdd47497dbad_0/explore. February 11.

³⁴ Association of Bay Area Governments. Hazard Viewer. <https://abag.ca.gov/our-work/resilience/data-research/hazard-viewer>. Accessed December 3, 2024.

³⁵ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

³⁶ Tank Protect Engineering. 1990. Site Assessment. Yuen's Automotive. 1901 Park Boulevard, Oakland, California. July 3.

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required pursuant to SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction). With implementation of SCA-GEO-1, SCA-GEO-2, and SCA-GEO-3, the Project impact associated with seismic hazards would be less than significant.

Expansive Soil, Erosion or Loss of Topsoil, Creating Substantial Risks to Life, Property, or Creeks/Waterways. (Criterion 6.6.b)

Soils that are clayey could have expansive properties when subject to varying moisture conditions. According to previous boring logs, soil beneath the Project site to a total depth of 50 feet bgs consists of clay with sandy layers. Potential fill material up to a depth of approximately 15 feet bgs was found at the previous location of the underground storage tanks.³⁷ Project excavation would include remedial activities to residual petroleum contamination at the project site, as approved by the ACEHD.³⁸ Section VII.8 - Hazards and Hazardous Materials, addresses soil erosion during the remedial excavation and requires the preparation of Remedial Excavation Plans and Specifications that would be reviewed and approved by ACEHD.

The fill material of the Project site would not have expansive properties based on the high sand content of these soils. SCA-GEO-2: Soils Report and SCA-Geo-3 : Seismic Hazards Zone (Landslide/Liquefaction) would apply to the Project and would require the preparation of a soil analysis report and implementation of the associated recommendations if the soils report identifies expansive soils beneath the Project site. With implementation of SCA-GEO-2 and SCA-GEO-3, potential hazards associated with expansive soils would be less than significant.

As discussed in detail in Section VII.9 - Hydrology and Water Quality, of this document, soil erosion could occur during Project grading and construction. However, as described in Section VII.9, implementation of SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction would reduce the potential impacts related to erosion of topsoil to a less-than-significant level.

VII.7.3 Conclusion

Consistent with the examination of the analysis, findings, and conclusions of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related to geology, soils, and geohazards than those identified in the Program EIRs. Implementation of SCA-GEO-1: Construction – Related (Permit(s) , SCA-GEO-2: Soils Report, SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction), and SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction would reduce impacts related to geology, soils, and geohazards would be less than significant. Please see **Attachment A** for a full description of the applicable SCAs.

³⁷ Frank Lee and Associates. 2023. Geotechnical Investigation. 1901 Park Boulevard, Oakland, CA, 94606. December 18.

³⁸ Alameda County Environmental Health Department. 2024. Agency Approval of the Corrective Action Plan. April 3.

VII.8 GREENHOUSE GAS EMISSIONS / GLOBAL CLIMATE CHANGE

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. For a project involving a stationary source, produce total emissions of more than 10,000 metric tons of CO ₂ e annually.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. For a project involving a land use development, fail to demonstrate consistency with the 2030 Equitable Climate Action Plan (ECAP) adopted by the City Council on July 28, 2020. [NOTE: Land use developments are projects that do not require a BAAQMD permit to operate.] Consistency with the 2030 ECAP can be shown by either: <ul style="list-style-type: none"> committing to all of the GHG emissions reductions strategies described on the ECAP Consistency Checklist, or complying with the GHG Reduction Standard Condition of Approval that requires a project-level GHG Reduction Plan quantifying how alternative reduction measures will achieve the same or greater emissions than would be achieved by meeting the ECAP Consistency Checklist. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.8.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR identified less-than-significant GHG impacts with the implementation of applicable City of Oakland SCAs.

Climate change and greenhouse gas (GHG) emissions were not expressly addressed in the 1998 LUTE EIR. Furthermore, GHG was not included in the State CEQA Guidelines Appendix G: Environmental Checklist Form and no thresholds of significance were established for the evaluation of GHG emissions. As such, the Previous CEQA Documents did not evaluate potential GHG impacts.

VII.8.2 Project Analysis

Stationary Source (Criterion 6.7.a)

The Project would not include any stationary source of emissions, such as an emergency generator, that would require a BAAQMD permit. Therefore, the Project would not require quantifying annual emissions of CO₂ equivalent and would have no impact associated with GHG emissions from stationary source.

Consistency with the City Equitable Climate Action Plan (Criterion 6.7.b)

BAAQMD and the California Air Pollution Control Officers Association (“CAPCOA”) consider GHG impacts to be exclusively cumulative impacts in that no single project could, by itself, result in a substantial change in climate. Therefore, the evaluation of GHG emissions impacts evaluates whether the Project would make a considerable contribution to cumulative climate change effects. The City’s current adopted thresholds for GHG emissions rely upon the technical and scientific basis for the 2030 Equitable Climate Action Plan (ECAP), which provide substantial evidence that adherence to the 2030 ECAP action items will achieve GHG emissions reduction targets of 56 percent below 2005 levels by 2030 and 83 percent below 2005 levels by 2050. These reduction targets are more aggressive than the State’s adopted 2030 reduction target of 40 percent below 1990 levels (per Senate Bill 32). Therefore, reductions below the City of Oakland’s efficiency metric also meet the State’s adopted 2030 goals.

An ECAP Consistency Review Checklist (ECAP Checklist) was prepared for the Project (see **Attachment D**). The purpose of the ECAP Checklist is to determine, for purposes of compliance with CEQA, whether a development project complies with the ECAP and the City’s GHG emissions reduction targets. If a development project can qualitatively demonstrate compliance with all the measures included in the ECAP Checklist as part of the project’s design, or alternatively, demonstrate to the City’s satisfaction why the measure is not applicable, then the project will be considered in compliance with the City’s ECAP. If a development project cannot meet all of the ECAP Checklist items, the project will alternatively need to demonstrate consistency with the ECAP by preparing and implementing a project specific GHG Reduction. If the project cannot demonstrate consistency with the ECAP in either of those two ways, the City will consider the project to have a significant effect on the environment related to GHG emissions.

According to the Project’s ECAP Checklist, the Project has committed to all applicable GHG emissions reduction strategies. Therefore, the Project would comply with the ECAP and would be required to implement SCA GHG-1, Project Compliance with the ECAP Consistency Checklist, which would ensure that all ECAP Checklist items are incorporated into the Project; the measures shall be included on the drawings submitted for construction-related permits. Since the Project has committed to all applicable GHG emissions reductions strategies described on the ECAP Checklist (**Attachment D**), Therefore, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions.

The Project would comply with the City of Oakland’s Green Building Ordinance. The Project would optimize the efficiency of its building envelope, and it would limit the building’s energy use through the use of efficient lighting and HVAC systems. Also, the Project would meet the most recently implemented Title 24 Building Energy Efficiency Standards. Additionally, the Project would be in area

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with diverse land uses and in proximity to transit services, which would reduce the number of vehicle trips and the associated GHG emissions generated.

Although not required to mitigate a significant impact related to GHG emissions, the Project would be required to implement several other City of Oakland SCAs that would contribute to minimizing potential GHG emissions from Project construction and operations. These include SCA AIR-1: Criteria Air Pollutant Controls – Construction Related; SCA AIR-4: Toxic Air Contaminant Controls - Construction Related; SCA TRA-2: Bicycle Parking; SCA TRA-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure ; SCA UTIL-3, Construction and Demolition Waste Reduction and Recycling; and SCA UTIL-5, Green Building Requirements.

Therefore, the Project would be consistent with all applicable goals, policies and regulations adopted to reduce GHG emissions and this impact would be less than significant. As such, the Project impact associated with consistency with applicable GHG plans would be less than significant.

VII.8.3 Conclusion

Consistent with the findings of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related GHG emissions than those identified in the Program EIRs. The Project would be required to implement SCA GHG-1, Project Compliance with the ECAP Consistency Checklist, which would reduce Project GHG impact to a less-than-significant level. In addition, to further reduce Project GHG impact, the Project would implement SCA AIR-1: Criteria Air Pollutant Controls – Construction Related; SCA AIR-4: Toxic Air Contaminant Controls - Construction Related; SCA TRA-2: Bicycle Parking; SCA TRA-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure; SCA UTIL-3, Construction and Demolition Waste Reduction and Recycling (#87); and SCA UTIL-5, Green Building Requirements. Please see **Attachment A** for a full description of the applicable SCAs.

VII.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors [NOTE: Per the BAAQMD CEQA Guidelines, evaluate whether the project would result in persons being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for acutely hazardous air emissions either by siting a new source or a new sensitive receptor. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers];	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (i.e., the "Cortese List") and, as a result, would create a significant hazard to the public or the environment;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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	and would result in a significant safety hazard for people residing or working in the project area;			
h.	Be located within the vicinity of a private airstrip, and would result in a significant safety hazard for people residing or working in the project area;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j.	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.9.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR determined that effects associated with hazards and hazardous materials, including hazardous materials transport, use, and disposal, would be less than significant with implementation of applicable SCAs. The Phase I Oakland 2045 General Plan Update EIR identified significant unavoidable impact related the impairment of implementation of emergency response or emergency evacuation plans.

The findings of the 1998 LUTE EIR found all impacts to hazardous materials handling, potential release of hazardous materials, hazardous materials related to construction and demolition, and contamination of soils or groundwater, would be less than significant and would not require mitigation measures. The 1998 LUTE EIR also found that impacts related to exposure of construction workers to hazardous materials would be less than significant with implementation of the LUTE Mitigation Measure M.5. This measure mandates the preparation and implementation of site-specific health and safety plans as recommended by the Occupational Safety and Health Administration(OSHA)Mitigation Measure M.5 is functionally equivalent to current SCAs that aim to reduce potential hazardous materials impact to a less-than-significant level.

VII.9.2 Program EIR Findings

Hazardous Materials Use, Storage and Disposal (Criteria 6.8.a, 6.8.b, and 6.8.c)

Operation of the Project would not involve the use, storage, or disposal of significant quantities of hazardous materials. The proposed retail and residential uses would involve the use of only small quantities of commercially available hazardous materials (e.g., paint and cleaning supplies). Construction of the Project would involve demolition of the existing structures and asphalt pavement. Site preparation would include the excavation of contaminated materials. Handling of these materials is discussed below under criterion VII.9.e.

There is the possibility of hazardous building materials including asbestos containing materials (ACMs), lead-based paint, and polychlorinated biphenyls (PCBs) to be present in the building structures.

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If present and not appropriately removed and disposed of, hazardous building materials could be released into the environment during demolition activities, which may adversely affect construction workers, the public, and/or the environment.

In accordance with the requirements of SCA-HAZ-1: Hazardous Building Materials and Site Contamination, the Project Applicant is required to submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of ACMs, lead-based paint, PCBs, and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the Project Applicant must submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The Project Applicant must implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.

In addition, the Project would be required to comply with SCA-AIR-3: Asbestos in Structures which requires the Project Applicant to comply with all applicable laws and regulations regarding demolition of ACMs, including but not limited to California Code of Regulations Title 8; California Business and Professions Code Division 3; California Health and Safety Code Sections 25915-25919.7; and BAAQMD Regulation 11, Rule 2, as may be amended. Evidence of compliance must be submitted to the City upon request.

Construction of the Project would involve the use and transport of hazardous materials. These materials could include fuels, oils, paints, and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and environment. The Project would be required to comply with SCA-HAZ-2: Hazardous Materials Related to Construction, which requires the contractor to implement BMPs during construction to minimize potential negative effects on groundwater, soils, and human health, which could occur as a result of hazardous materials handling and storage.

The transportation of hazardous materials is subject to United States Department of Transportation (USDOT), Resource Conservation and Recovery Act (RCRA), and state regulations. In 1990 and 1994, the federal Hazardous Material Transportation Act was amended to improve the protection of life, property, and the environment from the inherent risks of transporting hazardous material in all major modes of commerce. The USDOT developed hazardous materials regulations, which govern the classification, packaging, communication, transportation, and handling of hazardous materials, as well as employee training and incident reporting. The California Highway Patrol, the California Department of Transportation (Caltrans), and the California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC) are responsible for enforcing federal and State regulations pertaining to the transportation of hazardous materials. If a discharge or spill of hazardous materials occurs during transportation, the transporter is required to take appropriate immediate action to protect human health and the environment (e.g., notify local authorities and contain the spill), and is responsible for the spill cleanup. Project construction would result in the generation of various waste materials that would require recycling and/or disposal, including some waste materials that may be classified as hazardous waste. As required by DOT, RCRA, and state

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regulations, hazardous wastes would be transported by a licensed hazardous waste hauler and disposed of at facilities that are permitted to accept such materials.

Compliance with SCA-HAZ-2: Hazardous Materials Related to Construction and existing regulations as described above would minimize the potential for accidental releases of hazardous materials used during construction and ensure that potential Project impacts associated with routine transport, use, disposal of hazardous materials would be less than significant.

Hazardous Materials within 0.25-Mile of a School (Criterion 6.8.d)

The Lake school, a community preschool, is located approximately 500 feet northwest of the Project site at 304 Lester Avenue. In addition, the FM Smith Recreational Center is adjacent to the Project site from the north. The recreational center provides an after-school program.

No other schools were identified within a 0.25-mile of the Project site. The Project operation would not involve the handling of acutely hazardous materials. Potential Project impact associated with the presence of contaminated soil or groundwater are discussed below, under *Criterion 6.8.e*.

Compliance with SCAs described above (SCA-HAZ-1, SCA-HAZ-2, and SCA-AIR-3) that address potential emissions of hazardous materials during construction, would reduce potential Project impact related to hazardous emissions or the handling of hazardous materials, substances, or waste within 0.5 miles of a school to a less-than-significant level.

Exposure to Hazardous Materials in the Subsurface, Cortese List (Criterion 6.8.e)

The Project site was formerly occupied by a gas station from 1928 to 1990 and Yuen's Automotive from 1978 to 2020. The Project site comprises a one-story building utilized as an office and a shop for car servicing. Four underground storage tanks (USTs) (one 10,000-gallon gasoline tank, one 8,000-gallon gasoline tank, one 6,000-gallon gasoline tank, and one 500-gallon waste oil tank) were formerly located at the Project site.³⁹ The three gasoline USTs were located at the southwest side of the Project site along Park Boulevard. The waste oil UST was located at the north-northeast side of the Project site along 3rd Avenue. The gasoline USTs were removed in December 1989 following a Leaking UST case earlier that year.⁴⁰ The waste oil UST was removed in October 1994.⁴¹ On August 12, 1997, the Project site received closure via Remedial Action Completion Certification from the Alameda County Environmental Health Department ACEHD for the Leaking UST case.⁴² A site investigation conducted in 2021 (documented in a report dated July 29, 2022), as part of a prospective property transaction, identified high concentrations of residual petroleum hydrocarbons in soil, groundwater, and soil gas associated with the previously closed Leaking UST case.⁴³ In October 2021, ACEHD reached the determination to reopen the closed Leaking UST case.⁴⁴

³⁹ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

⁴⁰ Tank Project Engineering of Northern California. 1990. Site Assessment. Yuen's Automotive. 1901 Park Boulevard, Oakland, CA. July 3.

⁴¹ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

⁴² Alameda County Health Services Agency. 1997. Remedial Action Completion Certification. Yuen's Exon Service, 1901 Park Boulevard, Oakland, Ca 94606. August 12.

⁴³ Pangea. 2022. Assessment Report. 1901 Park Boulevard, Oakland CA. LOP Case No. R00000912. July 29.

⁴⁴ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

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On February 12, 2024, the Project Applicant submitted a *Corrective Action Plan* (plan) to ACEHD.⁴⁵ The plan outlined additional assessment to determine if groundwater monitoring wells, formerly installed at the Project site, were properly destroyed, and to help delineate the extent of the soil contamination. As outlined in the plan, analysis identified the presence of petroleum hydrocarbon (TPH) in the soil, mainly near the the former UST fueling and waste oil facilities with the highest TPH detected near the former waster oil tank. At several locations within the Project site, the TPH was detected above the conservative residential environmental screening levels (ESL) for odor and nuisance set by the Regional Water Quality Control Board. Benzene and Naphtalene were also detected in the soil at several locations in excess of the Low-Threat Closure Policy (LTCP) criteria for residential areas.

In groundwater, hydrocarbon concentrations (including TPH, benzene, and naphthalene) were detected near the former fuel USTs and waste oil UST. Benzene was detected in one of the monitoring wells above the Tiew 1 ESL.

Detected soil gas included benzene, TPH, and tetrachloroethylene. Benzene and TPH concentrations detected in soil gas near the former dispenser island exceeded the residential ESL. In addition, perchloroethylene (PCE) concentration exceeded the Tier 1 ESL in soil gas detected in two locations. PCE was also detected in subslab gas above the residential human health cancer risk ESL at four locations.

The plan described several methods to remove the residual petroleum contamination at the site and recommended the excavation method given the soil type and the shallow depth to hrydrocarbon impact and groundwater. The scope of the *Corrective Action Plan* included the following:

- Destroying the monitoring wells at the site
- Delineating the extent of excavation
- Preparing for the excavation (public notification and preparing the site)
- Excavating for remediation
- Reporting to ACEHD

On April 3, 2024, ACEHD concurred with the proposed remedial activities and approved the *Corrective Action Plan* to address the residual petroleum contamination at the project site.⁴⁶ ACEHD approval required the submittal of the following deliverables:

- Geotracker Database Compliance Certification Letter
- Retainment of a Public Outreach Specialist
- Draft fact sheet outlining the approved corrective action plan
- Draft certification of fact sheet mailing
- Response to public comment document (as needed)
- Baseline project schedule
- Geotracker databse compliance

⁴⁵ Pangea. 2024. *Corrective Action Plan*. Letter to the Alameda County Environmental Health. February 12.

⁴⁶ Alameda County Environmental Health Department. 2024. Agency Approval of the *Corrective Action Plan*. April 3.

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The Project would be required to comply with SCA-HAZ 3: Regulatory Permits and Authorization from Other Agencies, which would require obtaining all necessary permits and submitting evidence of approved permits/authorization to the City of Oakland. The Project would also comply with SCA-HAZ-1: Hazardous Building Materials and Site Contamination, which would require implementation of an approved plan to protect Project construction workers from risks associated with hazardous materials. In addition, the Project Applicant would be required to ensure that BMPs are implemented by the contractor during construction to minimize potential hazards related to contaminated soil and groundwater. Implementation of SCA-GEN-1 and compliance with applicable local, state, and federal regulations would reduce potential impacts associated with the contamination at the Project site to a less-than-significant level.

Emergency Access Routes (Criteria 6.8.f and 6.8.i)

The Project would not change the surrounding streets or roadways and would not limit emergency access or conflict with plans. Any temporary roadway closures required during construction of the Project would be subject to SCA-TRA-1: Construction Activity in the Public Right-of-Way and City of Oakland review and approval to ensure consistency with City of Oakland requirements. Therefore, the Project would have a less-than-significant impact related to emergency access routes and emergency response plans.

Airports (Criteria 6.8.g and 6.8.h)

The Project site is not located within two miles of a public airport or public use airport, or near a private airstrip. Oakland International Airport is located at approximately 4 miles southeast of the Project site. Therefore, the Project would have no impact related to airport hazards.

Wildfire Risk (6.8.j)

The Project site is not located within a State Responsibility Area for fire service or within a very high fire severity zone.⁴⁷ Therefore, the Project would have a less-than-significant impact related to wildfire.

VII.9.3 Conclusion

Consistent with the analysis, findings, and conclusions of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related to hazards and hazardous materials than those identified in the Program EIRs. Implementation of SCA-HAZ-1: Hazardous Building Materials and Site Contamination, SCA-HAZ-2: Hazardous Materials Related to Construction, SCA-GEN-1: Regulatory Permits and Authorization from Other Agencies, SCA-AIR-3: Asbestos in Structures, and SCA-TRA-1: Construction Activity in the Public Right-of-Way would ensure that potential impacts related to hazards and hazardous materials would be less than significant. Please see **Attachment A** for a full description of the applicable SCAs.

⁴⁷ Cal Fire. 2008. California State (Cal Fire) Designated Very High Fire Hazard Severity Zone (VHFHSZ), Local & State Responsibility Areas. <https://cao-94612.s3.us-west-2.amazonaws.com/documents/Very-High-Fire-Hazard-Severity-Zone-Map.pdf>. September 3.

VII.10 HYDROLOGY AND WATER QUALITY

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Identified in Previous CEQA Documents	New Significant Impact
<p>a. Violate any water quality standards or waste discharge requirements;</p> <p>Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters;</p> <p>Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems;</p> <p>Otherwise substantially degrade water quality;</p> <p>Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted);</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c. Create or contribute substantial runoff which would be an additional source of polluted runoff;</p> <p>Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or off- site;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>d. Result in substantial flooding on- or off-site;</p> <p>Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Place within a 100-year flood hazard area structures which would impede or redirect flood flows; Expose people or structures to a substantial risk of loss, injury, or death involving flooding; or Expose people or structures to a substantial risk of loss, injury, or death as a result of inundation by seiche, tsunami, or mudflow;			
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VII.10.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found impacts related to hydrology and water quality to be less than significant with the implementations of the City's SCAs.

The 1998 LUTE EIR found all hydrology and water quality impacts to be less than significant, and therefore, no mitigation measures or SCAs were required.

VII.10.2 Project Analysis

Water Quality, stormwater, drainages and drainage patterns, and Creek Protection (Criteria 6.9.a, and 6.9.c)

The Project is located within a highly urbanized environment and there are no lakes, creeks, or other surface waters in the vicinity of the Project site. Lake Merritt, which is the nearest surface water body, is approximately 1,400 feet to the northwest and is separated from the Project site by urban development. Stormwater runoff from the Project site is conveyed to Lake Merritt via underground storm drains and culverts.

Construction of the Project would involve demolition, site remediation activities, grading, and construction, all of which, if not properly managed, could result in degradation of the quality of stormwater runoff, erosion and/or sedimentation, and adverse effects on downstream receiving waters. The Project would require a grading permit, and therefore, would have to comply with SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction, which requires implementation of best management practices to manage stormwater runoff, minimize erosion and sedimentation, and prevent any debris and dirt from flowing into the City's storm drain system through measures such as barriers and devices to trap, store, and filter runoff.

As discussed under Section VII.9, Hazards and Hazardous Materials, the Project would be required to comply with SCA-HAZ-1: Hazardous Building Materials and Site Contamination and SCA-HAZ-2: Hazardous Materials Related to Construction which require BMPs to be implemented during construction to minimize potential negative effects on groundwater and receiving waters which could result from inappropriate handling of construction-related hazardous materials (e.g., fuels, oils, and paints) and potentially contaminated soil and groundwater. The Project would also be required to obtain all necessary regulatory permits and authorizations, pursuant to SCA-GEN-1: Regulatory Permits and Authorization from Other Agencies.

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Based on previous site assessments, groundwater level in the area of the Project site ranges between 4 and 5.5 feet bgs.⁴⁸ Based on the depth to groundwater, dewatering may be required during Project construction. Dewatering would be subject to permits from East Bay Municipal Utility District (EBMUD) or the Regional Water Quality Control Board (RWQCB), depending if the discharge were to the sanitary or storm sewer system, respectively. If the water is not suitable for discharge to the storm drain (receiving water), dewatering effluent may be discharged to EBMUD's sanitary sewer system, if special discharge criteria are met. These include, but are not limited to, application of treatment technologies or BMPs which would result in achieving compliance with the wastewater discharge water quality limits. Discharges to EBMUD's facilities must occur under a Special Discharge Permit. In addition, per the EBMUD Wastewater Ordinance, "all dischargers, other than residential, whose wastewater requires special regulation or contains industrial wastes requiring source control shall secure a wastewater discharge permit" (Title IV, Section 1). EBMUD also operates its wastewater treatment facilities in accordance with Waste Discharge Requirements issued by the RWQCB, which require rigorous monitoring of effluent to ensure discharges do not adversely impact receiving water quality.

Based on the Project location, size of impervious surface to be replaced (less than 0.5 acres), lot coverage, and absence of surface parking, the Project qualifies for a Category "A" Special Project, which provides for 100 percent Low Impact Development (LID) treatment reductions credits. The Project would direct runoff from the roof and sidewalks onto vegetated areas. Wastewater and garage floor drainage would be discharged in the sanitary sewer. Water resulting from testing fire sprinklers would be discharged to on-site vegetated areas or to the sanitary sewer.

In compliance with Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the Project would be required to implement SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated projects, which requires the submittal and implementation of an approved Post-Construction Stormwater Management Plan to reduce the amount of post-construction stormwater runoff and limit stormwater pollution.

With implementation of SCA-HYD-1 and SCA-HYD-2, as well as SCA-HAZ-1, SCA-HAZ-2, and SCA-GEN-1, the Project would result in a less-than-significant impact to water quality, stormwater drainages, and drainage patterns.

Use of Groundwater (Criterion 6.9.c)

As discussed above, if dewatering is required during construction, it would be temporary and have only a localized and short-term effect on groundwater levels. Therefore, depletion of groundwater resources associated with Project construction-period dewatering would be less than significant. Operation of the Project would not involve dewatering or the use of groundwater, as potable water is supplied to the Project site by EBMUD.

Flooding and Substantial Risks from Flooding (Criterion 6.9.d)

Current floodplain mapping prepared by the Federal Emergency Management Agency (FEMA) indicates that the Project site is located outside the 100-year and 500-year flood hazard areas.⁴⁹ Therefore,

⁴⁸ Pangea. 2024. Corrective Action Plan. Letter to the Alameda County Environmental Health. February 12.

⁴⁹ Federal Emergency Management Agency (FEMA), 2018. Flood Insurance Rate Map, Alameda County, California and Incorporated Areas, Panel 67 of 725, Map Number 06001C0067H and 06001C0086H, December 21.

development of the Project would not be subject to significant impacts with respect to storm-related flooding.

VII.10.3 Conclusion

Consistent with the findings of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related water quality and creek protection, use of groundwater, stormwater drainage, or flooding than those identified in the Program EIRs.

Implementation of SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction, SCA HYD-2: NPDES C.3: Stormwater Requirements for Regulated Projects, SCA-HAZ-1: Hazardous Building Materials and Site Contamination, SCA-HAZ-2: Hazardous Materials Related to Construction , and SCA-GEN-1: Regulatory Permits and Authorization from Other Agencies would ensure impacts to hydrology and water quality would be less than significant. Please see **Attachment A** for a full description of the applicable SCAs.

VII.11 LAND USE AND PLANNING

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Physically divide an established community;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in a fundamental conflict between adjacent or nearby land uses;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Fundamentally conflict with any applicable habitat conservation plan or natural community	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.11.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update found all land use or policy impacts to be less than significant or less than significant with implementation of the City's SCAs.

The 1998 LUTE EIR analyzed land use compatibility between existing uses and zoning and found that these impacts to be less than significant with implementation of a number of mitigation measures, which have largely been implemented into the City of Oakland Municipal Code (OMC) or as SCAs. The 1998 LUTE EIR also found a significant and unavoidable effect associated with policy inconsistencies with the Clean Air Plan (resulting from significant and unavoidable increases in criteria pollutants from increased traffic regionally). It identified mitigation measures, which largely align with current City of Oakland SCAs involving travel demand management and which apply to all projects within the City of Oakland.

VII.11.2 Project Analysis

Division of Existing Community, Conflict with Land Uses, or Land Use Plans (Criteria 10.a through 10.d)

General Plan, Zoning Designation, and Applicable Policies

The City of Oakland General Plan designates the Project site as Neighborhood Center Mixed Use which is intended to “identify, create, maintain, and enhance mixed use neighborhood commercial centers.” The Project site is within the Neighborhood Commercial – 3 Zone (CN-3). The intent of the CN-3 zone is to create, improve, and enhance neighborhood commercial centers that have a compact, vibrant pedestrian environment. The Project site is also within Affordable Housing Combining (S-13) Zone. S-13 is intended to create and preserve affordable housing restricted for extremely low, very low, low, and/or moderate-income households, (as defined in California Government Health and Safety Code Sections 50093, 50105, and 50106 50052.5 and in Oakland Planning Code Section 17.107.020).

The Project would be consistent with both the intent of the General Plan and Zoning as it would develop a multiple floor residential building with retail uses at the ground floor that would help the City further establish the area as a mixed-use urban center of regional importance. Additionally with the proximity of retail, many restaurants, and open space in the area, the building occupants are anticipated to substantially increase pedestrian activity and help support pedestrian-oriented ground-floor uses in the Project site’s vicinity. The project would also include two affordable units designated for very-low-income households.

Section VI, Project Consistency with Community Plan or Zoning, analyzes the project consistency with applicable plans and policies. In addition, **Attachment B** includes a discussion of the relevant General Plan policies that are applicable to the Project. As noted in **Section VI** and **Attachment B**, the Project would not conflict with applicable City’s policies and regulations.

Development Standards

The Project would construct a new mixed-use residential development with ground level retail uses near other mixed-use, residential, retail development, recreational and educational uses. The residential and retail land uses would be consistent and compatible with nearby commercial retail, restaurant uses, and educational uses. Therefore, the Project would not physically divide an established community. As discussed in *Section 6.2, Aesthetics, Shadow, and Wind*, the Project would not result in a significant impact with respect to aesthetics (views) or shadows. The Project also would not result in a fundamental conflict with adjacent land uses, including adjacent historical resources.

The Project Site is located within a Commercial Corridor which has a maximum height limit of 45 feet. The height of the proposed building would be approximately 65 feet to the parapet. The Project Applicant is seeking density bonus concessions/waivers for number of stories, maximum building height limits, residential rear yard setback, and percentage of group open space located on the roof in compliance with provisions of the California State Government Code 65915-65918 for the affordable

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housing density bonus pursuant to Chapter 17-107 – Density Bonus and Incentive Procedures of the Oakland Municipal Code.⁵⁰

The Project site is not within an adopted specific plan area but is located approximately 1,800 feet northeast of the Lake Merritt Station Area Plan, which was adopted in 2014. Therefore, no specific plan applies to the site.

VII.11.3 Conclusion

Consistent with the analysis, findings, and conclusions of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related to land use, plans, or policies than those identified in the Program EIRs. The Project would implement SCA-AIR-4: Toxic Air Contaminants Controls – Construction Related (see Section 4.2, Air Quality), SCA-HAZ-1: Hazardous Building Materials and Site Contamination (see Section 4.8, Hazards and Hazardous Materials), SCA-NOI- 6: Operational Noise, and SCA NOI-7: Exposure to Community Noise (see Section. Section 4.11, Noise), which would further reduce Project impacts to land use, plans, policies.

⁵⁰ The Project site is within S-13 Zone. The provisions in Chapter 17.95 -S-13 Affordable Housing Combining Zone Regulations of the Oakland Municipal Code are distinguished from, and are mutually exclusive of, other development bonuses available pursuant to Chapter 17.107 - Density Bonus and Incentive Procedure. Developers may apply to utilize either the provisions under Chapter 17.107 or this chapter, but not both.

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VII.12 NOISE

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
<p>a. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts;;</p> <p>Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code section 8.18.020) regarding persistent construction-related noise;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding operational noise;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3 dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project)</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>d. Expose persons to interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24);</p> <p>Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA]);			
e. During either project construction or project operation expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA):	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels; or Be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.12.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found impacts to be less than significant or less than significant with the implementation of the City's SCAs.

The 1998 LUTE EIR found that noise impacts associated with traffic noise increases, changes in map designations, mixed use development, noise compatibility within residential areas, live-work noise compatibility, and transportation improvements would be less than significant with implementation of LUTE Mitigation Measures L.3, L.4, L.5, and L.7.

- L.3a: Establish design requirements for large-scale commercial development that requires adequate buffers from residential uses. Use of open space, recreation space, or transit installations as buffers should be encouraged.
- L.3b: Mixed residential/ non-residential neighborhoods should be rezoned after determining which should be used for residential, mixed, or non-residential uses. Some of the factors that should be considered when rezoning mixed use areas include the future intentions of the existing residents or businesses, natural features, or health hazards.
- L.4: Where high density residential development would be located adjacent to existing lower density residential development, new development shall be designed to minimize noise impacts on any existing residential uses due to increased traffic on local roadways and increased parking activities
- L.5a: The City should develop distinct definitions for home occupation, live/work and work/live operations; define appropriate locations for these activities and performance criteria for their establishment; and create permitting procedures and fees that facilitate the establishment of those activities which meet the performance criteria.
- L.5b: Avoid proliferation of existing incompatible uses by eliminating, through appropriate rezoning actions, pockets of residential zoning within predominantly industrial areas.

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- L.5c: Establish performance-based standards which designate appropriate levels of noise, odors, light/glare, traffic volumes, or other such characteristics for industrial activities located near commercial or residential areas.
- L.5d: Develop performance zoning regulations which permit industrial and commercial uses based upon their compatibility with other adjacent or nearby uses.
- L.7: Future transit improvements shall be designed sufficiently so that future noise levels along these streets can be adequately estimated and considered in the design of future residential or other noise-sensitive developments.

These mitigation measures are functionally equivalent to the updated City SCAs and are applicable to the Project, as discussed below.

VII.12.2 Project Analysis

Construction Noise (Criterion 6.11.a)

The City of Oakland CEQA Thresholds of Significance Guidelines, dated September 26, 2023, indicate that the construction of the Project would have a significant impact on the environment if it would:

1. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Municipal Code section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts;⁵¹
2. During the hours of 7 p.m. to 7 a.m. on weekdays and 8 p.m. to 9 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard;
3. Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code section 8.18.020) regarding persistent construction-related noise;
4. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding operational noise;
5. During either Project construction or Project operation expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA);⁵²

Construction of the Project would occur over approximately 12 months. Construction is planned to occur between 7:00 a.m. and 7:00 p.m. on weekdays as allowed by the City of Oakland conditions of approval.

⁵¹ The acoustical analysis must identify, at a minimum, (a) the types of construction equipment expected to be used and the noise levels typically associated with the construction equipment and (b) the surrounding land uses including any sensitive land uses (e.g., schools and childcare facilities, health care and nursing homes, public open space). If sensitive land uses are present, the acoustical analysis must recommend measures to reduce potential impacts.

⁵² The FTA criteria were developed to apply to transit-related groundborne vibration. However, these criteria should be applied to transit-related and non-transit-related sources of vibration.

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Project construction noise levels would be greatest during the early phases of the Project when the greatest amount of noise-generating heavy equipment would be used at the Project site. Later phases of construction (i.e., interior finishing/architectural coating) are anticipated to require less heavy equipment and noise levels would be slightly less.

Equipment used during Project construction would include arc welders, backhoes, compressors, concrete mixers, concrete saws, cranes, dozers, excavators, front end loaders, generators, graders, pavers, tractors, trucks, vibratory compactors, and other ancillary equipment. The range of maximum instantaneous noise levels for Project equipment (identified in **Table 8** with **bold font**) would be 70 to 90 A-weighted decibels maximum noise level (dBA L_{max}) at a distance of 50 feet from the equipment.

TABLE 8
CONSTRUCTION EQUIPMENT 50-FOOT NOISE EMISSION LIMITS

Equipment Category	L_{max} Level (dBA)^{1,2}	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor³	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous

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Equipment Category	L _{max} Level (dBA) ^{1,2}	Impact/Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

¹ Measured at 50 feet from the construction equipment, with a "slow" (1 sec.) time constant.

² Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

³ Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

L_{max}: Maximum noise level

dBA: A-weighted decibels

SOURCE: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

Table 9 shows the hourly average noise level ranges, by construction phase, typical for various types of projects. Hourly average noise levels generated by construction are about 65 to 88 dBA L_{eq} for domestic housing projects, measured at a distance of 50 feet from the center of a busy construction site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

The Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM) was also used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of equipment would operate simultaneously, as recommended by the FTA for construction noise evaluations. This construction noise model includes representative sound levels for the most common types of construction equipment and the approximate usage factors of such equipment that were developed based on an extensive database of information gathered during the construction of the Central Artery/Tunnel project in Boston, Massachusetts (CA/T project or "Big Dig"). The usage factors represent the percentage of time that the equipment would be operating at full power.

Equipment expected to be used in each construction phase are summarized in **Table 10**, along with the reference noise level at 50 feet assuming the operation of the two loudest pieces of construction equipment, and the estimated noise levels at the nearest receptors to the north, west, and south, as projected from the center of the construction site. The noise levels calculated with the RCNM model generally agreed with EPA's construction noise data, as summarized in **Table 10**.

Based on these data, the Project construction would produce noise levels exceeding 65 dBA within 500 feet of residences and noise levels exceeding 70 dBA within 285 feet of commercial land uses. The anticipated noise sources for the site are not "extreme" noise generators under typical construction conditions (i.e., equipment that would generate noise levels of 90 dBA or greater at nominal distances of 50 feet or greater from the equipment). However, construction activities would result in a substantial temporary increase in ambient noise levels in excess of standards established in the noise ordinance.

TABLE 9
TYPICAL RANGES OF CONSTRUCTION NOISE LEVELS AT 50 FEET, L_{EQ} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

Note:

I - All pertinent equipment present at site.

II - Minimum required equipment present at site.

L_{eq}: equivalent sound level

dBA: A-weighted decibels

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

The Project would be required to implement SCA-NOI-1: Construction Days/Hours, SCA-NOI-2: Construction Noise, SCA-NOI-3: Project-Specific Construction Noise Reduction Measures, and SCA-NOI-4: Construction Noise Complaints, which would address potentially significant construction noise impact. SCA-NOI-1 would limit construction operations to specified days and hours, except as allowed on a case-by-case basis. SCA-NOI-2 would require the Project to institute a noise reduction program, including the use of best available noise control techniques on machinery, provision of stipulations for impact tools such as jack hammers. SCA-NOI-2 would also require, stationary sources to be muffled and located as far from receptors as possible and would limit the noisiest phases of construction to 10 days at a time or fewer. SCA-NOI-3 would require site specific attenuation measures to protect adjacent sensitive receptors, and SCA-NOI-4 would establish procedures for responding to and tracking complaints received pertaining to construction noise. In addition, pursuant to SCA-NOI-5: Extreme Construction Noise, the Project would be required to implement the Construction Noise Management Plan included in **Attachment E** of this document. With implementation of SCA-NOI-1 through SCA-NOI-5, construction noise resulting from the Project would not violate the City's Noise Ordinance. Therefore, the Project noise impact during construction would be less than significant.

Operational Noise Impact (Criterion 6.11.b)

A development project would result in a significant impact if it were to generate operation-period noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050). The primary noise generated by the long-term operation of the Project would occur as a result of the use of HVAC systems. Noise generated from HVAC systems would be subject to SCA-NOI-6: Operational Noise that requires all operational noise to comply with the performance standards of Chapter 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. Therefore, noise generated by the HVAC systems would not violate the City of Oakland operational noise standards during the operational period of the Project, and the potential for noise impacts during operation would be less than significant.

TABLE 10
CONSTRUCTION NOISE LEVELS

Phase	Construction Equipment (Quantity)	Calculated Hourly Average L_{eq} (dBA) From Operation of Two Loudest Pieces of Construction Equipment			
		Noise Level at 50 feet	Noise Level at 65 feet (North)	Noise Level at 100 feet (South)	Noise Level at 120 feet (West)
Demolition	Concrete/Industrial Saw (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (3) *	85	82	78	77
Site Preparation	Grader (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (1) *	84	81	78	76
Grading	Grader (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (2) *	84	81	78	76
Trenching	Tractor/Loader/Backhoe (1) * Excavator (1) *	82	79	76	74
Building Construction	Crane (1) Forklift (1) Generator Set (1) * Tractor/Loader/Backhoe (1) * Welder (3)	82	80	76	74
Building – Interior/ Architectural Coating	Air Compressor (1) *	74	71	68	66
Paving	Cement & Mortar Mixer (1) * Paver (1) Paving Equipment (1) Roller (1) Tractor/Loader/Backhoe (1) *	82	80	76	74

Notes:

* Denotes two loudest pieces of construction equipment per phase

 L_{eq} : Sound level equivalent

dBA: A-weighted decibels

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

Permanent Increase in Ambient Traffic Noise and Cumulative Noise Impact (Criterion 6.11.c)

Motor vehicles with their distinctive noise characteristics are the dominant noise source in the Project vicinity. The amount of noise varies according to many factors, such as volume of traffic, vehicle mix (percentage of cars and trucks), average traffic speed, and distance from the observer. Implementation of the Project would result in new daily trips on local roadways in the Project site vicinity. A characteristic of sound is that a doubling of a noise source is required in order to result in a perceptible (3 dBA or greater) increase in the resulting noise level.

As discussed in Section 6.14, Transportation, the Project would generate 230 trips per day with 13 trips during AM peak hours and 24 trips during PM peak hours. The average daily traffic volume on Park Boulevard is approximately 13,000 cars. The average daily traffic volume on East 19th Street and

3rd Avenue is approximately 9,300 and 2350 cars, respectively.⁵³ Therefore, the number of trips generated by the Project would be marginal compared to existing trips and would not double the volume of the existing traffic. The ambient traffic noise increase associated with the Project would be approximately 10 percent and would be less than significant.

Noise Exposure during Construction and Operation (Criterion 6.11.d)

A development project would result in a significant impact to occupants of the proposed building if it were to expose those occupants to noise levels greater than those stated in the Oakland General Plan. Occupants of the Project would be subject to ambient outdoor noise levels of approximately 65 dBA Ldn.⁵⁴ This noise environment is regarded as “conditionally acceptable” community noise exposure levels for residential land uses. The City of Oakland General Plan indicates that development within a “conditionally acceptable” environment requires an analysis of noise-reduction requirements, and if necessary, noise-mitigation features in the design. The implementation of SCA-NOI-7: Exposure to Community Noise) would require noise reduction measures be incorporated into building design based upon the recommendations of a qualified acoustical engineer. The noise reduction measures would be required to reduce interior noise levels to 45 dBA Ldn for any habitable room⁵⁵ in accordance with the 2022 California Building Standards Code. The noise control measures are required to be submitted to the City of Oakland for review and approval prior to the issuance of a construction-related permit. Compliance with SCA-NOI-7: Exposure to Community Noise would therefore reduce the potential impact that future occupants of the Project would be exposed to excessive or incompatible noise levels to a less-than-significant level.

A development project would result in a significant impact to construction workers if it were to generate noise in excess of California Division of Occupational Safety and Health (Cal/OSHA) standards. Construction workers could be exposed to excessive noise from the heavy equipment used during Project construction. However, noise exposure of construction workers is regulated by Cal/OSHA. Title 8, Subchapter 7, Group 15, Article 105 of the California Code of Regulations (Control of Noise Exposure) sets noise exposure limits for workers and requires employers who have workers that may be exposed to noise levels above these limits to establish a hearing conservation program, make hearing protectors available, and keep records of employee noise exposure measurements. The construction contractor for the Project would be subject to these regulations, and compliance with these Cal/OSHA regulations will ensure that the potential of construction workers to be exposed to excessive noise is less than significant.

Construction Vibration Impact (Criterion 6.11.e)

Groundborne vibration has the potential to disturb people as well as to damage buildings in some cases. The FTA vibration impact criteria and impact assessment guidelines are published in their

⁵³ Traffic Volume Survey Data for the City of Oakland.

<https://www.arcgis.com/home/webmap/viewer.html?webmap=86ceba0ee7f4427cba0613c9b7e114d0&extent=-122.3425,37.7185,-121.9635,37.897>. Accessed March 29, 2024.

⁵⁴ City of Oakland. 2005. City of Oakland General Plan. Noise Element. June.

⁵⁵ Habitable space is a space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

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*Transit Noise and Vibration Impact Assessment Manual*⁵⁶. The FTA guidelines for construction vibration impact criteria are shown in **Table 11** for various structural categories.

TABLE 11
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV, in/sec	Approximate L _v [*]
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Note:

*L_v velocity in decibels (VdB)

PPV: Peak particle velocity

SOURCE: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018.

Project construction phases would include demolition, site preparation, grading/excavation, trenching/foundation, building framing and exterior construction, interior finishing/architectural coating, and paving. Pile driving equipment, which can cause excessive vibration, is not expected to be required for the Project.

Table 12 provides a summary of vibration levels expected at the nearest receptors to the north, west, and south to show how vibration levels attenuate with distance from the source. The construction of the Project would not generate vibration levels exceeding the conservative peak particle velocity (PPV) threshold of 0.2 inch per second (in/sec) established for non-engineered timber and masonry buildings, even when heavy equipment or impact tools are used at the property line of the Project site. Therefore, the Project would result in a less-than-significant impact associated with construction vibration.

Aircraft Noise (6.11.f)

Implementation of the Project would not expose people residing or working in the Project Area to excessive noise levels from airport or aircraft operation. The Project site is located over 4 miles northwest and well outside the Oakland International Airport 65 dBA Ldn/CNEL noise contour, which the Federal Aviation Administration regards as a significance threshold for noise-sensitive land uses. Therefore, impacts related to airport noise would be less than significant.

⁵⁶ US Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.

TABLE 12
ESTIMATED CONSTRUCTION VIBRATION LEVELS BY PHASE

Phase of Construction	Construction Equipment	PPV (in/sec) at Various Distances from Construction Equipment			
		25 feet (Source)	35 feet (North)	60 feet (West)	70 feet (South)
Demolition	Concrete/Industrial Saw	--	--	--	--
	Rubber-Tired Dozer	0.089	0.054	0.024	0.019
	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001
Site Preparation	Grader	0.089	0.054	0.024	0.019
	Rubber-Tired Dozer	0.089	0.054	0.024	0.019
	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001
Grading	Grader	0.089	0.054	0.024	0.019
	Rubber-Tired Dozer	0.089	0.054	0.024	0.019
	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001
Trenching	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001
	Excavator	0.202	0.122	0.054	0.043
Building Construction	Crane	--	--	--	--
	Forklift	--	--	--	--
	Generator Set	--	--	--	--
	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001
	Welder	--	--	--	--
Building – Interior/ Architectural Coating	Air Compressor	--	--	--	--
Paving	Cement & Mortar Mixer	--	--	--	--
	Paver	0.076	0.046	0.020	0.016
	Paving Equipment	0.076	0.046	0.020	0.016
	Roller	0.210	0.127	0.056	0.045
	Tractor/Loader/Backhoe	0.003	0.002	0.001	0.001

Note:

PPV: Peak particle velocity

In/sec: Inch per second

SOURCE: Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, Office of Planning and Environment, U.S. Department of Transportation, September 2018, as modified by Illingworth & Rodkin, Inc., February 2024.

VII.12.3 Conclusion

Implementation of the Project would not result in any new or more severe significant impacts related to construction noise and vibration, ambient noise, or noise exposure than those identified in the Program EIRs. Implementation of SCA-NOI-1: Construction Days/Hours, SCA-NOI-2: Construction Noise), SCA-NOI-3: Project-Specific Construction Noise Reduction Measures, SCA-NOI-4: Construction Noise Complaints, SCA-NOI-5: Extreme Construction Noise, SCA-NOI-6: Operational Noise, and SCA-NOI-7: Exposure to Community Noise would ensure impacts related to noise would be less than significant. Please see **Attachment A** for a full description of the applicable SCAs.

VII.13 POPULATION AND HOUSING

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.13.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR, found impacts related to population and housing to be less-than-significant or less than significant with the implementation of the City's SCAs.

The 1998 LUTE EIR identified mitigation measures to address unanticipated employment growth (compared to regional ABAG projections). No other mitigation measures were warranted.

VII.13.2 Project Analysis***Population Growth and Displacement of Housing and People (Criteria 6.12.a, 6.12.b, and 6.12.c)***

The Project would redevelop a site currently with no residential uses and occupied by an automotive garage, one canopy-style hand car wash, and asphalt pavement. Therefore, the Project would not displace any housing or people. Using a population generation rate established for the surrounding area of 2.78 persons per household, the Project would generate up to 64 new residents.⁵⁷ The

⁵⁷ U.S. Census. 2023. Quick Facts: Alameda County, CA. Persons per Households 2018-2022. <https://www.census.gov/quickfacts/fact/table/alamedacountycalifornia/PST045223>. Accessed January 10, 2025.

approximately 3,664 square feet of retail space would generate approximately 7 employees.⁵⁸ On the short term, construction of the Project would require the temporary use of construction workers. The additional approximate 64 residents and 7 employees, plus the temporary construction employees, would not result in a significant population increase.

While the 1998 LUTE EIR identified Mitigation Measure C.2, which requires the City of Oakland to maintain a database of underutilized parcels and to assist developers in locating sites for their developments, this mitigation measure has already been implemented by the City, and thus is not applicable to the Project.

VII.13.3 Conclusion

Consistent with the analysis, findings, and conclusions of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related to population growth or displacement than those identified in the Program EIRs. The Program EIRs did not identify any mitigation measures related to population and housing that apply to the project.

⁵⁸ Net jobs are calculated using a standard retail generation rate of 500 square feet per employee and does not account for jobs eliminated due to the removal of existing uses (3,664 retail square feet ÷ 500 square feet per employee = approximately 7 new retail employees).

VII.14 PUBLIC SERVICES, Parks and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Fire Protection;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Police Protection;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Schools; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Other public facilities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.14.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found all public services impacts to be less than significant or less than significant with the implementation of the City's SCAs.

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The 1998 LUTE EIR found that impacts related to firefighting and evacuation constraints would be significant and unavoidable even with implementation of a mitigation measure which would require the construction of a fire station in the North Oakland Hills to address the increase in population and housing. However, this specific impact was found to be localized to the Oakland Hills, which consists of areas with narrow street widths, insufficient turning radii, steep slopes, distant fire stations, and where an emergency water supply would be vulnerable to disruption from natural events, and is therefore, not relevant to projects located in the project area. The 1998 LUTE EIR also identified a significant and unavoidable impact regarding increased student enrollment, particularly in Downtown (and the Waterfront). The 1998 LUTE EIR identified mitigation measures, although the measures would not reduce the impact to a less-than-significant level. Thus, the impact was significant and unavoidable. However, this impact applies to development in the Downtown and waterfront area and therefore does not apply to projects located in the project area.

The 1998 LUTE EIR addressed effects on solid waste demand and infrastructure facilities for water, sanitary sewer and stormwater drainage under Public Services. These topics are addressed in this document under Section VII.16 , Utilities and Service Systems, consistent with current City approach.

VII.14.2 Project Analysis

Public Services and Parks and Recreation (Criteria 6.13.a, criteria 6.13.b, and criteria 6.13.c)

The Project would create minor demands on public services, parks, and other recreational facilities; however, the development would occur in an urban area already served by these services and facilities. The Program EIRs have determined that the anticipated growth would not impose a burden on existing public services in the Project area and would not create a significant impact.

The Project could also cause an incremental increase in demand for police and fire protection services; however, adherence to General Plan policies from the LUTE (N.12.1: Developing Public Service Facilities, N.12.2: Making Schools Available, and N.12.5: Reducing Capital Disparities) and Safety Element (F1-1: Maintain and enhance the city's capacity for emergency response, fire prevention and fire-fighting and F1-2: Continue, enhance or implement programs that seek to reduce the risk of structural fires) would mitigate potential impacts to a less-than-significant level consistent with the findings of the LUTE EIR.

As described above, the 1998 LUTE EIR did identify one significant and unavoidable impact related to firefighting and evacuation constraints; however, that particular impact was localized to the Oakland Hills and is not relevant to this Project, which is located near Lake Merritt.

In addition, pursuant to Senate Bill (SB) 50, the Project Applicant would be required to pay school impact fees, which are established to offset potential impacts from new development on school facilities.⁵⁹

The Project includes a combined total of 7,139 square feet of private and private group-usable open spaces which would minimize the dependency on public parks and other recreation facilities in the

⁵⁹ School Facility Source, 2016. School Facility Fee Justification Report for Residential, Commercial, and Industrial Development Projects for the Oakland Unified School District. <https://s3-us-west-1.amazonaws.com/waterfrontballparkdistrict.com/10.%20Remainder/AR%200051990-%20AR%200052018.pdf>. Accessed March 18, 2024.

vicinity. Public recreational facilities in the Project site's vicinity such as FM Smith Recreational Center, Park Boulevard Plaza, Clinton Park, Bella Vista Park and Lake Merritt would be incrementally impacted by the Project. Consistent with the findings of the Program EIRs, such impacts would not be considered significant as the size and type of this Project falls within the scope of new development considered in the Program EIRs. Additionally, there are no unique circumstances associated with the Project compared to other development projects anticipated in the Program EIRs that would increase such impacts to a level of significance.

The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1: Capital Improvements Impact Fee, to address potential public services facilities impacts. The Project is within the development envelope analyzed in the Program EIRs and the increase in demand for public services and recreational facilities is consistent with that analysis, finding of no significant impact. Compliance with standard City practices would further ensure the Project would have no significant impacts related to services.

VII.14.3 Conclusion

Consistent with the analysis, findings, and conclusions of the Program EIRs, the Project would not result in any significant impacts related to public services, parks, and recreation. Further, based on an examination of the Program EIRs, implementation of the Project would not substantially increase the severity of impacts previously identified in the Program EIRs, nor would it result in new significant impacts related to public services that were not previously identified in the Program EIRs. SCA-PUB-1: Capital Improvement Impact Fee which would require the applicant to comply with the City's Capital Improvements Impact Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code). **Attachment A** provides the full description of the applicable SCA.

VII.15 TRANSPORTATION

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
a. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle and pedestrian facilities (except for automobile level of service or other measures of vehicle delay); or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause substantial additional vehicle miles traveled (per capita, per service population, or other appropriate efficiency measure); or	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or by adding new roadways to the network.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.15.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found transportation impacts to be less than significant with the implementation of the City's SCAs.

The 1998 LUTE EIR also identified significant and unavoidable impacts related to LOS on several roadway segments, including the following highways and arterials:

- SR 24 - west of the Caldecott Tunnel (AM/PM)
- SR 123 (San Pablo Avenue) - east of Stanford Avenue (AM/PM)
- SR 260 (Webster-Posey Tubes) (AM/PM)
- Embarcadero - Oak Street to 5th Avenue (AM/PM)
- Hegenberger Road - I-580 to I-880 (AM/PM)
- International (E. 14th) Boulevard - High Street to Hegenberger Road (AM/PM)
- San Pablo Avenue (SR 123) - I-580 to Grand Avenue (PM)
- Grand Avenue - Harrison Street to I-580 (AM/PM)

While significant and avoidable impacts were identified, none of these described impacts are applicable to this Project or site given the Project's site geographical location and expected traffic distribution. Furthermore, on April 14, 2017, the City of Oakland's Planning Commission adopted new Transportation Impact Review Guidelines for Land Use Development Projects consistent with Senate Bill 743, implementing a shift from traffic delay metrics to thresholds based on a Vehicle Miles Traveled

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standard (VMT) in the City of Oakland. The revised thresholds remove automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA and replace them with the VMT standard.

VII.15.2 Project Analysis

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's CEQA Thresholds of Significance Guidelines related to transportation impacts consistent with SB 743.⁶⁰ The revised thresholds remove automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The recommendation aligns with draft proposed guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis with adopted plans and policies related to transportation, which promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. This section describes the potential impacts of the Project on the transportation system. It includes a discussion of significant topics under CEQA and uses VMT standards, instead of LOS standards, as discussed above.

Conflicts with Plans, Ordinances, or Policies Relating to Safety, or Performance of the Circulation System (Criterion 6.14.a)

The Project would replace an existing automotive garage, a one canopy-style hand car wash, and asphalt with a mixed-use residential building with retail space on the ground floor. The Project proposes a parking garage with 14 parking spaces in the new building basement. The garage, would be accessible via a proposed curb cut on 3rd Avenue near the intersection with East 19th Street.

The LUTE states a strong preference for encouraging the use of non-automobile transportation modes, such as transit, bicycling, and walking. The Project would encourage the use of non-automobile transportation modes by providing a multi-family residential building of 23 housing units with minimal parking in a dense, walkable urban environment that is well-served by local and regional transit.

Currently, the Project site is accessible through two curb cuts on each of the Park Boulevard and 3rd Avenue. The Project would remove the curb cut on Park and have one access to the Project site on 3rd Avenue, near the intersection with East 19th Street. The Project would not increase the number of conflict points compared to current conditions. In addition, the Project Applicant would coordinate with the City of Oakland to ensure adequate sight distance between motorists entering and exiting the driveway and cyclists and pedestrians, as well as appropriate signage and striping in and around the driveway.

The Project would generate less than 50 peak-hour vehicle trips with an estimated 13 AM peak hour vehicle trips and 24 PM peak hour vehicle trips.⁶¹ Therefore, the City's SCA (Transportation and Parking Demand Management) would not apply, and the Project would not be required to prepare a transportation and parking management plan.

⁶⁰ Senate Bill 743. Steinberg, 2013.

⁶¹ Fehr & Peers. 2024. Memorandum – 1901 Park Boulevard Project – Transportation Impact Review Assumption. March 19.

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The Project would not alter roadways, pedestrian, bicycle facilities in the area. Therefore, the Project would not impact circulation system, including transit, roadways, bicycle lanes, and pedestrian paths, nor impact emergency access routes or impair implementation of an emergency response plan or emergency evacuation plan. The Project could require temporary closure of portions of Park Boulevard, 3rd Avenue, or 19th Street during construction activities. Pursuant to SCA-TRA-1: Construction Activity in the Public Right-of-Way, an Obstruction Permit would be required during construction, which would require the implementation of a Traffic Control Plan during construction. The Safety Element of the City of Oakland General Plan⁶² designates Park Boulevard as a secondary emergency evacuation route. Traffic control requirements imposed by the City for the permitting of temporary closure of streets areas would ensure that appropriate emergency access is maintained at all times during construction activities. The Traffic Control Plan would also include traffic control measures for vehicles, pedestrian, bicycle, and transit accommodations in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. With implementation of SCA-TRA-1, Project construction would have a less-than-significant impact on emergency access routes, vehicles, pedestrian, bicycle, and transit accommodations.

The Project would not cause a significant impact by conflicting with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. In addition, the Project would be required to implement SCA-TRA-2: Bicycle Parking, SCA-TRA-3: Transportation Impact Fee, SCA-TRA-4: Plug-In Electric Vehicle (PEV). For these reasons, the Project would not conflict with adopted plans, ordinances, or policies resulting in a less-than-significant impact; no mitigation measures are required.

Cause Substantial Additional Vehicle Miles Traveled (Criterion 6.14.b)

The Project impact associated with vehicle miles traveled (VMT) were analyzed in compliance with the adopted City of Oakland's *Transportation Impact Review Guidelines* (TIRG).⁶³

Vehicle Miles Traveled Estimate

Estimating VMT requires the use of travel demand models to fully capture the length of trips on the transportation network, as well as the changes in VMT behavior that may occur with the introduction of the Project.

Neighborhoods within Oakland are expressed geographically in transportation analysis zones (TAZs) for transportation analysis and other planning purposes. The Metropolitan Transportation Commission Travel Model includes 116 TAZs within Oakland that vary in size from a few City blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower-density neighborhoods.

Based on the MTC Travel Model, the regional average daily VMT per capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions.

Thresholds of Significance for VMT

⁶² City of Oakland. 2023. Oakland 2045 General Plan. Oakland Safety Element. Adopted September 26, 2023.

⁶³ City of Oakland. 2017. Transportation Impact Review Guidelines. Land Use Development Projects. April 14.

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According to the City of Oakland TIRG, the following are thresholds of significance related to substantial additional VMT:

- For residential projects, a project will cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent.
- For office projects, a project will cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
- For local-serving retail projects, a project will cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.

Because the Project is a residential project, the criteria used in this analysis is if VMT exceeds the existing regional VMT per capita minus 15 percent.

VMT Screening Criteria

Since some land use development projects may have characteristics that are highly likely to meet thresholds for a less-than-significant impact on VMT, the City of Oakland, consistent with the guidance provided by the State Office of Planning and Research (OPR), has developed screening criteria to quickly identify these projects without doing extensive analysis. According to the City of Oakland's TIRG, VMT impacts would be less than significant for a project if one or more of the identified screening criteria outlined below are met:

1. Small Projects: The project generates fewer than 100 vehicle trips per day.
2. Low-VMT Areas: The project meets map-based screening criteria by being located in an area that exhibits below-threshold VMT, or 15 percent or more below the regional average.
3. Near Transit Stations: The project is in a Transit Priority Area¹ or within one-half mile of a Major Transit Stop and satisfies the following:
 - Has a Floor Area Ratio (FAR) of more than 0.75,⁶⁴
 - does not include more parking for use by residents, customers, or employees of the project than other typical nearby uses, or more than required by the City (if parking minimums pertain to the site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the site), and
 - is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the MTC).

VMT Impact Analysis

Per direction provided in the TIRG, the regional VMT per capita minus 15-percent is used as the threshold of significance. The Project satisfies the Low-VMT Area (#2) and Near Transit Stations (#3) criteria, as described below.

⁶⁴ Floor Area Ratio refers to the relationship between the area upon which the building is constructed and the building floor area that is usable or is allowed to be used. A higher floor area ratio implies an urban or denser construction.

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Criterion #1: Small Projects. As shown in **Table 13**, the Project would generate more than 100 vehicle trips per day and therefore does not meet Criterion #1.

Criterion #2: Low-VMT Area. **Table 13** shows the estimated 2020 and 2040 household VMT per resident for TAZ 298,⁶⁵ is the TAZ in the Alameda County Transportation Commission (Alameda CTC) Travel Demand Model in which the Project is located. **Table 13** shows the estimated 2020 and 2040 household VMT per resident for TAZ 298, as well as the applicable VMT thresholds of 15 percent below the regional average. As shown in **Table 13**, the 2020 and 2040 estimated averages of daily household VMT per capita in the Project TAZ are less than the regional averages minus 15 percent, satisfying Criterion #2.

Since the approximately 3,664 square feet of retail included in the Project would be less than the 80,000 square feet of retail threshold described in the TIRG, the retail use is considered local-serving and presumed not to generate substantial additional VMT.

TABLE 13
DAILY VEHICLE MILES TRAVELED SUMMARY

Metric	Total Household VMT per Capita (2020)	Total Household VMT per Capita (2040)
Project TAZ (Alameda CTC Model TAZ 298) ¹	9.8	9.8
Regional Average ¹	19.8	19.1
Regional Average minus 15% (i.e., screening criterion)	16.9	16.2
Meet Screening Criterion?	Yes	Yes

Notes:

¹Alameda CTC Travel Demand Model results (<https://www.alamedactc.org/planning/sb743-vmt/>) accessed in February 2024.

VMT: Vehicle miles traveled

SOURCE: Fehr & Peers, 2024.

Criterion #3: Near Transit Stations. The Project would be about 0.3 miles walking distance from AC Transit Line 40 bus stops, which operates along Foothill Boulevard in the westbound direction and along East 15th Street in the eastbound direction. Line 40 operates with approximately 10-minute service intervals during peak commute periods, as of December 2024. The Project would be also approximately 300 feet walking distance from AC Transit Line 33, which operates along Park Avenue and serves the 19th Street and 12th Street BART stations. Line 33 operates with approximately 15-minute service intervals during peak commute periods, as of December 2024. Since peak period service intervals of the two AC Transit line are equal or less than 15 minutes during peak commute hours, the Project site is considered to be located within in a Transit Priority Area. The Project would satisfy Criterion #3 because it would also meet the following three conditions:

- The Project would have a floor area ratio (FAR) of 5.7, which is greater than 0.75.

⁶⁵ Transportation analysis zones, or TAZs, are used in transportation planning models to represent defined geographical areas ranging from a few city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower-density neighborhoods for transportation analysis and other planning purposes.

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- According to the US Census data, typical motor vehicle ownership for residential uses in the Project area is about 1.30 vehicle per household.⁶⁶ Although the parking spaces provided by the Project have not been allocated to the residential or commercial component of the Project, this analysis conservatively assumes that the 14 parking spaces provided by the Project would be assigned to the residential uses, which corresponds to about 0.61 parking spaces per unit. Thus, the Project would provide fewer parking spaces than similar typical uses nearby. Therefore, the Project would meet this condition.
- The Project is located within the San Antonio Priority Development Area⁶⁷ (PDA) as defined by Plan Bay Area and is therefore consistent with the region's Sustainable Communities Strategy.

The Project would satisfy the Low-VMT Area (Criterion #2) and the Near Transit Stations (Criterion #3). Therefore, the Project would have a less-than-significant impact on VMT.

Substantially Induce Additional Automobile Travel by Increasing Physical Roadway Capacity in Congested Areas or by Adding New Roadways to the Network (Criterion 6.14.c)

The Project would not modify the roadway network surrounding the Project site. Therefore, the Project would not substantially induce additional automobile travel by increasing the physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) and would not add new roadways to the network. As such, the Project would have a less-than-significant impact on inducing additional automobile traffic.

VII.15.3 Conclusion

The Project's potential impacts related to pedestrian, bicycle, transit, emergency access, and design and incompatible use considerations would be less than significant. The Project would not result in any other transportation related significant impacts.

Consistent with the analysis, findings, and conclusions of the Program EIRs, implementation of the Project would not result in any new or more severe significant impacts related to pedestrian, bicycle, transit, emergency access, or design identified in the Program EIRs. Additionally, implementation of SCA-TRA-1: Construction Activity in the Public Right-of-Way, SCA-TRA-2: Bicycle Parking, SCA-TRA-3: Transportation Impact Fee, and SCA-TRA-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure would further minimize the already less-than-significant transportation impacts. Please see **Attachment A** for a full description of the applicable SCAs.

⁶⁶ Based on US Census data from the 2022 American Community Survey (ACS) 5-Year Estimates for average vehicle ownership of renter households (Table B25044) in Alameda County Census Tracts 4055.

⁶⁷ Metropolitan Transportation Commission. 2021. Priority Development Areas. <https://opendata.mtc.ca.gov/datasets/4df9cb38d77346a289252ced4ffa0ca0/explore?location=37.796905%2C-122.238049%2C15.00>. Accessed: March 18, 2024.

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VII.16 UTILITIES AND SERVICE SYSTEM

Would the project:	Equal or Less Severity of Impact Identified in Previous CEQA Documents	Substantial Increase in Severity of Impact Identified in Previous CEQA Documents	New Significant Impact
<p>a. Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board;</p> <p>Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects;</p> <p>Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b. Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects;</p> <p>Violate applicable federal, state, and local statutes and regulations related to solid waste;</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>d. Violate applicable federal, state and local statutes and regulations relating to energy standards; or</p> <p>Result in a determination by the energy provider which serves or may serve the project that it does</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.			
e. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII.16.1 Program EIR Findings

The Phase I Oakland 2045 General Plan Update EIR found all impacts to utilities and service systems to be less than significant with applicable SCAs. The 1998 LUTE EIR, which analyzed utilities and service systems, found all potential impacts to be less than significant after implementation of mitigation measures.

The mitigation not specific to recommended City policies or strategies is now incorporated into the applicable City SCAs and includes requiring project-specific drainage improvements. These mitigation measures are now incorporated into the applicable City SCAs, as described below:

- D.3-2a. Review major new development proposals to determine projected water, wastewater, and storm drainage loads compared with available water, sewer, and storm drain capacity. Where appropriate, determine appropriate capital improvement requirements, fiscal impacts, and funding sources prior to project approval.

(Now SCA-UTIL-1: Water Efficient Landscape Ordinance (WELO)).

- D.3-2b. Require major new developments to include a combination of on- site and off-site drainage improvements to ensure that such projects do not create downstream erosion or flood hazards, or adversely impact the City's ability to manage stormwater runoff.

(Now SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects and SCA-UTIL-1: Water Efficient Landscape Ordinance (WELO)).

VII.16.2 Project Analysis

Water, Wastewater, and Stormwater (Criteria 15.a and 15.b)

The Project site is in an already built-out urban area. The Project would develop the site with a new mixed-use building served by all utilities. All onsite utilities would be designed in accordance with applicable codes and current engineering practices. The 2023-2031 Housing Element associated with the 2045 General Plan Update accounted for the development of the site and projected increase in the

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amount of water and wastewater generated at the site. The Project would not include any new, less efficient water uses than what was previously evaluated in the Program EIRs. For these reasons, the Project would not result in the need for additional water entitlements or water-related facilities.

Wastewater generated by the Project would be subject to both primary and secondary treatment and would not violate the wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board. The current Project site is composed of entirely impervious surface area, except for the planter located at the corner of Park Boulevard and 3rd Avenue. Implementation of SCA-UTIL-1: Water Efficient Landscape Ordinance (WELO) and SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects would apply to the Project, which would reduce landscape water usage and include Project Design that would equate post-project stormwater runoff flow with pre-project runoff.

Solid Waste Services (Criterion 15.c)

Nonhazardous solid waste in the Project area is ultimately hauled to the Altamont Landfill and Resource Facility, which has an estimated closure date of 2049.⁶⁸ As such, the Altamont Landfill would have sufficient capacity to accept waste generated by development under the Project. In addition, implementation of SCA-UTIL-2: Recycling Collection and Storage Space, would apply to the Project, which would be required to comply with the City of Oakland Recycling Space Allocation Ordinance (Chapter 17.118 of the Oakland Planning Code). Furthermore, implementation of SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling would apply to the Project, which would require to compliance with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (Chapter 15.34 of the Oakland Municipal Code). Implementation of these SCAs and adherence with City of Oakland requirements would ensure no significant impacts related to solid waste would occur.

Energy (Criteria 6.15.d and 6.15.e)

Construction Period. The anticipated construction schedule assumes that the Project would be built over a 12-month period. The Project would require grading, site preparation, and building activities during construction. Construction of the Project would require energy for the manufacture and transportation of construction materials, preparation of the site for grading activities, and construction of the proposed building. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the Project would restrict equipment idling times to 5 minutes or less and would require construction workers to shut off idle equipment, as required by SCA-AIR-1: Criteria Air Pollutant Controls – Construction and Operation Related and SCA GHG-1: Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the Project. The Project would not result in any new or more significant impacts related to construction energy use than those identified in the Program EIRs.

⁶⁸ Alameda County Waste Management Authority. 2020. Alameda County Integrated Waste Management Plan. Countywide Element. April 22.

Operation Period. Energy use consumed by the Project, during operation, would be associated with natural gas use, electricity consumption, and fuel used for vehicle trips.

The Project would be required to comply with the standards of Title 24 of the California Code of Regulations. In addition, the Project would be required to implement SCA-UTIL-4: Underground Utilities, which requires all new gas, electric, cable, and telephone facilities underground, SCA-UTIL-5: Green Building Requirements, which require compliance with the California Green Building Standards and the City of Oakland Green Building Ordinance. The Project would also be required to implement SCA-TRA-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure, which requires including sufficient electrical capacity to supply the required PEV-ready parking spaces. Furthermore, the Project Applicant has provided their ECAP checklist and would comply with all applicable requirements, which would further reduce the expected amount of energy consumed by the Project. Lastly, the Project would consume less energy expected of a typical residential building (or less with implementation of the measures stated previously) and would not feature any components that would result with an exceptional amount of energy usage such that additional energy facilities would need to be constructed. Implementation of these SCAs and adherence with the current version of Title 24 and City of Oakland requirements would ensure no significant impacts related to energy would occur as result of the Project implementation.

VII.16.3 Conclusion

The Project would not result in any new or more severe significant impacts related to water supply, sewer capacity, stormwater drainage facilities, solid waste services, and energy than those identified in the Program EIRs. Consistent with the analysis, findings, and conclusions of the Program EIRs, the Project would be adequately served by utilities and service systems and all impacts to utilities and service systems would be less than significant with applicable SCAs.

Implementation of SCA-UTIL-1: Water Efficient Landscape Ordinance (WELO) and SCA-UTIL-2: Recycling Collection and Storage Space, SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling, SCA-UTIL-4: Underground Utilities, SCA-UTIL-5: Green Building Requirements SCA-AIR-1: Criteria Air Pollutant Controls – Construction and Operation Related and SCA GHG-1: Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist, SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects would ensure that impacts to utilities and service systems would be less than significant. Please see **Attachment A** for a full description of the applicable SCAs.

Attachment A

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Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

The City of Oakland's Uniformly Applied Development Standards, adopted as Standard Conditions of Approval (Standard Conditions of Approval, or SCAs), were originally adopted by the City in 2008 (Ordinance No. 12899 C.M.S.) pursuant to Public Resources Code section 21083.3) and have been incrementally updated over time. The SCAs incorporate development policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, Green Building Ordinance, historic/Landmark status, California Building Code, and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects.

These SCAs are incorporated into projects as conditions of approval, regardless of the determination of a project's environmental impacts. As applicable, the SCAs are adopted as requirements of an individual project when it is approved by the City, and are designed to, and will, avoid or substantially reduce a project's environmental effects.

In reviewing project applications, the City determines which SCAs apply based upon the zoning district, community plan, and the type of permits/approvals required for the project. Depending on the specific characteristics of the project type and/or project site, the City will determine which SCAs apply to a specific project. Because these SCAs are mandatory City requirements imposed on a city-wide basis, environmental analyses assume that these SCAs will be imposed and implemented by the project, and are not imposed as mitigation measures under CEQA.

This Standard Conditions of Approval ("SCAs") and Mitigation Monitoring and Reporting Program ("SCAMMRP") is based on the CEQA Analysis prepared for the 1901 Park Boulevard Condos Project. To the extent that any SCA identified in the CEQA Analysis was inadvertently omitted, it is automatically incorporated herein by reference.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions, which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists other SCAs that apply to the Project.

On December 19, 2024, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. The SCAs are measures that would minimize potential adverse effects that could result from implementation of the Project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. This SCAMMRP also identifies the mitigation

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monitoring requirements for each SCA. This CEQA Analysis is also based on the analysis in the following program EIRs that apply to the 1901 Park Boulevard Condos Project:

- 1998 Land Use and Transportation Element EIR⁶⁹
- Phase I Oakland 2045 General Plan Update EIR⁷⁰

The first column of the SCAMMRP table identifies the mitigation measure or SCA applicable to that topic in the CEQA Analysis. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic (as indicated in the mitigation or SCA designator). The second column identifies the monitoring schedule or timing applicable to the Project. The third column names the party responsible for monitoring the required action for the Project. The Project Applicant is responsible for compliance with any recommendations identified in City-approved technical reports, all applicable mitigation measures adopted, and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland.

Overall, monitoring and compliance with the mitigation measures will be the responsibility of the Bureau or Planning, Zoning Inspections Division. Prior to the issuance of a demolition, grading, and/or construction permit, the Project Applicant shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

⁶⁹ City of Oakland, 1998. Land Use and Transportation Element, Final EIR, February.

⁷⁰ ESA. 2023. Phase I Oakland 2045 General Plan Update. Response to Comments/Final Environmental Impact Report. Prepared for the City of Oakland. July.

Attachment A

TABLE A-1
STANDARD CONDITIONS OF APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring	
	Schedule	Responsibility
General		
<p>SCA-GEN-1: <i>Regulatory Permits and Authorizations from Other Agencies</i></p> <p><u>Requirement:</u> The Project Applicant shall obtain all necessary regulatory permits and authorizations from applicable resource/regulatory agencies including, but not limited to, the Regional Water Quality Control Board, Bay Area Air Quality Management District, Bay Conservation and Development Commission, California Department of Fish and Wildlife, U. S. Fish and Wildlife Service, and Army Corps of Engineers and shall comply with all requirements and conditions of the permits/authorizations. The project applicant shall submit evidence of the approved permits/authorizations to the City, along with evidence demonstrating compliance with any regulatory permit/authorization conditions of approval.</p>	Prior to activity requiring permit/authorization from regulatory agency	City of Oakland Bureau of Planning and applicable regulatory agency with jurisdiction
Aesthetics, Shadow, and Wind		
<p>SCA-AES-1: <i>Lighting</i></p> <p>Requirement: Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.</p>	Prior to building permit final.	City of Oakland Bureau of Building
<p>SCA-AES-2: <i>Landscape Plan</i></p>	<p>a. Prior to approval of construction-related permit.</p> <p>b. Prior to building permit final.</p>	<p>a. City of Oakland Bureau of Planning</p> <p>b. City of Oakland Bureau of Planning</p>

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Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring	
	Schedule	Responsibility
<p>a. Landscape Plan Requirement</p> <p>Requirement: The Project Applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. Proposed plants shall be predominantly drought-tolerant. Specification of any street trees shall comply with the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively), and with any applicable streetscape plan.</p> <p>b. Landscape Installation</p> <p>Requirement: The Project Applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of \$2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.</p> <p>c. Landscape Maintenance</p> <p>All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable</p>	c. Ongoing	c. City of Oakland Bureau of Building

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Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/Monitoring	
	Schedule	Responsibility
landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.		
<p>SCA-AES-3: Trash and Blight Removal</p> <p>Requirement: The Project Applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multi-family residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.</p>	Ongoing	Bureau of Building
<p>SCA-AES-4: Graffiti Control</p> <p>Requirement:</p> <ul style="list-style-type: none"> a. During construction and operation of the Project, the Project Applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: <ul style="list-style-type: none"> i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). 	Ongoing	Bureau of Building

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<p>v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.</p> <p>b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:</p> <p>i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.</p> <p>ii. Covering with new paint to match the color of the surrounding surface.</p> <p>iii. Replacing with new surfacing (with City permits if required).</p>		
Air Quality		
<p>SCA-AIR-1: <i>Criteria Air Pollutant Controls – Construction and Operation Related</i></p> <p>Requirement: The Project Applicant shall implement all of the following applicable basic and enhanced control measures for criteria air pollutants during construction of the project as applicable:</p> <p>a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.</p>	During construction	Bureau of Building

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<p>b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”).</p> <p>c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.</p> <p>d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.</p> <p>e) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.</p> <p>f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations (“California Air Resources Board Off-Road Diesel Regulations”) and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.</p>		

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<p>SCA-AIR-2: Dust Controls -Construction Related</p> <p>Requirement: The Project Applicant shall implement all of the following applicable dust control measures during construction of the project:</p> <ul style="list-style-type: none"> a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d) Limit vehicle speeds on unpaved roads to 15 miles per hour. e) All excavation, grading, and/or demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph. f) All trucks and equipment, including tires, shall be washed off prior to leaving the site. g) Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. h) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 	During construction	Bureau of Building

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<p>SCA-AIR-3: Asbestos in Structures</p> <p>Requirement: The Project Applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.</p>	Prior to approval of construction-related permit	Bureau of Building
<p>SCA-AIR 4: Toxic Air Contaminant Controls-Construction Related</p> <p>a. Particulate Matter Reduction Measures</p> <p>Requirement: The Project Applicant shall implement appropriate measures during construction to reduce potential health risks to sensitive receptors due to exposure to diesel particulate matter (DPM) and particulate matter less than 2.5 microns in diameter (PM2.5) in exhaust and fugitive emissions from construction activities. The project applicant shall choose to implement I or both ii and iii:</p> <p>i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with current guidance from the California Air Resources Board (CARB), the Office of Environmental Health and Hazard Assessment, and the Bay Area Air Quality Management District (BAAQMD) to determine the health risk to sensitive receptors exposed to DPM and PM2.5 from exhaust and fugitive emissions from project construction. The HRA shall be based on project-specific construction schedule, equipment, and activity data. Estimated project-level health risks shall be compared to the City's health risk significance</p>	Prior to issuance of a construction related permit	Bureau of Building

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<p>thresholds for projects. The HRA shall be submitted to the City (and the Air District if specifically requested) for review and approval. If the HRA concludes that the health risk is at or below the City's health risk significance thresholds for projects, then DPM and PM2.5 reduction measures are not required. If the HRA concludes that the health risk exceeds the City's health risk significance thresholds for projects, DPM and PM2.5 reduction measures shall be identified to reduce the health risk to below the City's health risk significance thresholds as set forth under subsection b below. Identified DPM and PM2.5 reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM and PM2.5 reduction measures shall be implemented during construction.</p> <p>-or-</p> <p>ii. The project applicant shall incorporate the following health risk reduction measures into the project to reduce TAC emissions from construction equipment. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:</p> <ul style="list-style-type: none"> All off-road diesel equipment shall be equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by CARB. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. This shall be verified through an equipment inventory submittal and Certification Statement that the Contractor agrees to compliance and acknowledges that a significant violation of 		

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<p>this requirement shall constitute a material breach of contract.</p> <ul style="list-style-type: none"> Where access to grid-powered electricity is available, portable diesel engines shall be prohibited and electric engines shall be used for concrete/industrial saws, sweepers/scrubbers, aerial lifts, welders, air compressors, fixed cranes, forklifts, cement and mortar mixers, pressure washers, and pumps. Any other best available technology that reduces emissions offered at the time that future projects are reviewed may be included in the construction emissions minimization plan (e.g., alternative fuel sources, etc.). -and- <p>iii. The project applicant shall implement all enhanced control measures included in SCA 20 (Dust Controls – Construction Related).</p> <p>b. Construction Emissions Minimization Plan (if required by a above)</p> <p>The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified DPM reduction measures (if any). The Emissions Plan shall be submitted to the City (and the Bay Area Air Quality District if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:</p> <p>i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number,</p>		

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<p>make, model, manufacturer, CARB verification number level, and installation date.</p> <p>ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.</p>		
Biological Resources		
<p>SCA BIO-1: Bird Collision Reduction Measures</p> <p>Requirement: The project applicant shall submit a Bird Collision Reduction Plan for City review and approval to reduce potential bird collisions to the maximum feasible extent. The Plan shall include all of the following mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent. The project applicant shall implement the approved Plan. Mandatory measures include all of the following:</p> <ul style="list-style-type: none"> i. For large buildings subject to federal aviation safety regulations, install minimum intensity white strobe lighting with three second flash instead of solid red or rotating lights. ii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures. iii. Monopole structures or antennas shall not include guy wires. iv. Avoid the use of mirrors in landscape design. v. Avoid placement of bird-friendly attractants (i.e., landscaped areas, vegetated roofs, water features) near glass unless shielded by architectural features taller than the attractant that incorporate bird friendly treatments no more than two inches horizontally, four inches vertically, or both (the “two-by-four” rule), as explained below. 	<p>Prior to approval of construction permit</p>	<p>Bureau of Building</p>

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<p>vi. Apply bird-friendly glazing treatments to no less than 90 percent of all windows and glass between the ground and 60 feet above ground or to the height of existing adjacent landscape or the height of the proposed landscape. Examples of bird-friendly glazing treatments include the following:</p> <ul style="list-style-type: none"> • Use opaque glass in window panes instead of reflective glass. • Uniformly cover the interior or exterior of clear glass surface with patterns (e.g., dots, stripes, decals, images, abstract patterns). Patterns can be etched, fritted, or on films and shall have a density of no more than two inches horizontally, four inches vertically, or both (the “two-by-four” rule). • Install paned glass with fenestration patterns with vertical and horizontal mullions no more than two inches horizontally, four inches vertically, or both (the “two-by-four” rule). • Install external screens over non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects. • Install UV-pattern reflective glass, laminated glass with a patterned UV-reflective coating, or UV-absorbing and UV-reflecting film on the glass since most birds can see ultraviolet light, which is invisible to humans. • Install decorative grilles, screens, netting, or louvers, with openings no more than two inches horizontally, four inches vertically, or both (the “two-by-four” rule). 		

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<ul style="list-style-type: none"> • Install awnings, overhangs, sunshades, or light shelves directly adjacent to clear glass which is recessed on all sides. • Install opaque window film or window film with a pattern/design which also adheres to the “two-by-four” rule for coverage. <p>vii. Reduce light pollution. Examples include the following:</p> <ul style="list-style-type: none"> • Extinguish night-time architectural illumination treatments during bird migration season (February 15 to May 15 and August 15 to November 30). • Install time switch control devices or occupancy sensors on non-emergency interior lights that can be programmed to turn off during non-work hours and between 11:00 p.m. and sunrise. • Reduce perimeter lighting whenever possible. • Install full cut-off, shielded, or directional lighting to minimize light spillage, glare, or light trespass. • Do not use beams of lights during the spring (February 15 to May 15) or fall (August 15 to November 30) migration. <p>viii. Develop and implement a building operation and management manual that promotes bird safety. Example measures in the manual include the following:</p> <ul style="list-style-type: none"> • Donation of discovered dead bird specimens to an authorized bird conservation organization or museums (e.g., UC Berkeley Museum of Vertebrate Zoology) to aid in species identification and to benefit scientific study, as per all federal, state and local laws. • Distribution of educational materials on bird-safe practices for the building occupants. Contact Golden Gate Audubon 		

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<p>Society or American Bird Conservancy for materials. • Asking employees to turn off task lighting at their work stations and draw office blinds, shades, curtains, or other window coverings at end of work day.</p> <ul style="list-style-type: none"> • Install interior blinds, shades, or other window coverings in windows above the ground floor visible from the exterior as part of the construction contract, lease agreement, or CC&Rs. • Schedule nightly maintenance during the day or to conclude before 11 p.m., if possible. 		
<p>SCA BIO-2: Avoid and Minimize Impacts on Special-Status Roosting Bats in Buildings</p> <p><u>Requirement:</u> To avoid and minimize impacts on special-status roosting bat species, the project applicant shall retain a qualified biologist, as defined by the California Department of Fish and Wildlife (CDFW), who is experienced with bat surveying techniques, behavior, and roosting habitat. CDFW defines credentials of a qualified biologist within permits or authorizations issued for a project to typically include a minimum of four years of academic training leading to a degree and a minimum of two years of experience conducting surveys for each species that may be present within the project area.</p> <p>The retained biologist shall conduct a pre-construction habitat assessment of the project area (focusing on buildings to be demolished or relocated) to identify potential bat habitat and/or signs of potentially active roost sites. Should the pre-construction habitat not identify potential bat habitat or signs of potentially active roost sites, no further action is required.</p> <p>Sound the pre-construction habitat assessment identify potential bat habitat and/or signs of potentially active roost sites within the</p>		

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<p>project area (e.g., guano, urine staining, dead bats, etc.), the project applicant shall be required to implement the following measures:</p> <p>a) For projects starting demolition during the non-sensitive periods (August 16 – October 14, and March 2 – April 14), work shall be done under the supervision of a qualified biologist with restrictions such as:</p> <ul style="list-style-type: none"> i. Potential bat roosting habitat or active roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days, average wind speeds are less than 15 miles per hour, and when nighttime temperatures are at least 45 degrees Fahrenheit. ii. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist. <p>-- OR --</p> <p>b. For projects starting demolition during one of the sensitive periods (maternity season/April 15 - August 15 or period of winter torpor/October 15 - March 1), the project applicant shall be required to implement the following measures:</p> <ul style="list-style-type: none"> i. To the extent feasible, construction activities in areas identified as potential roosting habitat during the habitat assessment shall not occur during bat maternity roosting season and period of winter torpor (April 15 to August 15, and October 15 to March 1, respectively). ii. If avoidance of the bat maternity roosting season and period of winter torpor, defined above, is infeasible, the qualified biologist shall conduct pre-construction surveys 		

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<p>of potential bat roost sites identified during the initial habitat assessment. The survey shall be submitted to the City for review and approval.</p> <p>iii. If no signs of potentially active roost sites are identified, no further action is required.</p> <p>iv. If active bat roosts or evidence of roosting is identified during pre-construction surveys, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites either through the seasonal avoidance windows of April 15 to August 15 and October 15 to March 1, or until the qualified biologist determines the roosts are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site.</p> <p>v. Any work that must occur within established no-disturbance buffers shall be done under the supervision by a qualified biologist with restrictions such as:</p> <ul style="list-style-type: none"> • Potential bat roosting habitat or active roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit. • When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no 		

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<p>circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist</p> <ul style="list-style-type: none"> If adverse effects in response to project work within the no-disturbance buffers are observed, work within the no-disturbance buffer shall halt until the roost disbands. 		
<p>SCA BIO-3: Tree Permit</p> <p>Requirement:</p> <p>a. Tree Permit Required</p> <p>Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.</p> <p>b. Tree Protection During Construction</p> <p>Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:</p> <ul style="list-style-type: none"> Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to 	<p>a. Prior to approval of construction-related permit</p> <p>b. During Construction</p> <p>c. Prior to building permit final</p>	<p>Bureau of Building</p>

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<p>be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.</p> <p>ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filling, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.</p> <p>iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.</p>		

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<p>iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.</p> <p>v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.</p> <p>vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.</p>		
Cultural and Historic Resources		
<p>SCA-CULT-1: <i>Archaeological and Paleontological Resources – Discovery During Construction</i></p> <p>Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the</p>	During construction	Bureau of Building

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<p>significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.</p> <p>In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods</p>		

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<p>are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.</p> <p>In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.</p>		
<p>SCA-CULT-2: Archaeologically Sensitive Areas- Pre-Construction Measures</p> <p>The project applicant shall implement Provision A (Intensive Pre-Construction Study) and Provision B (Construction ALERT Sheet) concerning archaeological resources. If Native American archaeological resources are identified or suspected in a project site, the City shall consult with a Native American representative(s) registered with the Native American Heritage Commission that is traditionally and culturally affiliated with the geographic area as described in Public Resources Code Section 21080.3.</p> <p>Provision A: Intensive Pre-Construction Study.</p>	Prior to approval of construction-related permit; during construction	Bureau of Building

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<p>The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include:</p> <ul style="list-style-type: none"> a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources. b. A report disseminating the results of this research. c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources. <p>If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the</p>		

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<p>ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction.</p> <p>Provision B: Construction ALERT Sheet.</p> <p>The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the project site.</p> <p>The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural</p>		

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materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.		
SCA-CULT-3: Human Remains – Discovery During Construction Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the	During construction	Bureau of Building

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California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.		
Geology and Soils		
SCA-GEO-1: Construction – Related (Permit(s)) Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.	Prior to approval of construction-related permit	Bureau of Building
SCA-GEO-2: Soils Report (#43) Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction.	Prior to approval of construction-related permit	Bureau of Building
SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction)	Prior to approval of construction-related permit	Bureau of Building

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Requirement: The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (as amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.		
Greenhouse Gas Emissions		
<p>SCA GHG-1: <i>Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist</i></p> <p>Requirement: The project applicant shall implement all the measures in the Equitable Climate Action Plan (ECAP) Consistency Checklist that was submitted during the Planning entitlement phase.</p> <ul style="list-style-type: none"> a. For physical ECAP Consistency Checklist measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction related permits. b. For physical ECAP Consistency Checklist measures to be incorporated into the design of the project, the measures shall be implemented during construction. c. For ECAP Consistency Checklist measures that are operational but not otherwise covered by these SCAs, including but not limited to the requirement for transit passes or additional Transportation Demand Management measures, the applicant 	<ul style="list-style-type: none"> a. Prior to approval of construction-related permit. b. During construction c. Ongoing 	<ul style="list-style-type: none"> a. Bureau of Planning b. Bureau of Building c. Bureau of Planning

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shall provide notice of these measures to employees and/or residents and post these requirements in a public place such as a lobby or work area accessible to the employees and/or residents.		
Hazards and Hazardous Materials		
<p>SCA-HAZ-1: Hazardous Building Materials and Site Contamination</p> <p>Requirement:</p> <p>a. Hazardous Building Materials Assessment</p> <p>The project applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by State or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the project applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.</p>	<p>a. Prior to approval of demolition, grading, or building permits</p> <p>b. Prior to approval of construction-related permit.</p> <p>c. Prior to approval of construction-related permit</p> <p>d. During construction</p>	<p>a. Bureau of Building</p> <p>b. Alameda County of Environmental Health</p> <p>c. Bureau of Building</p> <p>d. Bureau of Building</p>

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<p>b. Environmental Site Assessment Required</p> <p>The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.</p> <p>c. Health and Safety Plan Required</p> <p>The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan.</p> <p>d. Best Management Practices (BMPs) Required for Contaminated Sites</p> <p>The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following:</p>		

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<p>i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements.</p> <p>ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.</p>		
<p>SCA-HAZ-2: <i>Hazardous Materials Related to Construction</i></p> <p>Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:</p> <ul style="list-style-type: none"> a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; 	During construction	Bureau of Building

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<p>e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and</p> <p>f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.</p>		
Hydrology and Water Quality		
<p>SCA- HYD-1: <i>Erosion and Sedimentation Control Measures for Construction</i></p> <p>Requirement: The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.</p>	<p>a. Prior to approval of construction-related permit</p>	<p>a. Bureau of Building</p>

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<p>SCA-HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects</p> <p>a. Post-Construction Stormwater Management Plan Required</p> <p>Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction.</p> <p>The Post-Construction Stormwater Management Plan shall include and identify the following:</p> <ul style="list-style-type: none"> i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and 	Prior to approval of construction-related permit	Bureau of Building

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<p>vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.</p> <p>b. Maintenance Agreement Required</p> <p>Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:</p> <p>The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control</p> <p>Board, San Francisco Region, for the purpose of verifying the implementation,</p> <p>operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary.</p> <p>The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.</p>		

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Noise		
<p>SCA-NOI-1: Construction Days/Hours</p> <p>Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours:</p> <ul style="list-style-type: none"> a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. <p>Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a nonenclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed</p>	During Construction	Bureau of Building

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outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.		
<p>SCA-NOI-2: Construction Noise</p> <p>Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:</p> <ol style="list-style-type: none"> Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact 	During Construction	Bureau of Building

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<p>equipment, whenever such procedures are available and consistent with construction procedures.</p> <p>c. Applicant shall use temporary power poles instead of generators where feasible.</p> <p>d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.</p> <p>e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.</p>		
<p>SCA-NOI-3: <i>Project-Specific Construction Noise Reduction Measures</i></p> <p>Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction noise impacts on the closest receptors to the north, south, and east, as described in Section 6.11 of the CEQA analysis. The project applicant shall implement the approved Plan during construction.</p>	Prior to approval of construction-related permit	Bureau of Building
<p>SCA-NOI-4: <i>Construction Noise Complaints</i></p> <p>Requirement: The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include:</p>	Prior to approval of construction-related permit	Bureau of Building

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<ul style="list-style-type: none"> a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. 		
<p>SCA-NOI-5: Extreme Construction Noise</p> <p>a. Construction Noise Management Plan Required</p> <p>Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The Project Applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:</p> <ul style="list-style-type: none"> i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; 	<ul style="list-style-type: none"> a. Prior to approval of construction-related permit b. During construction 	Bureau of Building

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<p>ii. Implement “quiet” pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;</p> <p>iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;</p> <p>iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and</p> <p>v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.</p> <p>b. Public Notification Required</p> <p>Requirement: The Project Applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.</p>		
SCA-NOI-6: Operational Noise	Ongoing	Bureau of Building

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Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.		
SCA-NOI-7: Exposure to Community Noise Requirement: The Project Applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities	Prior to approval of construction-related permit	Bureau of Building
Public Services, Parks, and Recreation Facilities		
SCA-PUB-1: Capital Improvement Impact Fee Requirement: The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).	Prior to issuance of building permit	Bureau of Building

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Transportation and Circulation		
<p>SCA-TRA-1: Construction Activity in the Public Right-of-Way</p> <p>Requirement:</p> <p>a. Obstruction Permit Required</p> <p>The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops.</p> <p>b. Traffic Control Plan Required</p> <p>In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian accommodations (or detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones.</p>	<p>a. Prior to approval of construction-related permit</p> <p>b. Prior to approval of construction-related permit</p> <p>c. Prior to building permit final</p>	<p>a. Department of Transportation</p> <p>b. Department of Transportation</p> <p>c. Department of Transportation</p>

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<p>The project applicant shall implement the approved Plan during construction.</p> <p>c. Repair of City Streets</p> <p>The project applicant shall repair any damage to the public right-of way, including streets and sidewalks, caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.</p>		
<p>SCA-TRA-2: Bicycle Parking</p> <p>Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.</p>	Prior to approval of construction-related permit	Bureau of Building
<p>SCA-TRA-3: Transportation Impact Fee</p> <p>Requirement: The project applicant shall comply with the requirements of the City of Oakland Transportation Impact Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).</p>	Prior to issuance of building permit	N/A
<p>SCA-TRA-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure</p> <p>Requirement:</p>	<p>a. Prior to Issuance of Building Permit</p> <p>b. Prior to Issuance of Building Permit</p>	<p>a. Bureau of Building</p> <p>b. Bureau of Building</p>

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<p>a. PEV-Ready Parking Spaces</p> <p>The applicant shall submit, for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e. “PEV-Ready”) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces.</p> <p>b. PEV-Capable Parking Spaces</p> <p>The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.</p> <p>c. ADA-Accessible Spaces</p> <p>The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).</p>		
Utilities and Service Systems		
SCA-UTIL-1: Water Efficient Landscape Ordinance (WEL)	Prior to approval of construction-related permit	Bureau of Building

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<p>Requirement: The project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For the specific ordinance requirements, see the link below:</p> <p>http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf</p> <p>For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less, the project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California's Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO.</p> <p><i>Prescriptive Measures:</i> Prior to construction, the project applicant shall submit the Project Information (detailed below) and documentation showing compliance with Appendix D of California's Model Water Efficient Landscape Ordinance (see page 38.14(g) in the link above).</p> <p><i>Performance Measures:</i> Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following</p> <p style="text-align: center;">a. Project Information:</p> <p>ii. Date,</p> <p>iii. Applicant and property owner name,</p>		

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<p>iv. Project address, v. Total landscape area, vi. Project type (new, rehabilitated, cemetery, or home owner installed), vii. Water supply type and water purveyor, viii. Checklist of documents in the package, and ix. Project contacts x. Applicant signature and date with the statement: “I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package.”</p> <p>b. Water Efficient Landscape Worksheet</p> <p>i. Hydrozone Information Table ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use</p> <p>c. Soil Management Report</p> <p>d. Landscape Design Plan</p> <p>e. Irrigation Design Plan, and</p> <p>f. Grading Plan</p> <p>Upon installation of the landscaping and irrigation systems, and prior to the final of a construction-related permit, the Project applicant shall submit a Certificate of Completion (see page 38.6 in the link above) and landscape and irrigation maintenance schedule</p>		

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for review and approval by the City. The Certificate of Completion shall also be submitted to the local water purveyor and property owner or his or her designee.		
SCA-UTIL-2: Recycling Collection and Storage Space Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two (2) cubic feet of storage and collection space per residential unit is required, with a minimum of ten (10) cubic feet. For nonresidential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.	Prior to approval of construction-related permit	Bureau of Building
SCA-UTIL-3: Construction and Demolition Waste Reduction and Recycling Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of \$50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The	Prior to approval of construction-related permit	Public Works Department, Environmental Services Division

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WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.		
<p>SCA-UTIL-4: <i>Underground Utilities</i></p> <p>Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.</p>	During Construction	Bureau of Building
<p>SCA-UTIL-5: <i>Green Building Requirements</i></p> <p>Requirement:</p> <p>a. <i>Compliance with Green Building Requirements During Plan-Check</i></p> <p>The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).</p>	Prior to approval of construction-related permit	N/A

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<p>i. The following information shall be submitted to the City for review and approval with the application for a building permit:</p> <ul style="list-style-type: none"> • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. <p>ii. The set of plans in subsection (i) shall demonstrate compliance with the following:</p> <ul style="list-style-type: none"> • CALGreen mandatory measures. 		

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<ul style="list-style-type: none"> Green building point level/certification requirement per the appropriate checklist approved during the Planning entitlement process. All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. The required green building point minimums in the appropriate credit categories. 		

In-fill Performance Standards, Per CEQA Guidelines Section 15183.3

Based on CEQA Guidelines Section 15183.3(d)(1), the Lead Agency must examine an eligible infill project in light of the prior EIR to determine whether the infill project will cause any effects that require additional review under CEQA. This evaluation shall:

- A. Document whether the infill project satisfies the applicable performance standards in Appendix M.
- B. Explain whether the effects of the infill project were analyzed in a prior EIR.
- C. Explain whether the infill project will cause new specific effects (defined as “an effect that was not addressed in the prior EIR and that is specific to the infill project or the infill project site”).
- D. Explain whether substantial new information shows that the adverse environmental effects of the infill project are more significant (defined as “substantially more severe”) than described in the prior EIR.

If the infill project will cause new specific effects or more significant effects, the evaluation should indicate whether uniformly applicable development policies or standards will substantially mitigate those effects.

Table B-1 below shows how the Project satisfies each of the applicable requirements.

Consistent with CEQA Guidelines Section 15183.3(a), which allows streamlining for qualified infill Projects, this environmental document is limited to topics applicable to Project-level review where the effects of infill development have been addressed by uniformly applicable development policies (Standard Conditions of Approval or SCA) which mitigate such impacts. As the analysis in Section 6 demonstrates, the Project would not substantially increase the severity of the significant impacts identified in the Program EIRs, nor would it result in new significant impacts that were not identified in the Program EIRs. Further, there have been no substantial changes in circumstances following certification of the Program EIRs that would result in any new specific effects. Therefore, this document fulfills the review requirements for the Project pursuant to Section 15183.3.

TABLE B-1 PROJECT INFILL ELLIGIBILITY		
CEQA Eligibility Criteria		Eligible?/Notes for the Project
1.	Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least seventy-five percent of the site’s perimeter. For the purpose of this subdivision “adjoin” means the infill project is immediately adjacent to	Yes The Project site has been previously developed an automotive repair shop, one-canopy car wash, and the asphalt pavement, as described in Chapter 5, Project Description, above

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	qualified urban uses or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	
2.	Satisfy the performance Standards provided in Appendix M — (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:	-
	<i>2a. Performance Standards Related to Project Design.</i> All projects must implement all of the following:	-
	<p>Renewable Energy.</p> <p><i>Non-Residential Projects.</i> All nonresidential projects shall include onsite renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible.</p> <p><i>Residential Projects.</i> Residential projects are also encouraged to include such on site renewable power generation.</p>	<p>Not Applicable</p> <p>The project is residential.</p>
	<p>Soil and Water Remediation.</p> <p>If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.</p>	<p>Yes</p> <p>Prior use of the site as a gasoline service station included four underground storage tanks, with three tanks used for gasoline and one tank used for waste oil. Following removal of these tanks, the project site received closure for Leaking Underground Storage Tanks (UST), in 1997, via Remedial Action Completion Certification from the Alameda County Environmental Health Department. However, in 2021, ACEHD reached the determination to reopen the closed leaking UST case following a site investigation that identified high concentrations of residual petroleum hydrocarbons in soil, groundwater, and soil gas. A Corrective Action Plan submitted on February 12, 2024 to ACEHD outlined additional assessment to determine if groundwater monitoring wells, formerly installed at the Project site, were properly destroyed, and to help delineate the extent of the soil contamination. The plan described several methods to remove the residual petroleum contamination at the site and recommended the excavation method given the soil type and the shallow depth to hydrocarbon impact and groundwater. On April 3, 2024, ACEHD concurred with the proposed remedial activities and approved the corrective action plan to address the residual</p>

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	<p>petroleum contamination at the project site.⁷¹ ACEHD approval required the submittal of the following deliverables:</p> <ul style="list-style-type: none"> - Geotracker Database Compliance Certification Letter - Retainment of a Public Outreach Specialist - Draft fact sheet outlining the approved corrective action plan - Draft certification of fact sheet mailing - Response to public comment document (as needed) - Baseline project schedule - Geotracker database compliance <p>The Project will be required to obtain all necessary permits and submitting evidence of approved permits/authorization to the City of Oakland. The Project will also be required to implement an approved plan to protect Project construction workers from risks associated with hazardous materials. In addition, the Project will be required to ensure that BMPs are implemented by the contractor during construction to minimize potential hazards related to contaminated soil and groundwater.</p>
<p>Residential Units Near High-Volume Roadways and Stationary Sources.</p> <p>If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution.</p> <p>If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and</p>	<p>Yes</p> <p>The Project would include residential units within 1,000 feet of existing stationary sources, major roadways, and proposed developments that could operate emergency diesel generators. However, as summarized in the health risk analysis (Section VII.4 – Air Quality), the existing and foreseeable future sources of air pollution within 1,000 feet of the Project site would not cause the excess cancer risk, chronic HI, and PM2.5 concentrations at the Project site to be greater than the City of Oakland’s cumulative thresholds of significance. Therefore, no indoor air pollution reduction measures are required to be implemented for the Project.</p>

⁷¹ Alameda County Environmental Health Department. 2024. Agency Approval of the Corrective Action Plan. April 3.

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<p>project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.</p>	
<p>2b. Additional Performance Standards by Project Type. In addition to implementing all the features described in 2a above, the project must meet eligibility requirements provided below by project type.</p>	
<p>Residential. A residential project must meet one of the following:</p> <ul style="list-style-type: none"> A. <i>Projects achieving below average regional per capita vehicle miles traveled (VMT).</i> A residential project is eligible if it is located in a “low vehicle travel area” within the region; B. <i>Projects located within 1/2 mile of an Existing Major Transit Stop or High Quality Transit Corridor.</i> A residential project is eligible if it is located within 1/2 mile of an existing major transit stop or an existing stop along a high quality transit corridor; or C. <i>Low - Income Housing.</i> A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code. 	<p>Yes, satisfies A and B.</p> <p>As discussed in Section 6.14, Transportation and Circulation, the Project site is located in a low vehicle travel area. In addition, the Project site is located within approximately 0.3 miles walking distance from AC Transit Lines 40 and 33 bus stops</p>
<p>Commercial/Retail. A commercial/retail project must meet one of the following:</p> <ul style="list-style-type: none"> 1. <i>Regional Location.</i> A commercial project with no single- building floor- 	<p>Not Applicable. The project is residential.</p> <p>According to Section IV (G) of CEQA Appendix M, for mixed-use projects “...the performance standards in this Section that apply to the predominant use shall</p>

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<p>plate greater than 50,000 square feet is eligible if it locates in a “low vehicle travel area”; or</p> <p>2. <i>B. Proximity to Households.</i> A project with no single- building floor-plate greater than 50,000 square feet located within 1/2 mile of 1,800 households is eligible.</p>	<p>govern the entire project.” Because the predominant use is residential, the requirements for commercial/retail projects do not apply.</p>
<p>Office Building. An office building project must meeting one of the following:</p> <p>1. <i>Regional Location.</i> Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; or</p> <p>2. <i>Proximity to a Major Transit Stop.</i> Office buildings, both commercial and public, within 1/2 mile of an existing major transit stop, or 1/4 mile of an existing stop along a high-quality transit corridor, are eligible.</p>	<p>Not Applicable. The project is residential.</p>
<p>Schools.</p> <p>Elementary schools within 1 mile of 50 percent of the projected student population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within 1/2 mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible.</p> <p>Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.</p>	<p>Not Applicable. The project is residential.</p>
<p>Transit.</p> <p>Transit stations, as defined in Section 15183.3(f)(1), are eligible.</p>	<p>Not Applicable. The project is residential.</p>
<p>Small Walkable Community Projects.</p> <p>Small walkable community projects, as defined in Section 15183.3, subdivision (f)(5), that implement the project features in 2a above are eligible.</p>	<p>Not Applicable. The project is residential.</p>

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3.	<p>Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, except as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below:</p> <p>(b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; or</p> <p>(b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan planning organization, the infill project must meet the definition of a “small walkable community project” in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3]).</p>	<p>Yes</p> <p>See explanation below the table.</p> <p>In addition, see explanation in Chapter VI of this document for an analysis, pursuant to CEQA Guidelines Section 15183, of the Project consistency with the development density established by existing zoning community plan, or general plan policies for which an EIR was certified.</p> <p>As described in Chapter VI, the Project is consistent with the General Plan land use designation and zoning and with the relevant policies of the LUTE EIR.</p>
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Explanation for Eligibility Criterion 3 (From Table B-1 Above)

The adopted Plan Bay Area (2021) serves as the Sustainable Communities Strategy for the Bay Area, per Senate Bill 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. **The Project is located within the San Antonio Priority Development Area⁷² (PDA) as defined by Plan Bay Area.** A core strategy of Plan Bay Area is to focus growth within PDAs which are generally areas served by public transit and near existing job centers and are locally identified for housing and job growth. The Project would support many of Plan Bay Area’s goals and strategies, such as building affordable housing and reducing GHG emissions by locating development near transit. As such, the Project is consistent with the region’s Sustainable Communities Strategy. The Project is consistent with the Oakland General Plan and the Planning Code, as discussed below.

- The General Plan land use designation for the site is Neighborhood Center Mixed Use, which is intended to “identify, create, maintain, and enhance mixed use neighborhood commercial centers. Vertical integration of uses, including residential

⁷² Metropolitan Transportation Commission. 2021. Priority Development Areas.
<https://opendata.mtc.ca.gov/datasets/4df9cb38d77346a289252ced4ffa0ca0/explore?location=37.796905%2C-122.238049%2C15.00>. Accessed: March 18, 2024.

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units above street-level commercial space is encouraged.” Combined with the Project’s retail component on the ground floor, new Project residents would activate the area during both day and night and on weekdays and weekends and thereby enhance mixed uses in the Project area.

- The Project site at 1901 Park Boulevard is zoned Neighborhood Commercial – Zone 3 (CN-3). The intent of the CN-3 zone is to create, improve, and enhance areas neighborhood commercial centers that have a compact, vibrant pedestrian environment. The Project site is also within Affordable Housing Combining (S-13) Zone. S-13 is intended to create and preserve affordable housing restricted for extremely low, very low, low, and/or moderate-income households, (as defined in California Government Health and Safety Code Sections 50093, 50105, and 50106 50052.5 and in Oakland Planning Code Section 17.107.020).

The Project would be consistent with both the intent of the General Plan and Zoning as it would develop a mid-rise residential building with ground floor retail that would help enhancing the pedestrian environment. The Project would also include two affordable units designated for very-low-income households.

The Project Site is located within a Commercial Corridor which has a maximum height limit of 45 feet. The height of the proposed building would be approximately 65 feet. The Project Applicant is seeking concession/waivers for number of stories, maximum building height limits, residential within the rear yard setback and percentage of open space on the roof in compliance with provisions of the California State Government Code 65915-65918 for the affordable housing density bonus pursuant to Chapter 17-107 – Density Bonus and Incentive Procedures of the Oakland Municipal Code.

Attachment C

Air Quality Technical Analysis

Construction Criteria Air Pollutants						
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	CO2e
Year	Tons					MT
Construction Equipment						
2024-2025	0.39	1.29	0.05	0.05	0.02	259.15
	Total Construction Emissions					
Tons	0.39	1.29	0.05	0.05		259.15
Pounds/Workdays	Average Daily Emissions					Workdays
2024-2025	2.98	9.79	0.38	0.35		264
Threshold - lbs/day	54.0	54.0	82.0	54.0		
	Total Construction Emissions					
Pounds	787.72	2585.76	100.28	92.35	0.00	
Average	2.98	9.79	0.38	0.35	0.00	264.00
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Operational Criteria Air Pollutants						
Unmitigated	ROG	NOX	Total PM10	Total PM2.5		
Year	Tons					
Total	0.32	0.12	0.22	0.06		
	Net Annual Operational Emissions					
Tons/year	0.32	0.12	0.22	0.06		
Threshold - Tons/year	10.0	10.0	15.0	10.0		
	Average Daily Emissions					
Pounds Per Day	1.75	0.65	1.20	0.31		
Threshold - lbs/day	54.0	54.0	82.0	54.0		
Category	CO2e					
	Project	Existing	Project 2030	Existing		
Mobile	221.62					
Area	0.41					
Energy	25.68					
Water	1.17					
Waste	6.47					
Refrig.	0.04					
TOTAL	243.82	0.00	0.00	0.00		
Net GHG Emissions		243.82		0.00		

Number of Days Per Year

2024-2025	6/1/2024	6/3/25	368	264
			368	264 Total Workdays

Phase	Start Date	End Date	Days/Week	Workdays
Demolition	6/1/2024	6/29/2024	5	20
Site Preparation	6/30/2024	7/8/2024	5	6
Grading	7/9/2024	7/24/2024	5	12
Building Construction	7/31/2024	5/6/2025	5	200
Paving	5/21/2025	6/3/2025	5	10
Architectural Coating	5/7/2025	5/20/2025	5	10
Trenching	7/25/2024	7/30/2024	5	4

Air Quality/Noise Construction Information Data Request							
Project Name: 1901 Park Blvd DEFAULTS						Complete ALL Portions in Yellow	
See Equipment Type TAB for type, horsepower and load factor							
Project Size		23 Dwelling Units		1 total project		acres disturbed	
31,458 s.f. residential						Pile Driving? Y/N?	
3,507 s.f. retail						Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? _N_	
s.f. office/commercial						IF YES (if BOTH separate values) -->	
s.f. other, specify:						Kilowatts/Horsepower: _____	
4,970 s.f. parking garage		14 spaces				Fuel Type: _____	
s.f. parking lot		spaces				Location in project (Plans Desired if Available):	
Construction Days (i.e., M-F)		to					
Construction Hours		am to		pm			
DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT							
Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours
Comments							
Demolition		Start Date: 6/1/2024		Total phase: 20			
		End Date: 6/29/2024					
Overall Import/Export Volumes							
1	Concrete/Industrial Saws	81	0.73	8	20	8	9461
	Excavators	158	0.38	8	20	0	0
1	Rubber-Tired Dozers	247	0.4	8	20	8	15808
3	Tractors/Loaders/Backhoes	97	0.37	8	20	8	17227
Other Equipment?							
Demolition Volume							
Square footage of buildings to be demolished (or total tons to be hauled)							
-2,000 square feet or							
Hauling volume (tons)							
Any pavement demolished and hauled? 100 tons							
Pavement demo = 7442sf x 0.3ft =							
99							
1	Graders	187	0.41	8	6	8	3680
1	Rubber-Tired Dozers	247	0.4	7	6	7	4150
1	Tractors/Loaders/Backhoes	97	0.37	8	6	8	1723
Other Equipment?							
Grading / Excavation		Start Date: 6/30/2024		Total phase: 6			
		End Date: 7/8/2024					
1	Excavators	158	0.38	8	6	0	0
1	Graders	187	0.41	8	12	8	7360
1	Rubber Tired Dozers	247	0.4	8	12	8	9485
1	Concrete/Industrial Saws	81	0.73	8	12	0	0
2	Tractors/Loaders/Backhoes	97	0.37	7	12	7	6030
Other Equipment?							
Soil Hauling Volume							
Export volume = Est. 3,970 cubic yards?							
Import volume = 2 cubic yards?							
7442 sf lot size x 12ft deep x 20% expansion							
3969							
Trenching/Foundation		Start Date: 7/25/2024		Total phase: 4			
		End Date: 7/30/2024					
1	Tractor/Loader/Backhoe	97	0.37	8	4	8	1148
1	Excavators	158	0.38	8	4	8	1921
Other Equipment?							
Building - Exterior		Start Date: 7/31/2024		Total phase: 200			
		End Date: 6/6/2025					
1	Cranes	231	0.29	6	200	6	80388
1	Forklifts	89	0.2	6	200	6	21360
1	Generator Sets	84	0.74	8	200	8	99456
1	Tractors/Loaders/Backhoes	97	0.37	8	200	6	43068
3	Welders	46	0.45	6	200	6	96360
Other Equipment?							
Cement Trucks? Est. 33 Total Round-Trips							
Electric? (Y/N) Otherwise assumed diesel							
Liquid Propane (LPG)? (Y/N) Otherwise Assumed diesel							
Or temporary line power? (Y/N)							
Building - Interior/Architectural Coating		Start Date: 6/7/2025		Total phase: 10			
		End Date: 5/20/2026					
1	Air Compressors	78	0.48	6	5	3	1123
	Aerial Lift	62	0.31			0	0
Other Equipment?							
Paving		Start Date: 5/21/2025		Total phase: 10			
		Start Date: 6/3/2025					
1	Cement and Mortar Mixers	9	0.56	6	10	6	302
1	Pavers	130	0.42	6	10	6	3276
1	Paving Equipment	132	0.36	8	10	8	3802
1	Rollers	80	0.38	7	10	7	2128
1	Tractors/Loaders/Backhoes	97	0.37	8	10	8	2371
Other Equipment?							
Asphalt? ____ cubic yards or ____ round trips?							
Additional Phases		Start Date: _____		Total phase: _____			
		Start Date: _____					
						#DIV/0!	
						#DIV/0!	
						#DIV/0!	
						#DIV/0!	
						#DIV/0!	
						#DIV/0!	
Equipment types listed in "Equipment Types" worksheet tab.							
Equipment listed in this sheet is to provide an example of inputs							
It is assumed that water trucks would be used during grading							
Add or subtract phases and equipment, as appropriate							
Modify horsepower or load factor, as appropriate							

Complete one sheet for each project component



This screening tool helps to determine whether the daily construction or operational emissions associated with a proposed land use development project with multiple land use types would exceed BAAQMD's average daily thresholds.

Use the drop-down menus to select the land use category and land use type for each type of land use included in the project. Enter the proposed size of each land use based on the default units that are autopopulated in column D.

Construction and Operation Screening Tool				
Land Use Category	Land Use Type	Unit	Project Land Use Size	Has Overlapping Construction Phases?
Residential	Apartments Mid Rise	DU	23.0	<input type="checkbox"/>
Retail	Strip Mall	KSF	3.5	<input type="checkbox"/>
Parking	Enclosed Parking w/ Elevator	Spaces	14.0	<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
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				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
				<input type="checkbox"/>
Exceeds Construction Threshold?			NO	
Exceeds Operational Threshold?			NO	
BAAQMD's Recommendation			Further Analysis Not Required	



5/6/2022

24-012 1901 Park Blvd, Oakland DEFAULTS T4i 2026 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-012 1901 Park Blvd, Oakland DEFAULTS T4i 2026
Construction Start Date	6/1/2024
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.90
Precipitation (days)	41.0
Location	1901 Park Blvd, Oakland, CA 94606, USA
County	Alameda
City	Oakland
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1468
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Apartments Mid Rise	23.0	Dwelling Unit	1.44	31,458	0.00	—	65.0	—
Strip Mall	3.51	1000sqft	0.08	3,507	0.00	—	—	—
Enclosed Parking with Elevator	14.0	Space	0.13	4,970	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	48.4	19.5	0.80	3.62	4.42	0.74	1.57	2.31	5,659
Mit.	48.3	11.4	0.20	3.62	3.73	0.18	1.57	1.67	5,659
% Reduced	< 0.5%	42%	75%	—	16%	75%	—	28%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.20	9.67	0.37	0.20	0.57	0.34	0.05	0.39	2,105
Mit.	0.40	9.18	0.20	0.20	0.39	0.18	0.05	0.23	2,105
% Reduced	66%	5%	47%	—	31%	46%	—	41%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.62	4.67	0.19	0.23	0.42	0.17	0.09	0.26	1,013
Mit.	1.43	3.77	0.07	0.23	0.30	0.07	0.09	0.15	1,013
% Reduced	12%	19%	63%	—	28%	62%	—	41%	—

Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.85	0.03	0.04	0.08	0.03	0.02	0.05	168
Mit.	0.26	0.69	0.01	0.04	0.05	0.01	0.02	0.03	168
% Reduced	12%	19%	63%	—	28%	62%	—	41%	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2024	1.75	19.5	0.80	3.62	4.42	0.74	1.57	2.31	5,659
2025	48.4	9.14	0.33	0.20	0.53	0.30	0.05	0.35	2,113
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	1.20	9.67	0.37	0.20	0.57	0.34	0.05	0.39	2,105
2025	1.13	9.17	0.33	0.20	0.53	0.30	0.05	0.35	2,100
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.54	4.67	0.19	0.23	0.42	0.17	0.09	0.26	1,013
2025	1.62	2.41	0.09	0.05	0.14	0.08	0.01	0.09	553
Annual	—	—	—	—	—	—	—	—	—
2024	0.10	0.85	0.03	0.04	0.08	0.03	0.02	0.05	168
2025	0.30	0.44	0.02	0.01	0.03	0.01	< 0.005	0.02	91.5

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—

2024	0.42	11.4	0.20	3.62	3.73	0.18	1.57	1.67	5,659
2025	48.3	9.14	0.20	0.20	0.39	0.18	0.05	0.23	2,113
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	0.40	9.18	0.20	0.20	0.39	0.18	0.05	0.23	2,105
2025	0.40	9.17	0.20	0.20	0.39	0.18	0.05	0.23	2,100
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.16	3.77	0.07	0.23	0.30	0.07	0.09	0.15	1,013
2025	1.43	2.42	0.05	0.05	0.10	0.05	0.01	0.06	553
Annual	—	—	—	—	—	—	—	—	—
2024	0.03	0.69	0.01	0.04	0.05	0.01	0.02	0.03	168
2025	0.26	0.44	0.01	0.01	0.02	0.01	< 0.005	0.01	91.5

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.94	0.64	0.01	1.31	1.33	0.01	0.33	0.34	1,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.73	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,563
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.75	0.65	0.01	1.19	1.20	0.01	0.30	0.31	1,473
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	244

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	0.89	0.62	0.01	1.31	1.32	0.01	0.33	0.34	1,517
Area	1.06	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25
Total	1.94	0.64	0.01	1.31	1.33	0.01	0.33	0.34	1,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,432
Area	0.88	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25
Total	1.73	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,563
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.64	0.01	1.19	1.20	0.01	0.30	0.31	1,339
Area	0.97	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.48
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25
Total	1.75	0.65	0.01	1.19	1.20	0.01	0.30	0.31	1,473
Annual	—	—	—	—	—	—	—	—	—

Mobile	0.14	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	0.06	222
Area	0.18	< 0.005	< 0.005	—	—	< 0.005	—	—	< 0.005	0.41
Energy	0.00	0.00	0.00	—	—	0.00	—	—	0.00	14.1
Water	—	—	—	—	—	—	—	—	—	1.17
Waste	—	—	—	—	—	—	—	—	—	6.47
Refrig.	—	—	—	—	—	—	—	—	—	0.04
Total	0.32	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	0.06	244

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	0.89	0.62	0.01	1.31	1.32	0.01	0.33	0.34	1,517
Area	1.06	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25
Total	1.94	0.64	0.01	1.31	1.33	0.01	0.33	0.34	1,654
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	0.85	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,432
Area	0.88	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25

Total	1.73	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,563
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	0.78	0.64	0.01	1.19	1.20	0.01	0.30	0.31	1,339
Area	0.97	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.48
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	85.2
Water	—	—	—	—	—	—	—	—	7.09
Waste	—	—	—	—	—	—	—	—	39.1
Refrig.	—	—	—	—	—	—	—	—	0.25
Total	1.75	0.65	0.01	1.19	1.20	0.01	0.30	0.31	1,473
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.14	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	222
Area	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.41
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	14.1
Water	—	—	—	—	—	—	—	—	1.17
Waste	—	—	—	—	—	—	—	—	6.47
Refrig.	—	—	—	—	—	—	—	—	0.04
Total	0.32	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	244

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	15.6	0.67	—	0.67	0.62	—	0.62	2,502

Demolition	—	—	—	—	0.10	0.10	—	—	0.02	0.02	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	0.04	—	—	0.04	0.03	—	0.03	0.03	137	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	—	0.01	0.01	0.01	0.01	0.01	22.7	—
Demolition	—	—	—	< 0.005	< 0.005	< 0.005	—	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.10	0.10	0.10	0.00	0.00	0.02	0.02	112	—
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
Hauling	< 0.005	0.19	< 0.005	0.04	0.04	0.04	< 0.005	< 0.005	0.01	0.01	161	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.01	0.00	0.00	< 0.005	< 0.005	5.73	—
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
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.83	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.95	—
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
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.46	—

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	8.81	0.10	—	0.10	0.09	—	0.09	2,502
Demolition	—	—	—	0.10	0.10	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.48	0.01	—	0.01	0.01	—	0.01	137
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
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.09	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.7
Demolition	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.10	0.10	0.00	0.02	0.02	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.19	< 0.005	0.04	0.04	< 0.005	0.01	0.01	161
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	5.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.83
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.46

3.3. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	13.7	0.65	—	0.65	0.59	—	0.59	2,071
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.01	—	0.01	0.01	—	0.01	34.0
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.64

Dust From Material Movement	—	—	—	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
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.00	0.01	0.01	67.3	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	1.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	0.00	< 0.005	< 0.005	0.17	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)									
Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	6.40	0.04	—	0.04	0.04	—	0.04	2,071
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	34.0	—
Dust From Material Movement	—	—	—	0.04	0.04	—	—	—	0.02	0.02	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.64	—
Dust From Material Movement	—	—	—	0.01	0.01	—	—	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.00	0.06	0.06	0.00	0.06	0.00	0.01	0.01	67.3	—
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.17	—
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
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

3.5. Grading (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	15.9	0.74	—	0.74	0.68	—	0.68	2,462
Dust From Material Movement	—	—	—	2.77	2.77	—	1.34	1.34	—
Onsite truck	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	0.05	0.52	0.02	—	0.02	0.02	—	0.02	80.9
Dust From Material Movement	—	—	—	0.09	0.09	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.4
Dust From Material Movement	—	—	—	0.02	0.02	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.00	0.08	0.08	0.00	0.02	0.02	89.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	3.62	0.05	0.77	0.82	0.05	0.21	0.27	3,107

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.75	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	102
Hauling	< 0.005	0.12	< 0.005	0.02	0.03	< 0.005	0.01	< 0.005	0.01	0.01	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.46	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.9
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—

3.6. Grading (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	7.70	0.05	—	0.05	0.05	—	0.05	2,462
Dust From Material Movement	—	—	—	2.77	2.77	—	1.34	1.34	—
Onsite truck	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	0.01	0.25	< 0.005	—	< 0.005	< 0.005	—	< 0.005	80.9
Dust From Material Movement	—	—	—	0.09	0.09	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.05	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	13.4
Dust From Material Movement	—	—	—	0.02	0.02	—	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.02	0.00	0.08	0.08	0.00	0.02	0.02	0.02	89.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	3.62	0.05	0.77	0.82	0.05	0.21	0.27	0.27	3,107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	2.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	< 0.005	0.02	0.03	< 0.005	0.01	0.01	0.01	102
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.9

3.7. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e	
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.44	0.37	—	0.37	0.34	—	0.34	1,807	

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.44	0.37	—	0.37	0.34	—	0.34	—	0.34	1,807	—
Onsite truck	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	0.34	2.84	0.11	—	0.11	0.10	—	0.10	—	0.10	545	—
Onsite truck	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	0.52	0.02	—	0.02	0.02	—	0.02	—	0.02	90.2	—
Onsite truck	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	0.07	0.05	0.00	0.16	0.16	0.00	0.04	0.04	0.04	0.04	177	—
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.01	0.01	109	—
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	24.8	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.00	0.16	0.16	0.00	0.04	0.04	0.04	0.04	164	—
Vendor	< 0.005	0.14	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.01	0.01	109	—
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	24.7	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	0.01	0.01	49.9	—
Vendor	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	32.9	—
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.45	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	< 0.005	8.26	—

Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.44
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.23

3.8. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	8.95	0.20	—	0.20	0.18	—	0.18	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	8.95	0.20	—	0.20	0.18	—	0.18	1,807
Onsite truck	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	2.70	0.06	—	0.06	0.05	—	0.05	545
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.49	0.01	—	0.01	0.01	—	0.01	90.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.00	0.16	0.16	0.00	0.04	0.04	177
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	109

Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	24.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.00	0.16	0.16	0.00	0.04	0.04	0.04	164
Vendor	< 0.005	0.14	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.01	109
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	24.7
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	0.01	49.9
Vendor	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	32.9
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.45
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	8.26
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.44
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.23

3.9. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	8.95	0.33	—	0.33	0.30	—	0.30	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	8.95	0.33	—	0.33	0.30	—	0.30	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.26	2.21	0.08	—	0.08	0.07	—	0.07	446
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.40	0.01	—	0.01	0.01	—	0.01	73.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.00	0.16	0.16	0.00	0.04	0.04	174
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	107
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.00	0.16	0.16	0.00	0.04	0.04	161
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	107
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.3
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	40.0
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	26.4
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.63
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.38
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.99

3.10. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	8.94	0.20	—	0.20	0.18	—	0.18	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	8.94	0.20	—	0.20	0.18	—	0.18	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	2.21	0.05	—	0.05	0.04	—	0.04	446
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.40	0.01	—	0.01	0.01	—	0.01	73.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.07	0.04	0.00	0.16	0.16	0.00	0.04	0.04	174
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	107
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.00	0.16	0.16	0.00	0.04	0.04	161
Vendor	< 0.005	0.13	< 0.005	0.03	0.03	< 0.005	0.01	0.01	107
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.3
Average Daily	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	0.01	0.01	40.0
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	26.4
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	< 0.005	< 0.005	6.63
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.38
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.99

3.11. Paving (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.63	0.20	—	0.20	0.19	—	0.19	995
Paving	0.03	—	—	—	—	—	—	—	—
Onsite truck	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	0.01	0.13	0.01	—	0.01	0.01	—	0.01	27.3
Paving	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Off-Road Equipment	0.01	0.13	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	27.3
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	4.51
Paving	< 0.005	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.10	0.10	0.00	0.02	0.02	0.02	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	2.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
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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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15	0.15
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
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

3.14. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	1.07	0.03	—	0.03	0.03	—	0.03	134
Architectural Coatings	48.2	—	—	—	—	—	—	—	—
Onsite truck	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	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	1.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	0.24	—	—	—	—	—	—	—	—

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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.03	0.03	0.03	0.03	0.00	0.01	0.01	34.8	0.00
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.89	0.00
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.15	0.00
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
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

3.15. Trenching (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.05	0.08	—	0.08	0.08	—	0.08	434
Onsite truck	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	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	4.75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	0.79
Onsite truck	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	0.02	0.01	0.00	0.04	0.04	0.00	0.04	0.01	0.01	0.01	44.9
Vendor	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.46
Vendor	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
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08
Vendor	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

3.16. Trenching (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)											
Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e		
Onsite	—	—	—	—	—	—	—	—	—		
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—		

Off-Road Equipment	0.07	2.28	0.04	—	0.04	0.03	—	0.03	434
Onsite truck	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	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.79
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	44.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.39	0.26	< 0.005	0.53	0.53	< 0.005	0.13	0.14	613
Strip Mall	0.50	0.36	0.01	0.79	0.79	0.01	0.20	0.20	905
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.89	0.62	0.01	1.31	1.32	0.01	0.33	0.34	1,517
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.37	0.30	< 0.005	0.53	0.53	< 0.005	0.13	0.14	578
Strip Mall	0.48	0.42	0.01	0.79	0.79	0.01	0.20	0.20	853
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.85	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,432
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.06	0.05	< 0.005	0.09	0.09	< 0.005	0.02	0.02	91.5
Strip Mall	0.08	0.07	< 0.005	0.13	0.13	< 0.005	0.03	0.03	130
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	222

4.1.2. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.39	0.26	< 0.005	0.53	0.53	< 0.005	0.13	0.14	613
Strip Mall	0.50	0.36	0.01	0.79	0.79	0.01	0.20	0.20	905
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.89	0.62	0.01	1.31	1.32	0.01	0.33	0.34	1,517
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.37	0.30	< 0.005	0.53	0.53	< 0.005	0.13	0.14	578
Strip Mall	0.48	0.42	0.01	0.79	0.79	0.01	0.20	0.20	853
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.85	0.73	0.01	1.31	1.32	0.01	0.33	0.34	1,432
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.06	0.05	< 0.005	0.09	0.09	< 0.005	0.02	0.02	91.5
Strip Mall	0.08	0.07	< 0.005	0.13	0.13	< 0.005	0.03	0.03	130
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.12	< 0.005	0.22	0.22	< 0.005	0.06	0.06	222

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	61.2
Strip Mall	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	8.14
Total	—	—	—	—	—	—	—	—	85.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	61.2
Strip Mall	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	8.14
Total	—	—	—	—	—	—	—	—	85.2
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	10.1
Strip Mall	—	—	—	—	—	—	—	—	2.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	1.35
Total	—	—	—	—	—	—	—	—	14.1

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	61.2

Strip Mall	—	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	8.14
Total	—	—	—	—	—	—	—	—	—	85.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	61.2
Strip Mall	—	—	—	—	—	—	—	—	—	15.9
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	8.14
Total	—	—	—	—	—	—	—	—	—	85.2
Annual	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	10.1
Strip Mall	—	—	—	—	—	—	—	—	—	2.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	1.35
Total	—	—	—	—	—	—	—	—	—	14.1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Strip Mall	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Strip Mall	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Strip Mall	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	—	—	0.00	0.00	—	—	0.00	0.00	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Strip Mall	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Strip Mall	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	0.75	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Total	1.06	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	0.75	—	—	—	—	—	—	—	—

Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.88	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.14	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	0.41	0.41
Total	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	0.41	0.41

4.3.2. Mitigated

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

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	0.75	—	—	—	—	—	—	—	—
Architectural Coatings	0.13	—	—	—	—	—	—	—	—
Landscape Equipment	0.18	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Total	1.06	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.02
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	0.75	—	—	—	—	—	—	—	—

Architectural Coatings	0.13	—	—	—	—	—	—	—	—	—	—	—
Total	0.88	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	—
Consumer Products	0.14	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	0.41	—
Total	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	0.41	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	5.38
Strip Mall	—	—	—	—	—	—	—	—	1.71
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	7.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	5.38
Strip Mall	—	—	—	—	—	—	—	—	1.71

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.23
Strip Mall	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	0.25
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.23
Strip Mall	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	0.25
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.04
Strip Mall	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	0.04

4.6.2. Mitigated

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

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.23

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
---------	-----	-----	-------	-------	-------	--------	--------	--------	------

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	6/1/2024	6/29/2024	5.00	20.0	-
Site Preparation	Site Preparation	6/30/2024	7/8/2024	5.00	6.00	-

Grading	Grading	7/9/2024	7/24/2024	5.00	12.0	—
Building Construction	Building Construction	7/31/2024	5/6/2025	5.00	200	—
Paving	Paving	5/21/2025	6/3/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	5/7/2025	5/20/2025	5.00	10.0	—
Trenching	Trenching	7/25/2024	7/30/2024	5.00	4.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45

Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

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	Tier 4 Interim	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	7.00	367	0.40
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	1.00	6.00	82.0	0.20

Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Interim	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Interim	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Interim	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Interim	1.00	8.00	36.0	0.38

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	12.5	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	2.15	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	—	HHDT
Grading	—	—	—	—	—
Grading	Worker	10.0	11.7	LDA,LDT1,LDT2	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT	HHDT,MHDT
Grading	Hauling	41.4	20.0	HHDT	HHDT
Grading	Onsite truck	—	—	HHDT	HHDT
Building Construction	—	—	—	—	—
Building Construction	Worker	19.8	11.7	LDA,LDT1,LDT2	LDA,LDT1,LDT2
Building Construction	Vendor	3.85	8.40	HHDT,MHDT	HHDT,MHDT
Building Construction	Hauling	0.33	20.0	HHDT	HHDT
Building Construction	Onsite truck	—	—	HHDT	HHDT
Paving	—	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT	HHDT
Paving	Onsite truck	—	—	HHDT	HHDT
Architectural Coating	—	—	—	—	—
Architectural Coating	Worker	3.95	11.7	LDA,LDT1,LDT2	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT	HHDT
Architectural Coating	Onsite truck	—	—	HHDT	HHDT
Trenching	—	—	—	—	—
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT	HHDT
Trenching	Onsite truck	—	—	HHDT	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	2.15	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	41.4	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	19.8	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	3.85	8.40	HHDT,MHDT
Building Construction	Hauling	0.33	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—	—
Architectural Coating	Worker	3.95	11.7	LDA,LDT1,LDT2	
Architectural Coating	Vendor	—	8.40	HHDT,MHDT	
Architectural Coating	Hauling	0.00	20.0	HHDT	
Architectural Coating	Onsite truck	—	—	HHDT	
Trenching	—	—	—	—	
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2	
Trenching	Vendor	—	8.40	HHDT,MHDT	
Trenching	Hauling	0.00	20.0	HHDT	
Trenching	Onsite truck	—	—	HHDT	

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	63,702	21,234	5,507	1,781	329

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,000	—
Site Preparation	—	—	5.63	0.00	—
Grading	—	3,970	12.0	0.00	—

Paving	0.00	0.00	0.00	0.00	0.13
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5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Strip Mall	0.00	0%
Enclosed Parking with Elevator	0.13	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	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

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	125	113	94.1	43,414	749	676	563	259,834
Strip Mall	155	147	71.6	51,946	1,113	1,056	513	371,921
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	125	113	94.1	43,414	749	676	563	259,834
Strip Mall	155	147	71.6	51,946	1,113	1,056	513	371,921
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

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

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—

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

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
63702.45	21,234	5,507	1,781	329

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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	137,808	160	0.0330	0.0040	0.00
Strip Mall	35,824	160	0.0330	0.0040	0.00
Enclosed Parking with Elevator	18,346	160	0.0330	0.0040	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	137,808	160	0.0330	0.0040	0.00
Strip Mall	35,824	160	0.0330	0.0040	0.00
Enclosed Parking with Elevator	18,346	160	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	816,750	0.00
Strip Mall	259,772	0.00
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	816,750	0.00
Strip Mall	259,772	0.00

Enclosed Parking with Elevator	0.00	0.00
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5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	17.0	—
Strip Mall	3.68	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	17.0	—
Strip Mall	3.68	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartment's 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
Apartment's Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

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

5.16.1. Emergency Generators and Fire Pumps

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

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

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1 . Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

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

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.75	annual days of extreme heat
Extreme Precipitation	7.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.96	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	1	1	2
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The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract		
Exposure Indicators	—		
AQ-Ozone	3.12		
AQ-PM	47.1		
AQ-DPM	85.7		
Drinking Water	4.21		
Lead Risk Housing	80.6		
Pesticides	0.00		
Toxic Releases	49.8		
Traffic	9.72		
Effect Indicators	—		
CleanUp Sites	54.7		
Groundwater	78.4		
Haz Waste Facilities/Generators	11.1		
Impaired Water Bodies	94.6		
Solid Waste	0.00		

Sensitive Population	—
Asthma	92.4
Cardio-vascular	32.2
Low Birth Weights	59.2
Socioeconomic Factor Indicators	—
Education	64.5
Housing	87.7
Linguistic	85.8
Poverty	62.8
Unemployment	63.4

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	16.93827794
Employed	35.99384063
Median HI	13.08866932
Education	—
Bachelor's or higher	32.77300141
High school enrollment	100
Preschool enrollment	84.88387014
Transportation	—
Auto Access	4.812010779
Active commuting	95.77826254
Social	—
2-parent households	35.35223919

Voting	23.49544463
Neighborhood	—
Alcohol availability	4.516874118
Park access	81.35506224
Retail density	82.06082382
Supermarket access	94.25125112
Tree canopy	38.97087129
Housing	—
Homeownership	4.2858976
Housing habitability	24.22687027
Low-inc homeowner severe housing cost burden	65.67432311
Low-inc renter severe housing cost burden	32.06723983
Uncrowded housing	30.56589247
Health Outcomes	—
Insured adults	12.498396
Arthritis	48.2
Asthma ER Admissions	8.0
High Blood Pressure	47.4
Cancer (excluding skin)	82.6
Asthma	21.6
Coronary Heart Disease	61.0
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	22.3
Life Expectancy at Birth	16.7
Cognitively Disabled	25.4
Physically Disabled	50.9
Heart Attack ER Admissions	59.7

Mental Health Not Good	24.7
Chronic Kidney Disease	45.1
Obesity	52.9
Pedestrian Injuries	19.6
Physical Health Not Good	27.6
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	16.1
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	64.0
Elderly	73.1
English Speaking	12.0
Foreign-born	83.9
Outdoor Workers	73.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	6.0
Traffic Density	11.3
Traffic Access	87.4
Other Indices	—
Hardship	73.3
Other Decision Support	—
2016 Voting	24.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	34.0
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
Characteristics: Utility Information	Oakland default clean energy provider is East Bay Community Energy but it is not an option in caleemod, therefore PG&E is used. PG&E 2020 rate = 160 lb/MWh.
Land Use	Total number of units, parking spaces, and square footages from provided plans.
Construction: Construction Phases	Defaults slightly adjusted based on project size.
Construction: Off-Road Equipment	Defaults
Construction: Trips and VMT	Demolition = Est. 100 tons of pavement demo'd and hauled (1 trip/day), Building Construction = Est. 33 total concrete trucks trips (0.33 trips/day)
Construction: On-Road Fugitive Dust	Air District recommended BMPs required by Oakland - 15 mph speed.

Operations: Hearths	No hearths.
Operations: Energy Use	Oakland REACH Code - convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.

24-012 1901 Park Blvd, Oakland DEFAULTS T4f HRA Detailed Report

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3.4. Site Preparation (2024) - Mitigated	
3.5. Grading (2024) - Unmitigated	

- 3.6. Grading (2024) - Mitigated
- 3.7. Building Construction (2024) - Unmitigated
- 3.8. Building Construction (2024) - Mitigated
- 3.9. Building Construction (2025) - Unmitigated
- 3.10. Building Construction (2025) - Mitigated
- 3.11. Paving (2025) - Unmitigated
- 3.12. Paving (2025) - Mitigated
- 3.13. Architectural Coating (2025) - Unmitigated
- 3.14. Architectural Coating (2025) - Mitigated
- 3.15. Trenching (2024) - Unmitigated
- 3.16. Trenching (2024) - Mitigated
- 4. Operations Emissions Details
 - 4.10. Soil Carbon Accumulation By Vegetation Type
 - 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated
 - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated
 - 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated
 - 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

- 7.1. CalEnviroScreen 4.0 Scores
- 7.2. Healthy Places Index Scores
- 7.3. Overall Health & Equity Scores
- 7.4. Health & Equity Measures
- 7.5. Evaluation Scorecard
- 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-012 1901 Park Blvd, Oakland DEFAULTS T4f HRA
Construction Start Date	6/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.90
Precipitation (days)	41.0
Location	1901 Park Blvd, Oakland, CA 94606, USA
County	Alameda
City	Oakland
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1468
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

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	23.0	Dwelling Unit	1.44	31,458	0.00	—	65.0	—

Strip Mall	3.51	1000sqft	0.08	3,507	0.00	—	—	—
Enclosed Parking with Elevator	14.0	Space	0.13	4,970	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

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.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	48.4	16.6	0.74	2.80	3.54	0.69	1.34	2.03	2,619
Mit.	48.3	4.40	0.06	2.80	2.84	0.06	1.34	1.39	2,619
% Reduced	< 0.5%	73%	91%	—	20%	91%	—	31%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.19	9.51	0.37	0.01	0.38	0.34	< 0.005	0.34	1,830
Mit.	0.36	4.41	0.06	0.01	0.07	0.06	< 0.005	0.06	1,830
% Reduced	70%	54%	83%	—	81%	82%	—	81%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.62	4.51	0.18	0.14	0.33	0.17	0.06	0.23	815
Mit.	1.42	1.54	0.02	0.14	0.16	0.02	0.06	0.09	815
% Reduced	12%	66%	87%	—	49%	86%	—	62%	—

Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.30	0.82	0.03	0.03	0.06	0.03	0.01	0.04	135
Mit.	0.26	0.28	< 0.005	0.03	0.03	< 0.005	0.01	0.02	135
% Reduced	12%	66%	87%	—	49%	86%	—	62%	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2024	1.71	16.6	0.74	2.80	3.54	0.69	1.34	2.03	2,619
2025	48.4	9.01	0.33	0.01	0.34	0.30	< 0.005	0.30	1,830
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	1.19	9.51	0.37	0.01	0.38	0.34	< 0.005	0.34	1,830
2025	1.12	9.01	0.33	0.01	0.34	0.30	< 0.005	0.30	1,830
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.53	4.51	0.18	0.14	0.33	0.17	0.06	0.23	815
2025	1.62	2.37	0.09	< 0.005	0.09	0.08	< 0.005	0.08	482
Annual	—	—	—	—	—	—	—	—	—
2024	0.10	0.82	0.03	0.03	0.06	0.03	0.01	0.04	135
2025	0.30	0.43	0.02	< 0.005	0.02	0.01	< 0.005	0.01	79.9

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—

2024	0.36	4.40	0.06	2.80	2.84	0.06	1.34	1.39	2,619
2025	48.3	4.40	0.06	0.01	0.07	0.06	< 0.005	0.06	1,830
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2024	0.36	4.41	0.06	0.01	0.07	0.06	< 0.005	0.06	1,830
2025	0.36	4.40	0.06	0.01	0.07	0.06	< 0.005	0.06	1,830
Average Daily	—	—	—	—	—	—	—	—	—
2024	0.14	1.54	0.02	0.14	0.16	0.02	0.06	0.09	815
2025	1.42	1.14	0.02	< 0.005	0.02	0.02	< 0.005	0.02	482
Annual	—	—	—	—	—	—	—	—	—
2024	0.03	0.28	< 0.005	0.03	0.03	< 0.005	0.01	0.02	135
2025	0.26	0.21	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	79.9

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	15.6	0.67	—	0.67	0.62	—	0.62	2,502
Demolition	—	—	—	0.10	0.10	—	0.02	0.02	—
Onsite truck	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	0.09	0.85	0.04	—	0.04	0.03	—	0.03	137

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
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.01	—	0.01	0.01	—	0.01	22.7	—
Demolition	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	7.19	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.87	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.38	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	—
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07	—

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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.27	0.05	—	0.05	0.05	—	—	0.05	—	2,502	—
Demolition	—	—	—	0.10	0.10	—	0.02	—	0.02	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	137	—
Demolition	—	—	—	0.01	0.01	—	< 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	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	22.7	—
Demolition	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	7.19	—	—
Vendor	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	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	7.87	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.38	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07

3.3. Site Preparation (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.43	13.7	0.65	—	0.65	0.59	—	0.59	2,071
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.01	—	0.01	0.01	—	0.01	34.0
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.64
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	4.32	—
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	—
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	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.07	—
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	—
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	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—

3.4. Site Preparation (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.01	0.04	—	0.04	0.04	—	0.04	2,071
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	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	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.0
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.64
Dust From Material Movement	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.32	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.65	15.9	0.74	—	0.74	0.68	—	0.68	2,462
Dust From Material Movement	—	—	—	2.77	2.77	—	1.34	1.34	—
Onsite truck	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	0.05	0.52	0.02	—	0.02	0.02	—	0.02	80.9
Dust From Material Movement	—	—	—	0.09	0.09	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.4
Dust From Material Movement	—	—	—	0.02	0.02	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.67	< 0.005	0.02	0.02	< 0.005	0.01	0.01	152
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.18
Vendor	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	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.83

3.6. Grading (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	1.20	0.05	—	0.05	0.05	—	0.05	2,462
Dust From Material Movement	—	—	—	2.77	2.77	—	1.34	1.34	—
Onsite truck	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	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	80.9
Dust From Material Movement	—	—	—	0.09	0.09	—	0.04	0.04	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.4

Dust From Material Movement	—	—	—	0.02	0.02	—	0.01	0.01	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.75	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	0.67	< 0.005	0.02	0.02	< 0.005	0.01	0.01	152	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.18	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.00	—
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.83	—

3.7. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e	
Onsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	9.44	0.37	—	0.37	0.34	—	0.34	1,807	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.13	9.44	0.37	—	0.37	—	0.34	—	0.34	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	2.84	0.11	—	0.11	—	0.10	—	0.10	545
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.52	0.02	—	0.02	—	0.02	—	0.02	90.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.01	0.00	0.01	0.01	0.01	0.00	< 0.005	< 0.005	11.4
Vendor	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.6
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.21
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.02	0.00	0.01	0.01	0.01	0.00	< 0.005	< 0.005	11.1
Vendor	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.7
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.22
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.34
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.21
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.53
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06

3.8. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.34	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.34	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	1.31	0.02	—	0.02	0.02	—	0.02	545
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.24	< 0.005	—	< 0.005	< 0.005	—	< 0.005	90.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.4
Vendor	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.6
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.21
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.1

Vendor	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.7
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.22
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	3.34
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.21
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.37
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.53
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.06

3.9. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	8.95	0.33	—	0.33	0.30	—	0.30	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	8.95	0.33	—	0.33	0.30	—	0.30	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	2.21	0.08	—	0.08	0.07	—	0.07	446
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.40	0.01	—	0.01	0.01	—	0.01	73.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.1
Vendor	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.5
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.9
Vendor	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.5
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.20
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.58
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05

3.10. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.30	4.34	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.34	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.07	0.02	—	0.02	0.02	—	0.02	446
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.20	< 0.005	—	< 0.005	< 0.005	—	< 0.005	73.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.06	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	11.1
Vendor	< 0.005	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.5
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.19
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.05	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.9
Vendor	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	10.5
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.20
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.58
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29

Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.43
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05

3.11. Paving (2025) - Unmitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.63	0.20	—	0.20	0.19	—	0.19	995
Paving	0.03	—	—	—	—	—	—	—	—
Onsite truck	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	0.01	0.13	0.01	—	0.01	0.01	—	0.01	27.3
Paving	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Worker	0.04	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	7.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2025) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.30	0.03	—	0.03	0.03	—	0.03	995
Paving	0.03	—	—	—	—	—	—	—	—
Onsite truck	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	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Paving	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	4.51
Paving	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	< 0.005	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	7.05
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	0.19
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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

3.13. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e			
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.88	0.03	—	0.03	—	0.03	—	0.03	134
Architectural Coatings	48.2	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	3.67
Architectural Coatings	1.32	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	—	< 0.005	—	< 0.005	0.61
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—

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

3.14. 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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.65	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	48.2	—	—	—	—	—	—	—	—
Onsite truck	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	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	1.32	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	0.24	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	2.23	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.06	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	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	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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

3.15. Trenching (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)									
Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.05	0.08	—	0.08	0.08	—	0.08	434
Onsite truck	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	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.75
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	—	< 0.005	< 0.005	—	< 0.005	—	< 0.005	0.79	—
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	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	2.88	—
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	—
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	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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	—

3.16. Trenching (2024) - Mitigated

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

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.81	0.01	—	0.01	0.01	—	0.01	434
Onsite truck	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	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.75	—
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	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.79	—
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	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.88	—
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	—
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	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—
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	—

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	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	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—

[illegible]

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	6/1/2024	6/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	6/30/2024	7/8/2024	5.00	6.00	—
Grading	Grading	7/9/2024	7/24/2024	5.00	12.0	—
Building Construction	Building Construction	7/31/2024	5/6/2025	5.00	200	—
Paving	Paving	5/21/2025	6/3/2025	5.00	10.0	—

Architectural Coating	Architectural Coating	5/7/2025	5/20/2025	5.00	10.0	—
Trenching	Trenching	7/25/2024	7/30/2024	5.00	4.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backh oes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

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	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56

Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38

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	12.5	0.50	LDA, LDT1, LDT2
Demolition	Vendor	—	0.50	HHDT, MHDT
Demolition	Hauling	2.15	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	0.50	LDA, LDT1, LDT2
Site Preparation	Vendor	—	0.50	HHDT, MHDT
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	0.50	LDA, LDT1, LDT2
Grading	Vendor	—	0.50	HHDT, MHDT
Grading	Hauling	41.4	0.50	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	19.8	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	3.85	0.50	HHDT,MHDT
Building Construction	Hauling	0.33	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	0.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.95	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT
Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	0.50	LDA,LDT1,LDT2
Demolition	Vendor	—	0.50	HHDT,MHDT

Demolition	Hauling	2.15	0.50	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	0.50	LDA, LDT1, LDT2
Site Preparation	Vendor	—	0.50	HHDT, MHD
Site Preparation	Hauling	0.00	0.50	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	0.50	LDA, LDT1, LDT2
Grading	Vendor	—	0.50	HHDT, MHD
Grading	Hauling	41.4	0.50	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	19.8	0.50	LDA, LDT1, LDT2
Building Construction	Vendor	3.85	0.50	HHDT, MHD
Building Construction	Hauling	0.33	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	0.50	LDA, LDT1, LDT2
Paving	Vendor	—	0.50	HHDT, MHD
Paving	Hauling	0.00	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.95	0.50	LDA, LDT1, LDT2
Architectural Coating	Vendor	—	0.50	HHDT, MHD
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

Trenching	—	—	—	—
Trenching	Worker	5.00	0.50	LDA,LDT1,LDT2
Trenching	Vendor	—	0.50	HHDT,MHDT
Trenching	Hauling	0.00	0.50	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	63,702	21,234	5,507	1,781	329

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,000	—
Site Preparation	—	—	5.63	0.00	—
Grading	—	3,970	12.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.13

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
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Water Exposed Area	2	61%	61%
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5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Strip Mall	0.00	0%
Enclosed Parking with Elevator	0.13	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	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

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

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

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

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	7.75	annual days of extreme heat
Extreme Precipitation	7.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.96	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	1	2

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

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract				
Exposure Indicators	—				
AQ-Ozone	3.12				
AQ-PM	47.1				
AQ-DPM	85.7				
Drinking Water	4.21				
Lead Risk Housing	80.6				
Pesticides	0.00				
Toxic Releases	49.8				
Traffic	9.72				
Effect Indicators	—				
CleanUp Sites	54.7				
Groundwater	78.4				

Haz Waste Facilities/Generators	11.1
Impaired Water Bodies	94.6
Solid Waste	0.00
Sensitive Population	—
Asthma	92.4
Cardio-vascular	32.2
Low Birth Weights	59.2
Socioeconomic Factor Indicators	—
Education	64.5
Housing	87.7
Linguistic	85.8
Poverty	62.8
Unemployment	63.4

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	16.93827794
Employed	35.99384063
Median HI	13.08866932
Education	—
Bachelor's or higher	32.77300141
High school enrollment	100
Preschool enrollment	84.88387014
Transportation	—
Auto Access	4.812010779

Active commuting	95.77826254
Social	—
2-parent households	35.35223919
Voting	23.49544463
Neighborhood	—
Alcohol availability	4.516874118
Park access	81.35506224
Retail density	82.06082382
Supermarket access	94.25125112
Tree canopy	38.97087129
Housing	—
Homeownership	4.2858976
Housing habitability	24.22687027
Low-inc homeowner severe housing cost burden	65.67432311
Low-inc renter severe housing cost burden	32.06723983
Uncrowded housing	30.56589247
Health Outcomes	—
Insured adults	12.498396
Arthritis	48.2
Asthma ER Admissions	8.0
High Blood Pressure	47.4
Cancer (excluding skin)	82.6
Asthma	21.6
Coronary Heart Disease	61.0
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	22.3
Life Expectancy at Birth	16.7

Cognitively Disabled	25.4
Physically Disabled	50.9
Heart Attack ER Admissions	59.7
Mental Health Not Good	24.7
Chronic Kidney Disease	45.1
Obesity	52.9
Pedestrian Injuries	19.6
Physical Health Not Good	27.6
Stroke	26.0
Health Risk Behaviors	—
Binge Drinking	94.4
Current Smoker	16.1
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	64.0
Elderly	73.1
English Speaking	12.0
Foreign-born	83.9
Outdoor Workers	73.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	6.0
Traffic Density	11.3
Traffic Access	87.4
Other Indices	—
Hardship	73.3

Other Decision Support	—
2016 Voting	24.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	65.0
Healthy Places Index Score for Project Location (b)	34.0
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 Healthy 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
Characteristics: Utility Information	Oakland default clean energy provider is East Bay Community Energy but it is not an option in calemod, therefore PG&E is used. PG&E 2020 rate = 160 lb/MWh.
Land Use	Total number of units, parking spaces, and square footages from provided plans.
Construction: Construction Phases	Defaults slightly adjusted based on project size.
Construction: Off-Road Equipment	Defaults

Construction: Trips and VMT	Demolition = Est. 100 tons of pavement demo'd and hauled (1 trip/day). Building Construction = Est. 33 total concrete trucks trips (0.33 trips/day). HRA = 0.5 mile trip length for localized emissions.
Construction: On-Road Fugitive Dust	Air District recommended BMPs required by Oakland - 15 mph speed.
Operations: Hearths	No hearths.
Operations: Energy Use	Oakland REACH Code - convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.

**Attachment 2: Project Construction Emissions and Health Risk
Calculations**

Construction Health Risk Assessment and Calculations

1901 Park Boulevard, Oakland, CA

DPM Construction Emissions and Modeling Emission Rates

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source (g/s)
					(lb/yr)	(lb/hr)	(g/s)	
2024-2025*	Construction	0.0496	Point	22	99.2	0.03181	4.01E-03	1.82E-04

Emissions assumed to be evenly distributed over each construction areas

* One year of total construction over 2024-2025

hr/day = 12 (7am - 7pm M-F)
days/yr = 260
hours/year = 3120

DPM Construction Emissions and Modeling Emission Rates - With Mitigation

Construction Year	Activity	DPM (ton/year)	Source Type	No. Sources	DPM Emissions			Emissions per Point Source (g/s)
					(lb/yr)	(lb/hr)	(g/s)	
2024-2025*	Construction	0.0074	Point	22	14.9	0.00477	6.02E-04	2.73E-05

Emissions assumed to be evenly distributed over each construction areas

* One year of total construction over 2024-2025

hr/day = 12 (7am - 7pm M-F)
days/yr = 260
hours/year = 3120

1901 Park Boulevard, Oakland, CA

PM2.5 Fugitive Dust Construction Emissions for Modeling

Construction Year	Activity	Area Source	PM2.5 Emissions				Modeled Area (m ²)	DPM Emission Rate g/s/m ²
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2024-2025*	Construction	CON_FUG	0.0120	23.9	0.00767	9.66E-04	686.7622	1.41E-06

Emissions assumed to be evenly distributed over each construction areas

* One year of total construction over 2024-2025

hr/day = 12 (7am - 7pm M-F)
days/yr = 260
hours/year = 3120

PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation

Construction Year	Activity	Area Source	PM2.5 Emissions				Modeled Area (m ²)	DPM Emission Rate g/s/m ²
			(ton/year)	(lb/yr)	(lb/hr)	(g/s)		
2024-2025*	Construction	CON_FUG	0.0120	23.9	0.00767	9.66E-04	686.7622	1.41E-06

Emissions assumed to be evenly distributed over each construction areas

* One year of total construction over 2024-2025

hr/day = 12 (7am - 7pm M-F)
days/yr = 260
hours/year = 3120

1901 Park Boulevard, Oakland, CA
- Construction Health Impact Summary

Maximum Impacts at MEI Location - Without Mitigation

Emissions Year						
	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index	Maximum Annual PM2.5 Concentration*
	Exhaust PM10/DPM	Fugitive PM2.5				
	(µg/m ³)	(µg/m ³)	Infant/Child	Adult	(-)	(µg/m ³)
2024-2025**	0.2682	0.1146	47.69	0.77	0.05	0.34

* Maximum cancer risk and maximum PM2.5 concentration occur at the same receptor on different levels.

** One year of total construction over 2024-2025

Maximum Impacts at MEI Location - With Mitigation

Emissions Year						
	Maximum Concentrations		Cancer Risk* (per million)		Hazard Index	Maximum Annual PM2.5 Concentration*
	Exhaust PM10/DPM	Fugitive PM2.5				
	(µg/m ³)	(µg/m ³)	Infant/Child	Adult	(-)	(µg/m ³)
2024-2025**	0.0403	0.1146	7.16	0.12	0.01	0.15

* Maximum cancer risk and maximum PM2.5 concentration occur at the same receptor on different levels.

** One year of total construction over 2024-2025

- Tier 4 Final engines and BMPs as Mitigation Measures.

Maximum Impacts at The Lake Preschool - Without Mitigation

Construction Year	Mitigated Emissions				
	Maximum Concentrations		Child Cancer Risk (per million)	Hazard Index (-)	Maximum Annual PM2.5 Concentration ($\mu\text{g}/\text{m}^3$)
	Exhaust PM10/DPM ($\mu\text{g}/\text{m}^3$)	Fugitive PM2.5 ($\mu\text{g}/\text{m}^3$)			
2024-2025**	0.0083	0.0031	0.52	0.002	0.01

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 1.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10⁻⁶ = Conversion factor

Values

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			DPM Conc (ug/m3)	Annual					
0	0.25	-0.25 - 0*	2024-2025**	0.0994	10	1.35	2024-2025**	0.0994	-	-	0.02	0.10	0.16
1	1	0 - 1	2024-2025**	0.0994	10	16.33	2024-2025**	0.0994	1	0.29			
2	1	1 - 2		0.0000	10	0.00		0.0000	1	0.00			
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						17.68				0.29			

* Third trimester of pregnancy

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 4.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10⁻⁶ = Conversion factor

Values

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			DPM Conc (ug/m3)	Annual					
0	0.25	-0.25 - 0*	2024-2025**	0.2213	10	3.01	2024-2025**	0.2213	-	-	0.04	0.11	0.34
1	1	0 - 1	2024-2025**	0.2213	10	36.34	2024-2025**	0.2213	1	0.64			
2	1	1 - 2		0.0000	10	0.00		0.0000	1	0.00			
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						39.35				0.64			

* Third trimester of pregnancy

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 7.6 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10⁻⁶ = Conversion factor

Values

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			DPM Conc (ug/m3)	Year					
0	0.25	-0.25 - 0*	2024-2025**	0.2682	10	3.65	2024-2025**	0.2682	-	-			
1	1	0 - 1	2024-2025**	0.2682	10	44.05	2024-2025**	0.2682	1	0.77	0.05	0.04	0.31
2	1	1 - 2		0.0000	10	0.00		0.0000	1	0.00			
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						47.69				0.77			

* Third trimester of pregnancy

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - Without Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at The Lake Preschool - 1 meter - Child Exposure

Student Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹

ASF = Age sensitivity factor for specified age group

ED = Exposure duration (years)

AT = Averaging time for lifetime cancer risk (years)

Inhalation Dose = C_{air} x SCAF x 8-Hr BR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)

SCAF = School Child Adjustment Factor (unitless) for source operation
 and exposures different than 8 hours/day

= (24/SHR) x (7days/SDay) x (SCHR/8 hrs)

SHR = Hours/day of emission source operation

SDay = Number of days per week of source operation

SCHR = School operation hours while emission source in operation

8-Hr BR = Eight-hour breathing rate (L/kg body weight-per 8 hrs)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

10⁻⁶ = Conversion factor

Values

	Infant	Child
Age -->	0 - <2	2 - <16
Parameter		
ASF =	10	3
DPM CPF =	1.10E+00	1.10E+00
8-Hr BR* =	1200	520
SCHR =	8	8
SHR =	9	9
SDay =	5	5
A =	1	1
EF =	250	250
AT =	70	70
SCAF =	3.73	3.73

* 95th percentile 8-hr breathing rates for moderate intensity activities

Construction Cancer Risk by Year - Maximum Preschool Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Child - Exposure Information			Child Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age* Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual					
			2024-2025**	0.0083					
1	1	2 - 3	2024-2025**	0.0083	3	0.52	0.002	0.003	0.011
Total Increased Cancer Risk						0.52			

* Children assumed to be 2 years or older with 1 year of exposure to construction emissions

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 4.5 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10⁻⁶ = Conversion factor

Values

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			DPM Conc (ug/m3)	Year					
0	0.25	-0.25 - 0*	2024-2025**	0.0332	10	0.45	2024-2025**	0.0332	-	-			
1	1	0 - 1	2024-2025**	0.0332	10	5.46	2024-2025**	0.0332	1	0.10	0.01	0.11	0.15
2	1	1 - 2		0.0000	10	0.00		0.0000	1	0.00			
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						5.91				0.10			

* Third trimester of pregnancy

** One year of total construction over 2024-2025

1901 Park Boulevard, Oakland, CA - Construction Impacts - With Mitigation
Maximum DPM Cancer Risk and PM2.5 Calculations From Construction
Impacts at Off-Site MEI Location - 7.6 meter receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor (mg/kg-day)⁻¹
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10⁻⁶

Where: C_{air} = concentration in air (µg/m³)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10⁻⁶ = Conversion factor

Values

Age -> Parameter	Infant/Child			Adult
	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Age	Infant/Child - Exposure Information			Infant/Child Cancer Risk (per million)	Adult - Exposure Information			Adult Cancer Risk (per million)	Maximum		
			DPM Conc (ug/m3)		Age Sensitivity Factor		Modeled		Age Sensitivity Factor		Hazard Index	Fugitive PM2.5	Total PM2.5
			Year	Annual			DPM Conc (ug/m3)	Annual					
0	0.25	-0.25 - 0*	2024-2025**	0.0403	10	0.55	2024-2025**	0.0403	-	-	0.01	0.04	0.08
1	1	0 - 1	2024-2025**	0.0403	10	6.61	2024-2025**	0.0403	1	0.12			
2	1	1 - 2		0.0000	10	0.00		0.0000	1	0.00			
3	1	2 - 3		0.0000	3	0.00		0.0000	1	0.00			
4	1	3 - 4		0.0000	3	0.00		0.0000	1	0.00			
5	1	4 - 5		0.0000	3	0.00		0.0000	1	0.00			
6	1	5 - 6		0.0000	3	0.00		0.0000	1	0.00			
7	1	6 - 7		0.0000	3	0.00		0.0000	1	0.00			
8	1	7 - 8		0.0000	3	0.00		0.0000	1	0.00			
9	1	8 - 9		0.0000	3	0.00		0.0000	1	0.00			
10	1	9 - 10		0.0000	3	0.00		0.0000	1	0.00			
11	1	10 - 11		0.0000	3	0.00		0.0000	1	0.00			
12	1	11 - 12		0.0000	3	0.00		0.0000	1	0.00			
13	1	12 - 13		0.0000	3	0.00		0.0000	1	0.00			
14	1	13 - 14		0.0000	3	0.00		0.0000	1	0.00			
15	1	14 - 15		0.0000	3	0.00		0.0000	1	0.00			
16	1	15 - 16		0.0000	3	0.00		0.0000	1	0.00			
17	1	16-17		0.0000	1	0.00		0.0000	1	0.00			
18	1	17-18		0.0000	1	0.00		0.0000	1	0.00			
19	1	18-19		0.0000	1	0.00		0.0000	1	0.00			
20	1	19-20		0.0000	1	0.00		0.0000	1	0.00			
21	1	20-21		0.0000	1	0.00		0.0000	1	0.00			
22	1	21-22		0.0000	1	0.00		0.0000	1	0.00			
23	1	22-23		0.0000	1	0.00		0.0000	1	0.00			
24	1	23-24		0.0000	1	0.00		0.0000	1	0.00			
25	1	24-25		0.0000	1	0.00		0.0000	1	0.00			
26	1	25-26		0.0000	1	0.00		0.0000	1	0.00			
27	1	26-27		0.0000	1	0.00		0.0000	1	0.00			
28	1	27-28		0.0000	1	0.00		0.0000	1	0.00			
29	1	28-29		0.0000	1	0.00		0.0000	1	0.00			
30	1	29-30		0.0000	1	0.00		0.0000	1	0.00			
Total Increased Cancer Risk						7.16				0.12			

* Third trimester of pregnancy

** One year of total construction over 2024-2025

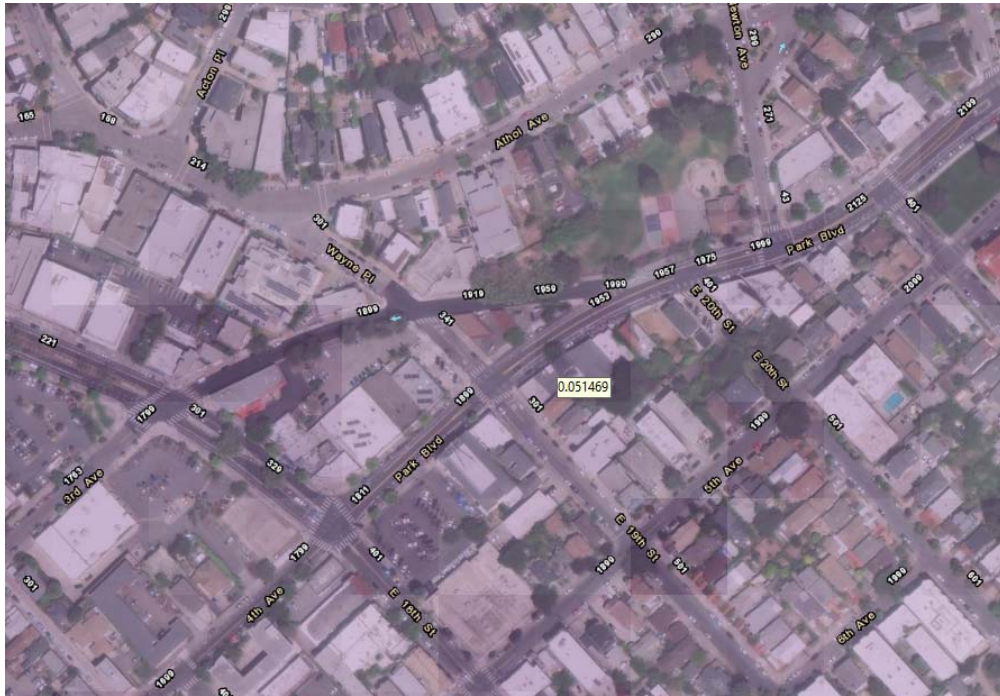
Attachment 3: Cumulative Health Risk Screening Information and Calculations

BAAQMD RASTER Screening Data – Roadway Cancer Risk Impacts at the MEIs

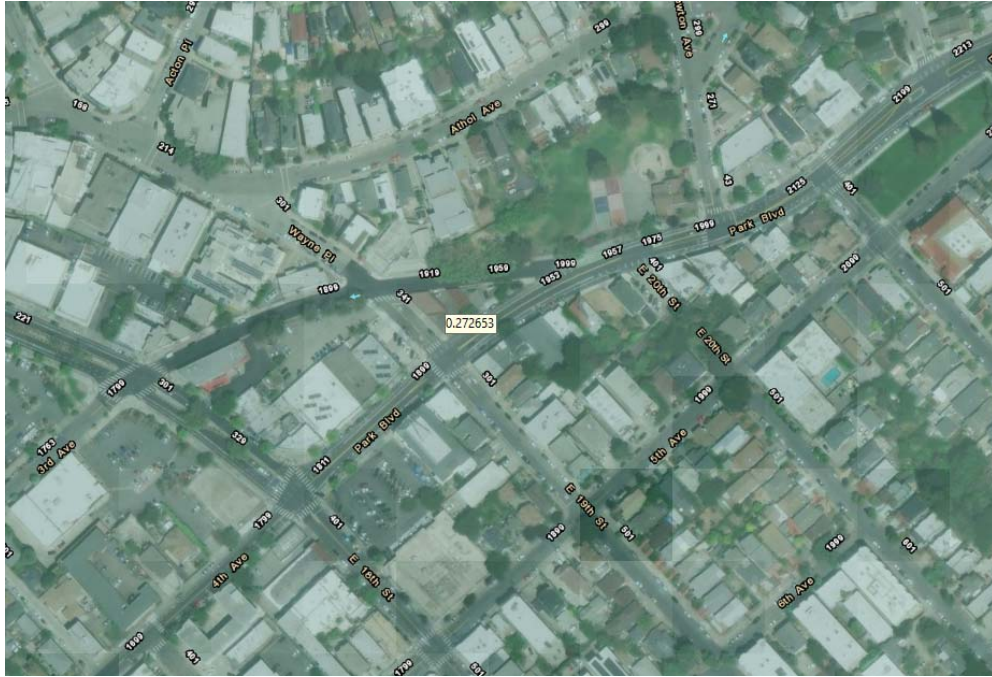


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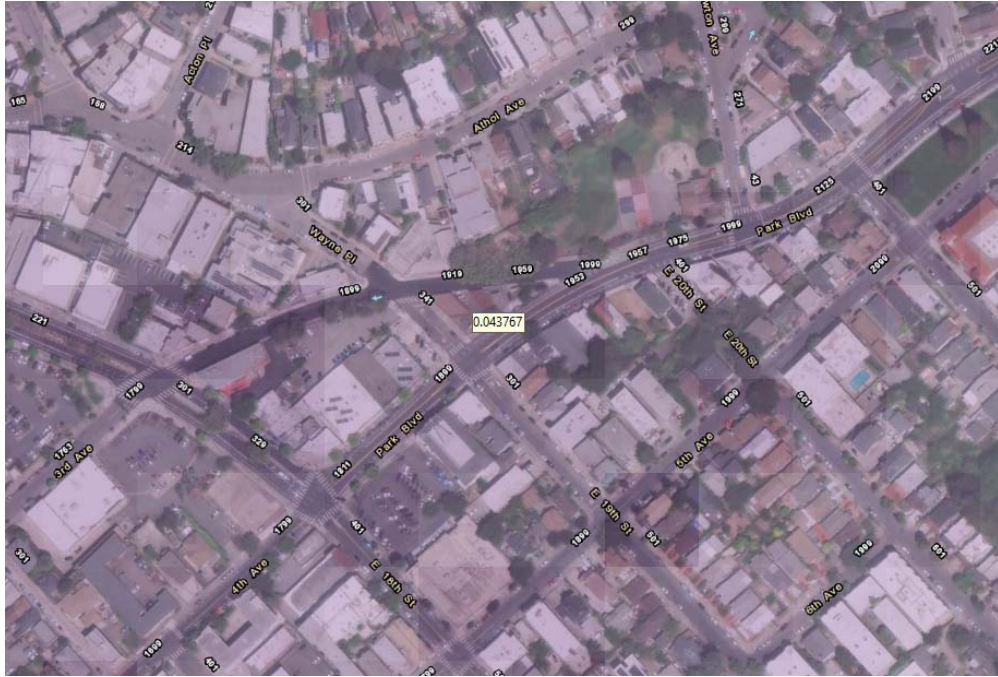
BAAQMD RASTER Screening Data – Roadway Hazard Index Impacts at the MEIs



BAAQMD RASTER Screening Data – Roadway PM_{2.5} Concentration Impacts at the Project Site



BAAQMD RASTER Screening Data – Roadway Hazard Index Impacts at the Project Site





BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

[Click here for guidance on conducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.](#)

[Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.](#)

Table A: Requester Contact Information

Date of Request	2/5/2024
Contact Name	Jordyn Bauer
Affiliation	Willingworth & Rodkin, Inc.
Phone	707-794-0400 x106
Email	jbauer@willingworthrodkin.com
Project Name	1901 Park Blvd
Address	1901 Park Blvd
City	Oakland
County	Alameda
Type (residential, commercial, mixed use, industrial, etc.)	MU
Project Size (# of units or building square feet)	23du, 3.5ksf retail

Comments:

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in [Table A](#). Incomplete forms will not be processed. Please include a project site map.
2. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.
3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.
4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.
5. List the stationary source information in [Table B](#) use section only.
6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.
7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Matthew Hanson at 415-749-8733, or mhanson@baaqmd.gov

Table B: Google Earth data									
930	Distance from Receptor (feet) or MEI ¹	Plant No.	Facility Name	Address	Cancer Risk ²	Hazard Risk ³	PM _{2.5} ²	Construction MEIs	
								Fuel Code ⁵	Status/Comments
				247 E 18th Street	0.014	-	-	Generator	2021 Dataset
19564	Lucky #726								
Footnotes:									
1. Maximally exposed individual									
2. These Cancer Risk, Hazard Index, and PM _{2.5} columns represent the values in the Google Earth Plant Information Table.									
3. Each plant may have multiple permits and sources.									
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.									
5. Fuel codes: 98 = diesel, 189 = Natural Gas.									
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.									
8. Engineer who completed the HRSA. For District purposes only.									
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.									
10. The HRSA "Chronic Health" number represents the Hazard Index.									
11. Further information about common sources:									
a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.									
b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less.									
c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM _{2.5} concentrations from co-residential dry cleaning businesses in the BAAQMD.									
d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the risk from these dry cleaners as of Jan. 1, 2023.									
e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.									
f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.									
g. This spray booth is considered to be insignificant.									
Date last updated:									
03/13/2018									

Construction MEIs				
Distance from Receptor (feet) or MEI ¹	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM _{2.5}	#VALUE!
790	0.001	0.001	0.001	#VALUE!

Project Site				
Distance from Receptor (feet) or MEI ¹	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM _{2.5}	#VALUE!
790	0.001	0.001	0.001	#VALUE!

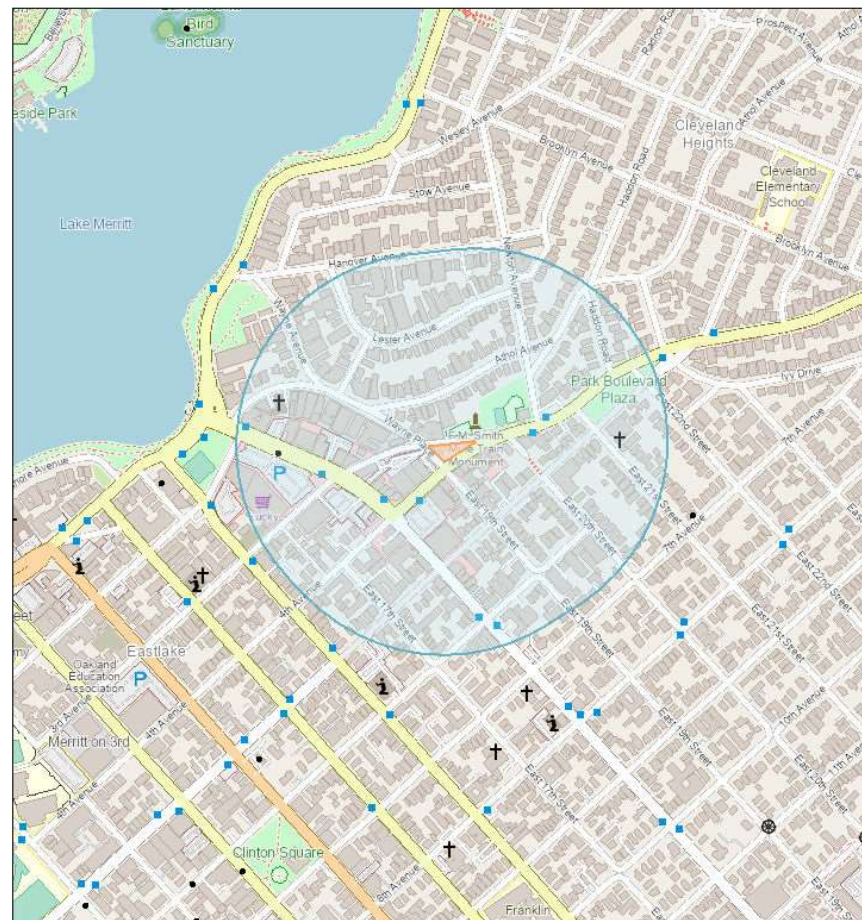


Screening Report

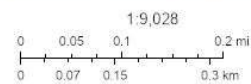
Area of Interest (AOI) Information

Area : 3,707,869.62 ft²

Feb 5 2024 11:40:29 Pacific Standard Time



* Permitted Stationary Sources



Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri

Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	1	N/A	N/A

Permitted Stationary Sources

#	Facility_I	Facility_N	Address	City	State
1	19564	Lucky #736	247 E 18th Street	Oakland	CA

#	Zip	County	Latitude	Longitude	Details
1	94606	Alameda	37.800028	-122.253077	Generator

#	NAICS	NAICS_Sect	NAICS_Subs	NAICS_Indu	Cancer_Ris
1	445110	Retail Trade	Food and Beverage Stores	Supermarkets and Other Grocery (except Convenience) Stores	0.014000

#	Chronic_Ha	PM25	Count
1	0.000000	0.000000	1

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.

Attachment D

ECAP Checklist



CITY OF OAKLAND

Equitable Climate Action Plan Consistency Checklist

250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612-2031

Zoning Information: 510-238-3911

<https://www.oaklandca.gov/topics/planning>

The purpose of this Equitable Climate Action Plan (ECAP) Consistency Checklist is to assess whether a development project is consistent with the City of Oakland ECAP and the City of Oakland's greenhouse gas (GHG) emissions reduction targets. This Checklist must be submitted concurrently with the City of Oakland Basic Application.

For projects subject to discretionary review, the California Environmental Quality Act (CEQA) requires the analysis of GHG emissions impacts from new development.

- If a discretionary development project demonstrates compliance with the Checklist items as part of the project's design, or alternatively, demonstrate to the City's satisfaction why the item is not applicable, then the project will be considered in compliance with the City's CEQA GHG Threshold of Significance.
- If a discretionary development project cannot meet all of the Checklist items, the project will alternatively need to demonstrate consistency with the ECAP by complying with the City of Oakland GHG Reduction Plan Condition of Approval.
- If the project cannot demonstrate consistency with the ECAP, the City will consider the project to have a significant effect on the environment related to GHG emissions.

The City additionally requires residential development projects subject to by right review to complete the Checklist to demonstrate that the project will not impede the City from achieving its GHG reduction targets. Accessory Dwelling Unit (ADU) projects are not required to complete this Checklist and are instead reviewed by applying state and local ADU approval criteria.

- If a by right residential development project demonstrates compliance with the Checklist items as part of the project's design, or alternatively demonstrates to the City's satisfaction why the item is not applicable, then the project will be considered to not impede the City from reaching its GHG emissions reductions targets.
- If a by right residential development project cannot meet all of the Checklist items and cannot demonstrate through a quantitative analysis alternate means of equivalent greenhouse gas reductions, the project will not be eligible for approval under a by right review process. The applicant may revise the project to comply with the Checklist or alternatively utilize the City's discretionary review process.

Application Information

Applicant's Name/Company: IvyHills, LLC

Property Address: 1901 Park Boulevard, Oakland, CA 94606

Assessor's Parcel Number: 21-0229-12

Phone Number: 415-525-6007

E-mail: Krystal@ivyhills.net

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

Checklist Item (Check the appropriate box and provide explanation for your answer).			
Transportation & Land Use			
<p>1. For residential and mixed-use development, if the project is located on a parcel designated in the City of Oakland Housing Element as a Housing Inventory Site, is the proposed project a majority residential use (at least two-thirds of the square footage utilized for residential purposes) with either i) a minimum residential unit count no less than seventy-five percent of the realistic capacity designated for the site or ii) a minimum density of 30 dwelling units/acre?</p> <p>For non-residential development, is the proposed project substantially consistent with the City's over-all goals for land use and urban form, and/or taking advantage of allowable density and/or floor area ratio (FAR) standards in the City's General Plan?</p> <p>(TLU1, 2023-2031 Housing Element, 2022 CARB Scoping Plan Appx. D.)</p>	Yes	No	N/A
			X
Please explain how the proposed project meets this action item.			
<p>2. For developments in "Transit Accessible Areas" as defined in the Planning Code, would the project provide less than the following off-street parking:</p> <ul style="list-style-type: none"> - For Residential Activities, less than one parking space per dwelling unit? - For Commercial Activities, less than one parking space per 600 square feet of floor area on the ground floor and one parking space per 1,000 square feet of floor area on other floors? - For Industrial Activities, less than one space per 3,500 square feet of floor area if total size exceeds 25,000 square feet, and less than one space per 1,00 square feet in all other circumstances? - For Agricultural and Extractive Activities, less than one space per 1,000 square feet of floor area and outdoor sales area <p>Where developments contain a mix of activities, each standard above should be applied to the respective component.</p> <p>(TLU1, 2022 CARB Scoping Plan, Appx. D, Oakland Planning Code Ch. 17.116 prior to ECAP effective date of July 2020.)</p>	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item.			
<p>The project would develop the site with 23 residential units, approximately 3,507 square feet of retail space and provide 14 parking spaces in the basement of the new building.</p>			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

<p>3. For projects including structured parking, would the structured parking be designed for future adaptation to other uses? (Examples include, but are not limited to: the use of speed ramps instead of sloped floors.).</p> <p>(TLU1)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>The parking would be provided in the basement of the new building and would be accessed through a speed ramp located at the corner of 19th Street and 3rd Avenue.</p>			
<p>4. For projects that <i>are</i> subject to a Transportation Demand Management Program, would the project include transit passes for employees and/or residents?</p> <p>(TLU1)</p>	<p>Yes</p>	<p>No</p>	<p>N/A</p> <p>X</p>
<p>Please explain how the proposed project meets this action item.</p>			
<p>5. For projects that are <i>not</i> subject to a Transportation Demand Management Program, would the project incorporate one or more of the optional Transportation Demand Management measures that reduce dependency on single-occupancy vehicles? (Examples include but are not limited to transit passes or subsidies to employees and/or residents; carpooling; vanpooling; or shuttle programs; on-site carshare program; guaranteed ride home programs)</p> <p>(TLU1 & TLU8)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Transit information will be displayed and distributed in the lobby.</p>			
<p>6. Does the project comply with the Plug-In Electric Vehicle (PEV) Charging Infrastructure requirements (Chapter 15.04 of the Oakland Municipal Code), if applicable?</p> <p>(TLU2 & TLU-5)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>The project would have one EV charging parking space, four EV ready parking spaces, and two EV capable parking spaces.</p>			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

<p>7. Would the project reduce or prevent the direct displacement of residents and essential businesses? (For residential projects, would the project comply with SB 330, if applicable? For projects that demolish an existing commercial space, would the project include comparable square footage of neighborhood serving commercial floor space.)</p> <p>(TLU3)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>The project would demolish an automotive garage of approximately 1,626 square feet and would provide approximately 3,507 square feet retail space at the ground floor.</p>			
<p>8. Would the project prioritize sidewalk and curb space consistent with the City's adopted Bike and Pedestrian Plans? (The project should not prevent the City's Bike and Pedestrian Plans from being implemented. For example, do not install a garage entrance where a planned bike path would be unless otherwise infeasible due to Planning Code requirements, limited frontage or other constraints.)</p> <p>(TLU7)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>Access to the parking garage would be through a ramp accessed via a proposed curb cut on 3rd Avenue.</p>			
<p>Buildings</p>			
<p>9. Does the project not create any new natural gas connections/hook-ups?</p> <p>(B1 & B2)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>The project would be fully electric and would not include a gas connection.</p>			
<p>10. Does the project comply with the City of Oakland Green Building Ordinance (Chapter 18.02 of the Oakland Municipal Code), if applicable?</p> <p>(B4)</p>	<p>Yes</p> <p>X</p>	<p>No</p>	<p>N/A</p>
<p>Please explain how the proposed project meets this action item.</p> <p>The project would comply with SCA-92: Green Building Requirements</p>			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist


11. For retrofits of City-owned or City-controlled buildings: Would the project be all-electric, eliminate gas infrastructure from the building, and integrate energy storage wherever technically feasible and appropriate? (B5)	Yes	No	N/A
			x
Please explain how the proposed project meets this action item.			
Material Consumption & Waste			
12. Would the project reduce demolition waste from construction and renovation and facilitate material reuse in compliance with the Construction Demolition Ordinance (Chapter 15.34 of the Oakland Municipal Code)? (MCW6)	Yes	No	N/A
	x		
Please explain how the proposed project meets this action item. The project would comply with SCA-89: Construction and Demolition Waste Reduction and Recycling.			
City Leadership			
13. For City projects: Have opportunities to eliminate/minimize fossil fuel dependency been analyzed in project design and construction? (CL2)	Yes	No	N/A
			X
Please explain how the proposed project meets this action item.			
Adaptation			
14. For new projects in the Designated Very High Wildfire Severity Zone: Would the project incorporate wildfire safety requirements such creation of defensible space around the house, pruning, clearing and removal of vegetation, replacement of fire resistant plants, as required in the Vegetation Management Plan? (A4)	Yes	No	N/A
			X
Please explain how the proposed project meets this action item.			

Equitable Climate Action Plan (ECAP) Consistency Review Checklist

Carbon Removal			
15. Would the project replace a greater number of trees than will be removed in compliance with the Tree Preservation Ordinance (Chapter 12.36 of the Oakland Municipal Code) and Planning Code if applicable and feasible given competing site constraints? (CR-2)	Yes	No	N/A
	X		
Please explain how the proposed project meets this action item. The project would preserve three trees along Park Boulevard and would not remove any tree.			
16. Does the project comply with the Creek Protection, Stormwater Management and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code), as applicable? (CR-3)	Yes	No	N/A
			X
Please explain how the proposed project meets this action item.			

I understand that answering **yes** to all of these questions, means that the project **is in compliance** with the City's Energy and Climate Action Plan as adopted on July 24, 2020 and requires that staff apply the Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist Condition of Approval as adopted by the Planning Commission on _____ and all Checklist items must be incorporated into the project

I understand that answering **no** to any of these questions, means that the project **is not in compliance** with the City's Energy and Climate Action Plan as adopted on July 24, 2020 and requires that staff apply the Greenhouse Gas (GHG) Reduction Plan Condition of Approval as adopted by the Planning Commission on _____ which will require that the applicant prepare a quantitative GHG analysis and GHG Reduction Plan for staff's review and approval. The GHG Reduction Plan and all GHG Reduction measures shall be incorporated into the project and implemented during construction and after construction for the life of the project.



Name and Signature of Preparer

06/03/2025
Date

Attachment E

Noise Management Plan

1901 PARK BOULEVARD CONDOMINIUM PROJECT CONSTRUCTION NOISE MANAGEMENT PLAN

Oakland, California

September 30, 2024

Prepared for:

**Rima Ghannam
Principal/CEQA-NEPA Planner
Sertior**

Prepared by:

ILLINGWORTH & RODKIN, INC.
/// Acoustics • Air Quality ///

**Michael S. Thill
Principal Consultant
429 E. Cotati Avenue
Cotati, CA 94931
(707) 794-0400**

Project: 24-012

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INTRODUCTION

The following Construction Noise Management Plan has been prepared for the 1901 Park Boulevard Condominium Project in Oakland, California. Included in this plan is a brief project description, applicable regulatory criteria, a summary of existing ambient noise levels measured in the project vicinity, and a summary of expected construction noise levels by phase. The plan then recommends noise control methods to reduce construction noise levels to comply with the City's noise standards.

PROJECT DESCRIPTION

The Project Applicant for the 1901 Park Boulevard Condos Project (Project) proposes to develop a five-floor mixed-use residential building with 23 residential units and 3,507 square feet of retail space over a basement.

The ground floor would include a residential lobby and office, a trash collection area, two spaces for mechanical utility, and approximately 3,507 square feet of retail space fronting Park Boulevard, 3rd Avenue, and East 19th Street. The second floor through the fifth floor would contain approximately 23 residential units with 6 units on the second, third, and fourth floors, and five units on the fifth floor. The residential units would be a mix of two-bedroom units (10) and three-bedroom units (13). All units would be affordable residential units. Approximately 7,139 square feet of group and private open space would be provided through an open space on the roof and private terraces.

REGULATORY CRITERIA

City of Oakland Construction Noise Standards

Local noise standards relevant to noise control for demolition and construction activities at the project site can be found in Section 17.120.050 of the City of Oakland Planning Code.

Section 17.120, Performance Standards

1. Temporary Construction or Demolition Which Exceed the Following Noise Level Standards. The daytime noise level received by any residential, commercial, or industrial land use which is produced by any nonscheduled, intermittent, short-term construction or demolition operation (less than ten days) or by any repetitively scheduled and relatively long-term construction or demolition operation (ten days or more) shall not exceed the maximum allowable receiving noise levels described in Table 17.120.04 (Table 1).

TABLE 1 Table 17.120.04, Maximum Allowable Receiving Noise level standards, dBA

Receiving Property	Short-Term (less than 10 days).		Long-Term (10 days or more)	
	Weekdays	Weekends	Weekdays	Weekends
Residential use	80	65	65	55
Commercial use	85	70	70	60

2. The nighttime noise level received by any land use and produced by any construction or demolition activity between weekday hours of seven (7) p.m. and seven (7) a.m. or between eight (8) p.m. and nine (9) a.m. on weekends and federal holidays shall not exceed the applicable nighttime noise level standards outlined in this section.

All work at the site is considered to be long-term construction since it involves repetitively scheduled (i.e. continuous) construction activity lasting more than 10 days.

City of Oakland Standard Conditions of Approval

The City of Oakland has adopted Standard Conditions of Approval (SCA), which are uniformly applied to projects under City of Oakland jurisdiction. The following SCAs would be applicable to the proposed project:

69. Construction Days/Hours

Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours:

- a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.
- b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.
- c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

70. Construction Noise

Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:

- a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) wherever feasible.
- b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.
- c. Applicant shall use temporary power poles instead of generators where feasible.
- d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.
- e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

72. Project-Specific Construction Noise Reduction Measures

Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site specific noise attenuation measures to further reduce construction noise impacts on [ENTER ADJACENT SENSITIVE RECEPTOR OR BUSINESS]. The project applicant shall implement the approved Plan during construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

73. Construction Noise Complaints

Requirement: The project applicant shall submit to the City of Oakland for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include:

- a. Designation of an on-site construction complaint and enforcement manager for the project;
- b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit;
- c. Protocols for receiving, responding to, and tracking received complaints; and
- d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

CONSTRUCTION NOISE ANALYSIS

Existing Noise Environment

The project site is located at 1901 Park Boulevard in Oakland, California. The site is bound by Park Boulevard, which is the predominant noise source in the vicinity, to the southeast, 19th Street to the west, and 3rd Avenue to the north. A noise monitoring survey, which included two long-term (LT-1 and LT-2) noise measurements, was performed at the site between Tuesday, September 17, 2024 and Friday, September 20, 2024. All measurement locations are shown in Figure 1.

Long-term noise measurement LT-1 was made at the northwest corner of the site, approximately 15 feet from the center of the 3rd Avenue travel lane and about 20 feet from the center of 19th Street. Hourly average noise levels at LT-1 typically ranged from 55 to 69 dBA L_{eq} during daytime hours (between 7:00 a.m. and 10:00 p.m.) and from 47 to 63 dBA L_{eq} during nighttime hours (between 10:00 p.m. and 7:00 a.m.). The L_{dn} at LT-1 ranged from 63 to 64 dBA.

Noise measurement LT-2 was along Park Boulevard, approximately 30 feet from the centerline of the roadway. Hourly average noise levels at LT-2 typically ranged from 62 to 68 dBA L_{eq} during the day and from 53 to 65 dBA L_{eq} at night. The L_{dn} was 67 dBA.

FIGURE 1 Aerial Image Showing the Project Site and Noise Measurement Locations



Source: Google Earth, 2024.

Construction Noise Levels at Nearby Noise Sensitive Uses

Construction of the proposed project would occur over approximately 12 months. Construction is planned to occur between 7:00 a.m. and 7:00 p.m. on weekdays as allowed by the City of Oakland conditions of approval.

Construction noise levels would be greatest during the early phases of the project when the greatest amount of noise-generating heavy equipment would be used at the project site. Later phases of construction (i.e., interior finishing/architectural coating) are anticipated to require less heavy equipment and noise levels would be slightly less.

The Project Applicant provided a list of construction equipment planned for the project. Proposed equipment include arc welders, backhoes, compressors, concrete mixers, concrete saws, cranes, dozers, excavators, front end loaders, generators, graders, pavers, tractors, trucks, vibratory compactors, and other ancillary equipment. The range of maximum instantaneous noise levels for project equipment (identified in Table 2 with **bold** font) would be 70 to 90 dBA L_{max} at a distance of 50 feet from the equipment.

TABLE 2 Construction Equipment 50-Foot Noise Emission Limits

Equipment Category	L_{max} Level (dBA) ^{1,2}	Impact/Continuous
Arc Welder	73	Continuous
Auger Drill Rig	85	Continuous
Backhoe	80	Continuous
Bar Bender	80	Continuous
Boring Jack Power Unit	80	Continuous
Chain Saw	85	Continuous
Compressor³	70	Continuous
Compressor (other)	80	Continuous
Concrete Mixer	85	Continuous
Concrete Pump	82	Continuous
Concrete Saw	90	Continuous
Concrete Vibrator	80	Continuous
Crane	85	Continuous
Dozer	85	Continuous
Excavator	85	Continuous
Front End Loader	80	Continuous
Generator	82	Continuous
Generator (25 KVA or less)	70	Continuous
Gradall	85	Continuous
Grader	85	Continuous
Grinder Saw	85	Continuous
Horizontal Boring Hydro Jack	80	Continuous
Hydra Break Ram	90	Impact
Impact Pile Driver	105	Impact
Insitu Soil Sampling Rig	84	Continuous

Equipment Category	L _{max} Level (dBA) ^{1,2}	Impact/Continuous
Jackhammer	85	Impact
Mounted Impact Hammer (hoe ram)	90	Impact
Paver	85	Continuous
Pneumatic Tools	85	Continuous
Pumps	77	Continuous
Rock Drill	85	Continuous
Scraper	85	Continuous
Slurry Trenching Machine	82	Continuous
Soil Mix Drill Rig	80	Continuous
Street Sweeper	80	Continuous
Tractor	84	Continuous
Truck (dump, delivery)	84	Continuous
Vacuum Excavator Truck (vac-truck)	85	Continuous
Vibratory Compactor	80	Continuous
Vibratory Pile Driver	95	Continuous
All other equipment with engines larger than 5 HP	85	Continuous

Notes:

¹ Measured at 50 feet from the construction equipment, with a “slow” (1 sec.) time constant.

² Noise limits apply to total noise emitted from equipment and associated components operating at full power while engaged in its intended operation.

³ Portable Air Compressor rated at 75 cfm or greater and that operates at greater than 50 psi.

Source: Mitigation of Nighttime Construction Noise, Vibrations and Other Nuisances, National Cooperative Highway Research Program, 1999.

Table 3 shows the hourly average noise level ranges, by construction phase, typical for various types of projects. Hourly average noise levels generated by construction are about 65 to 88 dBA Leq for domestic housing projects, measured at a distance of 50 feet from the center of a busy construction site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

The Federal Highway Administration’s (FHWA’s) Roadway Construction Noise Model (RCNM) was also used to calculate the hourly average noise levels for each phase of construction, assuming the two loudest pieces of equipment would operate simultaneously, as recommend by the FTA for construction noise evaluations. This construction noise model includes representative sound levels for the most common types of construction equipment and the approximate usage factors of such equipment that were developed based on an extensive database of information gathered during the construction of the Central Artery/Tunnel Project in Boston, Massachusetts (CA/T Project or "Big Dig"). The usage factors represent the percentage of time that the equipment would be operating at full power.

TABLE 3 Typical Ranges of Construction Noise Levels at 50 Feet, L_{eq} (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84
I - All pertinent equipment present at site.								
II - Minimum required equipment present at site.								

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

Equipment expected to be used in each construction phase are summarized in Table 4, along with the reference noise level at 50 feet assuming the operation of the two loudest pieces of construction equipment, and the estimated noise levels at the nearest receptors to the north, west, and south, as projected from the center of the construction site. The noise levels calculated with the RCNM model generally agreed with EPA's construction noise data, as summarized in Table 3.

Based on these data, the construction of the proposed project would produce noise levels exceeding 65 dBA within 500 feet of residences and noise levels exceeding 70 dBA within 285 feet of commercial land uses. The anticipated noise sources for the site are not "extreme" noise generators under typical construction conditions (i.e., equipment that would generate noise levels of 90 dBA or greater at nominal distances of 50 feet or greater from the equipment). Construction activities would result in a substantial temporary increase in ambient noise levels in excess of standards established in the noise ordinance.

TABLE 4 Construction Noise Levels

Phase	Construction Equipment (Quantity)	Calculated Hourly Average L_{eq} (dBA) From Operation of Two Loudest Pieces of Construction Equipment			
		Noise Level at 50 feet	Noise Level at 65 feet (North)	Noise Level at 100 feet (South)	Noise Level at 120 feet (West)
Demolition	Concrete/Industrial Saw (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (3) *	85	82	78	77
Site Preparation	Grader (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (1) *	84	81	78	76
Grading	Grader (1) * Rubber-Tired Dozer (1) Tractor/Loader/Backhoe (2) *	84	81	78	76
Trenching	Tractor/Loader/Backhoe (1) * Excavator (1) *	82	79	76	74
Building Construction	Crane (1) Forklift (1) Generator Set (1) * Tractor/Loader/Backhoe (1) * Welder (3)	82	80	76	74
Building – Interior/ Architectural Coating	Air Compressor (1) *	74	71	68	66
Paving	Cement & Mortar Mixer (1) * Paver (1) Paving Equipment (1) Roller (1) Tractor/Loader/Backhoe (1) *	82	80	76	74

*Denotes two loudest pieces of construction equipment per phase.

Recommended Noise Controls

Considering the above findings, and to reduce the impact of construction noise to the adjacent land uses, the contractors shall implement the following controls to allow demolition and construction at the project site to meet City noise performance standards. Controls identified in **bold** font are required by SCA:

1. Construction hours shall be limited as follows:

- a) **Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday.**
- b) **Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. and 5:00 p.m. only within the interior of the building with windows and doors closed. No extreme noise generating activities greater than 90 dBA are allowed on Saturday.**
- c) **No construction is allowed on Sundays or Federal holidays.**
- d) Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City of Oakland, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

2. Implement noise control measures to reduce noise impacts due to construction including:

- a) Delivery and removal of equipment or materials shall observe the allowable hours of construction.
- b) Route construction-related traffic away from roadways with noise sensitive residential frontages to the greatest degree feasible.
- c) **Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds), wherever feasible.**
- d) **Except as provided herein, impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered**

to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

- e) Unnecessary idling of internal combustion engines should be strictly prohibited.
- f) Use temporary power poles instead of generators where feasible.**
- g) Select quiet construction equipment whenever possible. Fit motorized equipment with proper mufflers in good working order.**
- h) To the extent feasible, use the smallest size equipment capable of safely completing work activities.
- i) Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams.
- j) Select hydraulically or electrically powered tools to avoid noise associated with compressed air exhaust from pneumatically powered tools.**
- k) Maintain equipment such that parts of vehicles and loads are secure against rattling and banging.
- l) Operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near residential areas.
- m) Grade surface irregularities on construction sites to prevent the generation of impact noise and ground vibrations by passing vehicles.
- n) Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.**
- o) Stage large equipment, compressors, or generators at least 25 feet from the site perimeters when work is not being done near these areas. Generators and compressors should be located at ground level to the greatest extent feasible. If compressors for pneumatic equipment are required above ground level, they should be located near the center of the structure.
- p) Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.

- q) Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.
 - r) Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
 - s) **The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.**
3. Implement the following noise control measures to reduce noise impacts due to construction:
- a) Erect construction noise barriers at the site perimeter shared with the residential uses to the north and west in such a way to block the direct line of sight to the primary work areas. These barriers should remain in place during all ground level work.
 - b) The barriers should be at least 8 feet tall and installed without cracks or gaps in the face or large or continuous gaps at the base. Barriers can be built of 3/4" (nominal thickness) plywood panels or other solid sheet materials with a minimum surface weight of 3 lb./sq. ft. or using mass loaded construction noise barrier blankets on temporary fencing, hung off of guy wires, or laid over existing structures, with a minimum STC rating of 25. Acceptable construction barrier blankets can be rented or purchased from the Acoustical Solutions¹, Environmental Noise Control², or other suppliers with acoustically equivalent construction barrier blankets.
- The use of the construction noise barriers outlined in the mitigation plan (above) are expected to reduce noise levels at area uses on the order of 8 to 10 dBA when work is being done at the site perimeter and on the order of 5 to 7 dBA when work is being done in the central portions of the site.
4. Identify, track, and respond to any complaints that may arise pertaining to construction noise, the following measures should be implemented:
- a) **Notify property owners and occupants located within 300 feet of construction activities at least 14 calendar days prior to commencement of construction.**
 - b) **Designate an on-site construction complaint and enforcement manager for the project.**
 - c) **Post a large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures and phone numbers for the complaint manager and City Code Enforcement unit.**

¹ Go to <https://acousticalsolutions.com/> for more information.

² Go to <http://www.environmental-noise-control.com/> for more information.

- d) Maintain a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.**
- e) Construction noise monitoring should be undertaken if reliable noise complaints are received during demolition, excavation, and/or construction activities. Noise levels should be monitored at the location from which the noise complaints originated and/or the worst-case façade window exposure at the complaint location by a qualified acoustical professional. Integrated average (L_{eq}) noise level measurements on an hourly basis should be made of activities representative of those that generated the complaint. If the measured noise levels during this test are found to exceed the City's construction noise performance standards, an acoustical professional should be retained to specify additional noise attenuation measures to reduce noise levels to City Standards. These measures may include operational considerations, the use of additional ground level noise barriers or noise control blanketing of the building structure.

REFERENCES

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