1453 23rd Avenue Charter School Project CEQA Analysis

January 2023

Lead Agency:

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



Prepared By:

Lamphier-Gregory, Inc. 4100 Redwood Rd, STE 20A - #601 Oakland, CA 94619



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ATTACHMENTS

Attachment A: City of Oakland Standard Conditions of Approval (SCAs) Applicable to the 1453 23rd Ave Charter School Project

Attachment B: Assessment of Project Consistency with Infill Project Performance Standards per CEQA Guidelines §15183.3 and Appendix M

Attachment C: Criteria for Use of Addendum, per CEQA Guidelines §15164 and §15162

Attachment D: Illingworth & Rodkin, Inc, Bay Area Technology School Emissions Assessment, January 5, 2023

Attachment E: Page & Turnbull, *Cultural Resources Technical Report, Bay Tech Charter School Project,* January 17, 2023

Attachment F: Illingworth & Rodkin, Inc., Bay Area Technology School Noise and Vibration Assessment, January 11, 2023

Attachment G: Parisi Transportation Consulting, CEQA Transportation Impact Analysis for BayTech Charter School Project, November 14, 2022

Project Characteristics

1. Project Title:

1453 23rd Ave. Charter School Project PLN22158

2. Lead Agency Name and Address:

City of Oakland Planning & Building Department 250 Frank H. Ogawa Plaza, Suite 2114 Oakland, CA 94612

3. Contact Person and Phone Number:

Mike Rivera, City Planner III 510-238-6417 mrivera@oaklandca.gov

4. Project Location:

1453 and 1445 23rd Ave., 2280 E. 15th Street Oakland, CA 94610 Assessor's Parcel Numbers 020-0152-001-00, 020-0152-017-00 and 020-0159-012-02

5. Project Sponsor's Name and Address:

1445 23rd Avenue, LLC attn: Seth Feldman, Bay Area Technology School 8251 Fontaine Street, Oakland, CA, 94610 510-382-9932 sfeldman@baytechschool.org

6. Existing General Plan Designation:

Neighborhood Center Mixed Use and Mixed Housing Type Residential

7. Existing Zoning:

CN-3 Neighborhood Commercial - 3 Zone, RM-2 Mixed Housing Type Residential Zone - 2

8. Requested Approvals:

The following City of Oakland discretionary approvals would be required for the project:

Conditional Use Permit (CUP) for Community Education Civic Activity in a Neighborhood Commercial (CN-3) and Mixed Housing Type Residential (RM-2) Zone

Regular Design Review (DR) for site and building alteration

Executive Summary

The City of Oakland's discretionary approvals required for the project include approval of a Conditional Use Permit for a Community Education Civic Activity in the Neighborhood Commercial (CN-3) Zone, and Regular Design Review (DR) for site and building alteration. These City of Oakland discretionary approvals are subject to review pursuant to the California Environmental Quality Act (CEQA).

Community Plan Exemption. Public Resources Code Section 21083.3 and 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 that are peculiar to the project or its site." Section 15183(c) specifies that "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 ..., then an additional EIR need not be prepared for the project solely on the basis of that impact."

The project is consistent with the land use and development strategies for this site as presented in the Land Use and Transportation Element of the General Plan (the LUTE), and is consistent with applicable CN-3 Neighborhood Commercial and Planned Unit Development zoning regulations of the Oakland Municipal Code. Findings regarding the proposed project's consistency with the LUTE are included in this document following the Project Description. The proposed project is permitted in the zoning district where the project site is located and consistent with the bulk, density, and land use standards envisioned in the LUTE. This CEQA Analysis concludes that the project would not result in significant impacts that were not previously identified as significant projectlevel, cumulative or off-site effects in the LUTE EIR, and that the project would not result in any new or more severe environmental effects than previously disclosed in the LUTE EIR. The project's potentially significant effects have already been addressed as such in the LUTE EIR, and would be substantially mitigated by the imposition of Standard Conditions of Approval (SCAs). Based on these environmental conclusions, the project is eligible for CEQA streamlining and/or tiering provisions under CEQA Guidelines Section 15183, which provide for streamlined review when a project is consistent with a Community or General Plan, and the environmental impacts of that Plan have been analyzed in a certified program Environmental Impact Report (i.e., the LUTE EIR). Therefore, consistent with CEQA Guidelines Section 15183, this CEQA Analysis satisfies, based on the analysis conducted in this document, the requirements for a community plan exemption. As such, no further environmental documents are required of the project, in accordance with CEQA Guidelines Section 15183.

Qualified Infill Exemption. Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 allow streamlining 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 applicable development policies. Infill projects are eligible if they are located in an urban area and on a site that either has been previously developed or adjoins existing qualified urban uses on at least 75 percent of the site's perimeter, able to satisfy the performance standards provided in CEQA Guidelines Appendix M, and 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. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects or if uniformly applicable development policies or standards would substantially mitigate such effects.

The analysis conducted indicates that the proposed project is eligible for a qualified infill exemption, pursuant to CEQA Guidelines Section 15183.3. The infill eligibility criteria are evaluated in **Attachment B** and supported by this CEQA Analysis.

Addendum. Public Resources Code Section 21166 and CEQA Guidelines Section 15164 state that an addendum to a certified EIR is allowed when minor changes or additions are necessary and none of the conditions for preparation of a subsequent EIR or negative declaration, per Section 15162, are satisfied.

This document includes a CEQA Analysis that evaluates the potential project-specific environmental effects of the proposed project and whether such effects were adequately covered by the LUTE EIR to allow the above-listed streamlining and/or tiering provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in the LUTE EIR. The proposed project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the LUTE EIR as well as the applicable December 16, 2020 City of Oakland (City) Standard Conditions of Approval (SCAs); therefore, the applicable mitigation measures and SCAs are included as part of the proposed project (see **Attachment A**). The criteria for use of an Addendum are evaluated in **Attachment C** and supported by this CEQA Analysis.

The analysis conducted, as described in this document, demonstrates that preparation of an Addendum to the LUTE EIR is allowed for the proposed project, pursuant to CEQA Guidelines Sections 15164 and 15162.

Purpose of this CEQA Document

The purpose of this document is to provide required CEQA review for the proposed project. As such, this document includes:

- a description of the proposed project
- an assessment of whether the project qualifies for CEQA streamlining pursuant to CEQA Guidelines Section 15183, as a project that is consistent with the development intensity established by existing zoning, community plan or general plan policies for which an EIR was certified, and
- an examination of whether there are project-specific significant effects that are peculiar to the project or its site, and that would necessitate preparation of a subsequent or supplemental Environmental Impact Report

The applicable CEQA section that provides a basis for streamlined CEQA compliance is described below.

Applicable CEQA Provisions

Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 mandates that, "projects that are consistent with the development density established by existing zoning, community plan, or general plan policies for which an EIR was certified shall not require additional environmental review, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site. This streamlines the review of such projects and reduces the need to prepare repetitive environmental studies."

This provision of CEQA applies only to projects that are consistent with: a) a community plan adopted as part of a general plan, b) a zoning action which zoned or designated the parcel on which the project would be located to accommodate a particular density of development, or c) a general plan of a local agency; and an EIR was certified by the lead agency for the zoning action, the community plan, or the general plan. Section 15183(a) provides that, in approving a project meeting these requirements, "a public agency shall limit its examination of environmental effects to those impacts that the agency determines, in an initial study or other analysis:

- are peculiar to the project or the parcel on which the project would be located,
- are not analyzed as significant effects in a prior EIR on the zoning action, general plan or community plan,
- are potentially significant off-site impacts and cumulative impacts that were not discussed in the prior EIR prepared for the general plan, community plan or zoning action, or
- are previously identified significant effects which, as a result of substantial new information which was not known at the time the prior EIR was certified, are determined to have a more severe adverse impact than discussed in the prior EIR"

Section 15183(c) provides that, "if an impact is not peculiar to the parcel or to the 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, . . . then an additional EIR need not be prepared for the project solely on the basis of that impact." When reviewing the environmental effects of a project pursuant to these provisions, "an effect of the project on the environment shall not be considered peculiar to the project or the parcel . . . if uniformly applied development policies or standards have been previously adopted by the city, with a finding that the development policies or standards will substantially mitigate that environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect. The finding shall be based on substantial evidence which need not include an EIR." These provisions further provide that if the City, "failed to make a finding as to whether such policies or

standards would substantially mitigate the effects of future projects, the decision-making body of the city, prior to approving such a future project pursuant to this section, may hold a public hearing for the purpose of considering whether, as applied to the project, such standards or policies would substantially mitigate the effects of the project. Such a public hearing need only be held if the city decides to apply the standards or policies as permitted in this section."

Furthermore, Section 15183(j) provides that, "this section does not affect any requirement to analyze potentially significant off-site or cumulative impacts, if those impacts were not adequately discussed in the prior EIR. If a significant off-site or cumulative impact was adequately discussed in the prior EIR, then this section may be used as a basis for excluding further analysis of that off-site or cumulative impact."

Subsequent sections of this CEQA Analysis document provide substantial evidence to support a conclusion that the project qualifies for streamlined review under CEQA Guidelines Section 15183, and that no effects of the project on the environment are peculiar to the project or the parcel when uniformly applied development policies or standards (i.e., City of Oakland Standard Conditions of Approval – or SCAs) are applied to the project. A complete list of uniformly applied development standards (or City SCAs) that are applicable to the project can be found in **Attachment A**, as cited throughout the CEQA Checklist.

Reliance on a Prior Program EIR

The provisions of CEQA Guidelines Section 15183 requires the project to be consistent with a zoning action, a community plan, or the General Plan, as well as the EIR that was certified for those plans, policies or regulations. The City of Oakland prepared a program-level EIR for the General Plan Land Use and Transportation Element (the LUTE EIR) that is applicable to the project and its site, and that provides programmatic environmental review of infill development and redevelopment (such as the project).

Pursuant to CEQA Guidelines Section 15168, "a program EIR is an EIR that has been prepared on a series of actions that can be characterized as one large project and that are related either geographically, as logical parts in a chain of contemplated actions, in connection with general criteria to govern the conduct of a continuing program, or as individual activities carried out under the same authorizing statute or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways."

Further, pursuant to CEQA Guidelines Section 15168(c), "later activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared:"

- If a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration. That later analysis may tier from the program EIR as provided in Section 15152.
- If the agency finds, pursuant to Section 15162, that no subsequent EIR would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required. Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record. Factors that an agency may consider in making that determination include, but are not limited to consistency of the later activity with the type of allowable land use, overall planned density and building intensity, geographic area analyzed for environmental impacts, and covered infrastructure, as described in the program EIR.
- An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into later activities in the program.
- Where the later activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity, to determine whether the environmental effects of the operation were within the scope of the program EIR.

The Program EIR relied on for this analysis is the City of Oakland General Plan Land Use and Transportation Element (LUTE) EIR. This prior Program EIR is applicable to the project and supports the streamlining and/or tiering provisions under CEQA Section 15183. The CEQA Analysis for the project, as provided in the following Checklist, evaluates the specific environmental effects of the project in light of the analysis and conclusions addressed in this prior Program EIR. The LUTE EIR is hereby incorporated by reference and can be obtained on the City of Oakland Planning and Building Department website at: https://www.oaklandca.gov/resources/environmental-review-docs

Land Use and Transportation Element EIR

The Land Use and Transportation Element of the City General Plan identifies policies to guide land use changes in the City, and sets forth an action program to implement the land use policy through development controls and other strategies. The City approved the land Use and Transportation Element of the General Plan and certified the LUTE EIR in 1998. The LUTE EIR is a Program EIR as defined under CEQA Guidelines §15168 and §15183. As such, subsequent activities pursuant to the LUTE are subject to requirements under these CEQA sections.

Applicable mitigation measures identified in the LUTE EIR are functionally equivalent to the City's current Standard Conditions of Approval.

Environmental Effects Summary -LUTE EIR

The LUTE EIR and its Initial Study determined that development consistent with the LUTE would result in impacts that would be less than significant for the following topic: 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); noise (roadway noise downtown and citywide, multifamily near transportation/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/circulation (transit demand). No impacts were identified for agricultural or forestry resources, and mineral resources.

The LUTE EIR and its Initial Study determined that development consistent with the LUTE would result in impacts that would be reduced to a level of less than significant with implementation of mitigation measures for the following topics:

- aesthetics (views, architectural compatibility and shadow only);
- air quality (construction dust [including PM₁₀] and emissions Downtown, odors);
- cultural resources (except those specific impacts identified above 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); and

¹ Climate change and greenhouse gas emissions were not expressly addressed in the 1998 LUTE EIR. (See GHG Section for further discussion.)

 public services (except as noted below as significant); and transportation/circulation (intersection operations Downtown)

The LUTE EIR determined that development consistent with the LUTE would result in significant and unavoidable impacts for the following environmental topics:

- air quality (regional emissions, roadway emissions in the downtown, and inconsistency with the Clean Air Plan);
- noise (construction noise and vibration in downtown);
- public services (fire safety);
- transportation/circulation (roadway segment operations); and
- wind hazards

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

Standard Conditions of Approval

The City of Oakland established its Standard Conditions of Approval and Uniformly Applied Development Standards (SCAs) in 2008, and they have been amended and revised several times since then. The City's SCAs are incorporated into projects as conditions of approval regardless of a project's environmental determination. The SCAs incorporate policies and standards from various adopted plans, policies and ordinances including the Oakland Planning and Municipal Codes, Oakland Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Oakland Protected Trees Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, and the 2030 Equitable Climate Action Plan (ECAP), among others. These SCAs have been found to substantially mitigate environmental effects. SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and will substantially mitigate environmental effects.

Consistent with the requirements of CEQA, the assessments made in this CEQA Analysis of whether the project would have significant impacts are determined prior to approval of the project. Where applicable, SCAs and (in certain cases) detailed recommendations to further implement the SCAs specific to the project, have been identified to mitigate those impacts. In some instances, exactly how the SCAs will be achieved awaits completion of future studies, an approach that is legally permissible where SCAs 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 where the project commits to developing measures that comply with the requirements and criteria identified.

SCAs that apply to the project are listed in **Attachment A** to this document, which is incorporated by reference into this CEQA Analysis. Because the SCAs are mandatory City requirements, the impact analysis for the project assumes that they will be imposed and implemented, and the project applicant has agreed to implement these SCAs or to ensure that they are implemented as part of the project. If this CEQA Checklist or its attachments inaccurately identifies or fails to list an applicable mitigation measure or SCA, that mitigation measure or SCA remains applicable to the project.

Project Description

Background

Project sponsor and applicant, Bay Area Technology School ("BayTech") is an accredited independent tuition-free public charter school serving middle and high school students in grades 6 through 12.

Throughout the 21-year history of BayTech, the school has operated under short-term leases with Oakland Unified School District (OUSD), frequently requiring moves to different locations within the OUSD system. BayTech currently operates within a portion of the OUSD campus at 8251 Fontaine Street in Oakland, but OUSD plans to use that space for other purposes and is not renewing the lease with BayTech. The proposed project represents development of a permanent home for BayTech.

Project Location, Conditions, and Surroundings

Location

This property is bordered by E. 15th Street to the northeast and 23rd Avenue to the southeast, with residential and retail buildings to the west. The project site includes three parcels, totalling approximately 0.6 acres. These include the approximately 18,500 square foot former Palace Theater and back parking area located at 1445 and 1453 23rd Avenue in Oakland, and a fenced surface parking lot across the street at 2280 E. 15th Street (see **Figures 1** and **2**).

History and Existing Conditions

The project site contains the existing 17,840-square-foot former Palace Theater building. This building was constructed in 1923 as a motion picture theater, though it has been used primarily as a church since 1953. The project site is currently occupied by "Word Assembly A Family of Churches", though under limited activity in recent years due to the COVID-19 pandemic. The surface parking lots in the rear of the building and across E. 15th Street are used as parking for the church. The existing parking lot across E. 15th Street has 18 standard parking stalls plus one ADA stall.

The former Palace Theater building has an Oakland Cultural Heritage Survey (OCHS) rating of B*2+, indicating it is a contributor to the 23rd Avenue Commercial Area of Secondary Importance with a historic rating that could improve with restoration. While the building is not currently listed on the National or California Registers of Historic Places and Historical Resources, it is considered eligible for the California Register, and therefore would be considered a historical resource for the purposes of CEQA. The building is considered eligible for listing as a good example of a neighborhood theater designed in the early 1920s in a Spanish Colonial Revival style, as well as for its association with master architects, the Reid Brothers, who designed a renovation to the building in 1931. See additional information in Cultural Resources analysis section of this document and Attachment E.

Surrounding Land Uses

The project site is located in the San Antonio neighborhood, in an area that contains a mix of residential uses and local businesses. Residential uses abut the properties to the north and west. Businesses are located adjacent and across 23rd Avenue to the south and east. OUSD Garfield Elementary school is located just over a block away to the northeast.

Regional Access

Regional access to the site is provided by the I-880 freeway and AC Transit lines including the Bus Rapid Transit (BRT) (Tempo) 1T line on International Boulevard. The nearest BART station is 1.0 mile from the project site.

Vehicle access to the site from I-880 is via the 23rd Avenue exit approximately $1/3^{rd}$ miles to the south. The primary AC Transit route serving the site is the new East Bay Bus Rapid Transit (BRT, or Tempo Line) which operates mostly along bus-only lanes on International Boulevard from uptown Oakland to San Leandro, with bus frequencies of every 10 minutes during peak times, and nearby stops at 24th Avenue and 20th Avenue. Other AC Transit routes in the immediate vicinity include the 40 Line and the 840 All Nighter Line, both along Foothill Boulevard and Bancroft Avenue, from Downtown Oakland to the Bay Fair BART station, and the 62 Line along 23rd Avenue and Highland Hospital, from the West Oakland BART to the Fruitvale BART.

General Plan and Zoning Designations

General Plan Land Use Designation

The City of Oakland's General Plan Land Use and Transportation Element (LUTE) and Land Use Diagram designate most of the project site and surrounding blocks between International Boulevard and Foothill Avenue, and between 22nd Avenue and 26th Avenue, as Neighborhood Center Mixed Use. The Neighborhood Center Mixed Use classification is intended to identify, create, maintain, and enhance mixed use neighborhood commercial centers. Indicated desired land use types include smaller scale retail, housing, office, active open space, eating and drinking establishments, personal and business services, and smaller scale educational, cultural, or entertainment uses. The maximum FAR for this land use classification is 4.0.

Farther from the 23rd Avenue corridor, the parcel that includes the current parking lot behind the building is in the Mixed Housing Type Residential designation, as is much of the surrounding neighborhood. The Mixed Housing Type Residential classification is intended to create, maintain, and enhance residential areas typically located near the City's major arterials and characterized by a mix of single-family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate. Indicated desired land use types include residential uses, live-work types of development, small commercial enterprises, schools, and other small scale, compatible civic uses possible in appropriate locations.

Zoning

Both sides of 23rd Avenue from Foothill Blvd. to slightly past International Blvd. are zoned Neighborhood Commercial (CN-3), including the project parcel that fronts onto 23rd Avenue. The Neighborhood Commercial Zone is intended to, "create, improve, and enhance area neighborhood commercial centers that have a compact, vibrant pedestrian environment." Pursuant to Oakland Municipal Code (OMC), Table 17.33.030, Community Education Civic Activities (schools) are conditionally permitted activities within this zoning district.

Both the parcels containing parking behind the building and across 15th Street are zoned Mixed Housing Type Residential Zone – 2 (RM-2). The intent of the RM-2 zone is, "to create, maintain, and enhance residential areas characterized by a mix of single-family homes, duplexes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate." Pursuant to Oakland Municipal Code (OMC), Table 17.17.01, Community Education Civic Activities (schools) are conditionally permitted activities within this zoning district.

Project Description

Physical Building and Site Changes

The former theater space would be remodeled to remove the sloped seating area and mezzanine seating, flatten the floor, and create a full-size high school gymnasium spanning the height of two stories, which would also be used as a multi-purpose space for lunch and group assembly. A full floor would be added within the existing space above the gymnasium to house classrooms and offices. This third story would also extend to the front of the building as a new floor over the "lobby" portion of the building, extending from the southeast façade, behind the historic parapet.

In addition to the gymnasium and lobby, the proposed 24,048 square feet of floor space would include ten standard classrooms and one science classroom, plus office, break, meeting, restroom, and support spaces. A full kitchen is not proposed, rather a "servery" area would be used to hold and distribute food prepared off-site.

BayTech is considering making up to 800 square feet of this space available to rent as offices to their afterschool program partner, Higher Ground. The actual after school program would occur within the facility whether the offices are also housed there or not.

The parking lot to the rear of the building would be demolished to create a school yard for recreational activities and lunch, including seating areas, hard courts, and a synthetic turf field. Outdoor recreational facilities would not include regulation-sized courts or fields and would be used only for practice and play (no organized sports games) (see **Figure 3**). As also shown on Figure 3, access to the rear yard would be fully controlled including along E. 15th Street with a proposed sliding gate for a relocated curbcut as well as swing gates to provide for pedestrian access and access to the proposed PG&E transformer. (Note that the proposed swing gates across the sidewalk for the PG&E transformer and pedestrian entry would need to be allowed by City of Oakland Department of Transportation or adjusted accordingly, which would not affect this analysis.)

The existing parking lot located across the street at 2280 E. 15th Street would undergo pavement repairs including crack seal, dig outs, and a slurry seal along with new striping. Fencing repairs will be performed as needed (see **Figure 4**).

The site has existing utility connections (water, sewer, stormdrain, electricity and natural gas). Existing utility services will be repurposed for domestic water, sewer and storm drain. A new fire service line is anticipated for fire sprinklers. A PG&E electrical transformer is anticipated and will be located in the rear of the building, as shown on the site plan. Note that swing gate for the PG&E transformer may require coordination with AT&T to relocate existing utility box(es) on the sidewalk.

The project proposes to retain two existing street trees along the project frontages and two more street trees would be added per City Tree Standards. Eleven additional trees are proposed in the project's rear yard.

It is anticipated that the above-proposed construction activities would occur over a nine-month period.

See Figures 5 through 7 showing the floor plans and Figures 8 and 9 showing the proposed elevations.

Historic Elements

The project would require extensive remodeling of the interior while preserving and rehabilitating the exterior façade. Changes to the exterior can generally be described as rehabilitation of surfaces and features and addition of new doorways and windows and emergency escape elements to facilitate the proposed school use.

A third story will be constructed within the envelope of the existing building footprint. The new roof for the third story at the front of the building will not be visible from the street frontages as it will not exceed the height of the current parapet. HVAC equipment on the roof at the front of the building will be located behind existing parapet and screened from view. An external metal staircase, two concealed exterior HVAC ducts, and an electrical service entrance cabinet would be added onto the rear of the building. HVAC equipment located on the roof at the rear of the building will be screened from view. The current 6'6" rectangular projecting sign will be replaced with a non-illuminated box sign with stenciled graphics and the Bay Tech logo. Approximate sign dimensions will be 23' wide by 5'6" high simulating the size of the original marquee sign.

Seismic bracing would be installed at the interior of perimeter walls. Installation of seismic bracing, flattening of the auditorium floor, and construction of the third story would require removal of all "false façade" cityscape elements at the southwest and northeast sides of the auditorium, as well as the existing stage, decorative cased

beam stage ceiling, decorative proscenium arch, balcony, and projection room. Some of these elements will be reused on site as described below.

Some interior elements conveying the historic nature of the use would be retained, including:

- The original recessed access from 23rd Avenue along with the existing wood doors and the five framed openings aligning the doors into the lobby.
- The false façade cityscape details at the side walls of the auditorium would be temporarily removed during seismic retrofit work, altered to reduce their height so they fit within the shortened auditorium space, and partially reinstalled.
- The tripartite columns and arch segments from each side of the stage would be installed at the rear (northwestern) wall of the gymnasium, in a similar location to their current location.
- Beams from the decorative cased beam stage ceiling would be salvaged and installed in a new science classroom space at the location of the stage, with the painted panels between each beam recreated in the new location based on photo documentation.
- The central staircase of the main lobby, which splits into two perpendicular wings at a landing leading to opposite sides of a mezzanine, will be retained, along with the staircase painted wrought-iron railings.
- The rear textured plaster wall with radiused corners and a decorative painted wood ceiling, with cased beams and ornate corbels, above the stairway which extends across the mezzanine and the mirror will also be preserved.
- The tile fountain on the first floor will be relocated within the new lobby area and the tile fountain on the second floor mezzanine will be preserved in place.
- Two of the four wood plank doors with decorative strap hinges at the mezzanine lobby would be retained and reused as mezzanine office doors.

A more detailed discussion of proposed changes and the relationship to historic features is included in the Cultural Resources analysis section of this document and Attachment E.

Parking and Loading

Oakland does not include a specific parking requirement for middle / high schools, but rather indicates that the number of parking spaces be determined by the Director of City Planning pursuant to Section 17.116.040, based on traffic generation, amount and frequency of loading operations, and other factors. A transportation study has been submitted separately to the City for this determination.

The existing staff parking lot across East 15th Street would be striped for 18 vehicles and one ADA accessible space (19 total). The parking lot capacity increases to 22 vehicles and one ADA accessible space with valet service. These spaces would be assigned to faculty and staff. There is no parking provided for students. The project would provide subsidized/discounted or free public transit passes for 100 students as part of their Transportation and Parking Demand Management (TDM) plan.

During special events (that do not otherwise utilize the rear yard), visitor parking would be allowed on the recreation yard to the rear of the building. The recreation yard could accommodate 19 vehicles without valet and 28 vehicles with valet. Assuming valet parking there and in the parking lot across East 15th Street, which can accommodate another 27 parking spaces with valet, the total off-street parking capacity for events would total 55 parking spaces. The limited parking situation would be clearly communicated to students' families through written communications regarding special events.

There is on-street parking, both metered and non-metered, in the vicinity of the project site on International Boulevard, 23rd Avenue and E. 15th Street, however typical occupancy rates during school hours are between 70 and 85 percent.

Pick-up and drop-off traffic would be routed onto E. 15th Street from the 22nd Avenue intersection. The approximately 200-foot curb frontage area along E. 15th Street fronting the project site is proposed to be a white curb area reserved for drop-off and pick-up during school hours, and deliveries and short-term visitors during other school hours.

The fenced recycling and trash collection area would be located in the rear of the building labeled "service area." Trash, recycling and composting service would be managed with 96-gallon carts and would be brought to the curb on 15th street for pickup.

The referenced separate transportation study addressed both parking and loading adequacy and determines that the proposed parking and loading would be adequate given the characteristics of the specific location, anticipated mode shift for the area, and TDM plan. The potential for environmental impacts with respect to transportation are discussed in the Transportation analysis section of this document and Attachment G.

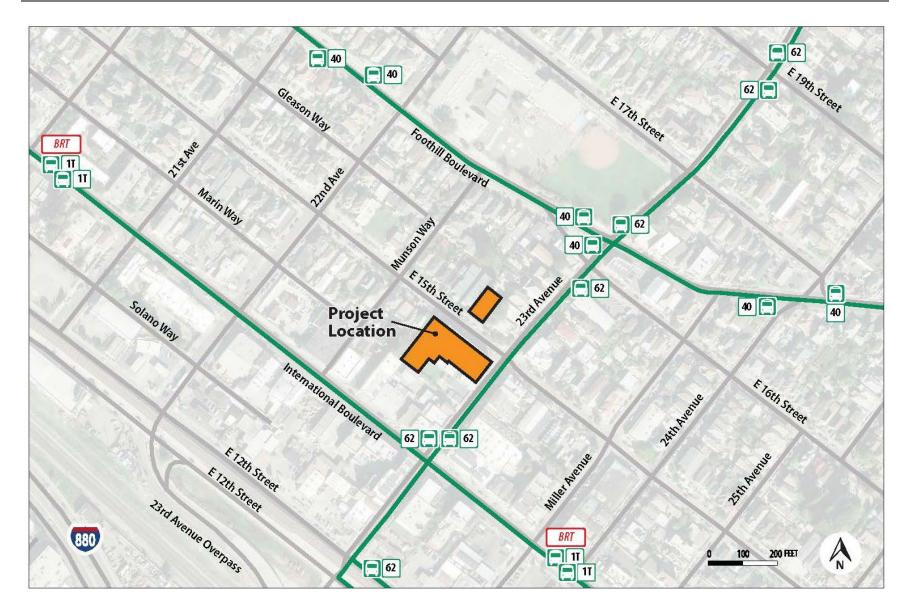


Figure 1: Project Location

Source: Parisi Transportation Consulting, Transportation Impact Review Report, dated 9/20/22



Figure 2: Project Site

Source: Preliminary Project Description dated 7/14/22

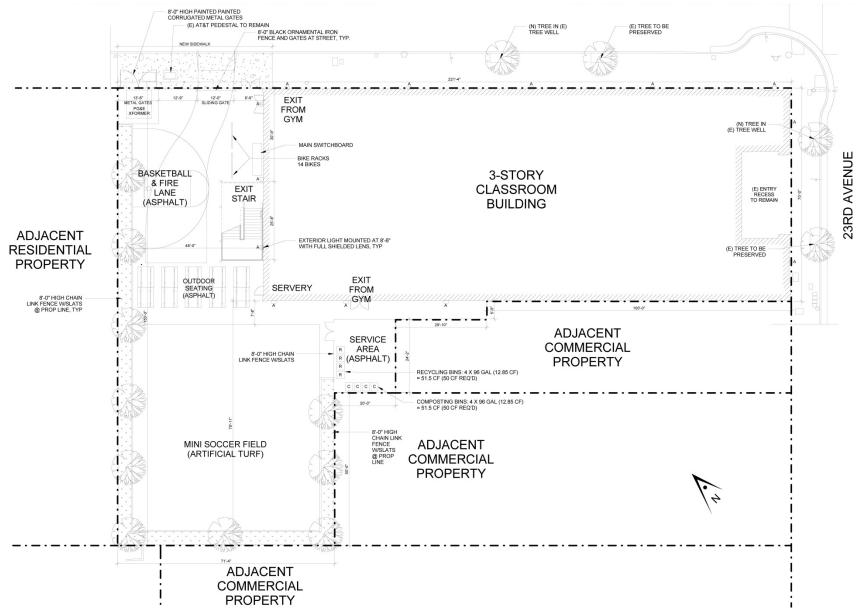
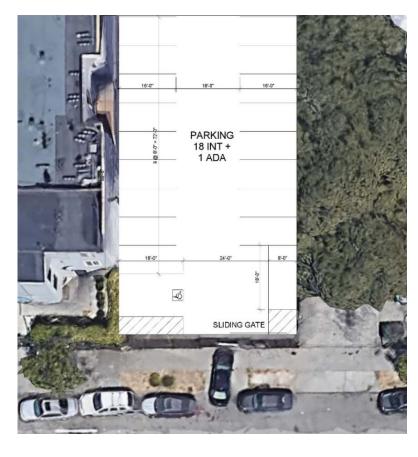


Figure 3: Proposed Project Site Plan

Source: Preliminary Planning Set dated 1/5/2023



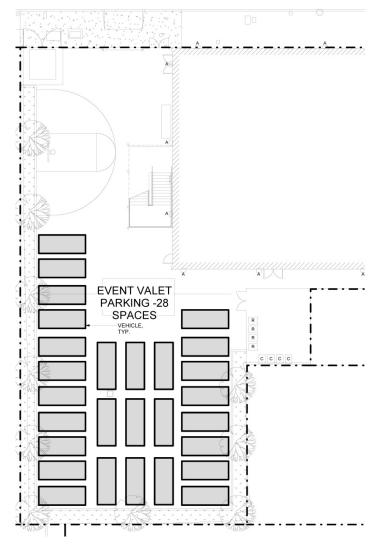
VALET PARKING -22 INT + 1 ADA

Without Valet Parking

With Valet Parking

Figure 4: Proposed Site Plan, Parking Lot

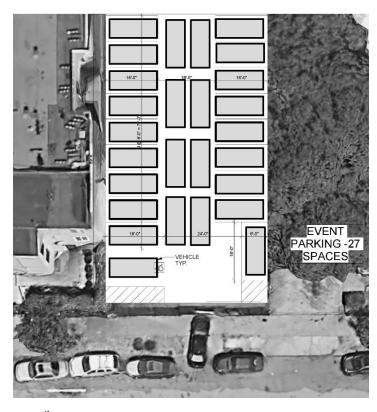
Source: Plan Set dated 11/11/22



In Rear Yard

Figure 5: Proposed Special Event Parking

Source: Plan Set dated 11/11/22 and 1/5/2023



In 15th Avenue Lot

.

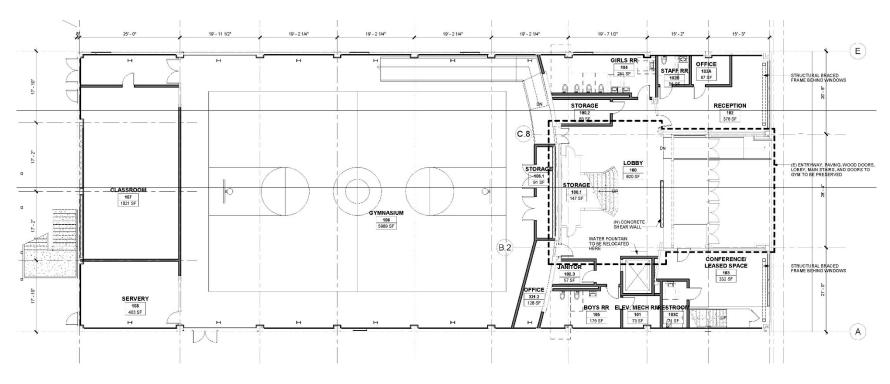


Figure 6: Proposed 1st Floor Plans

Source: Preliminary Planning Set dated 11/11/22

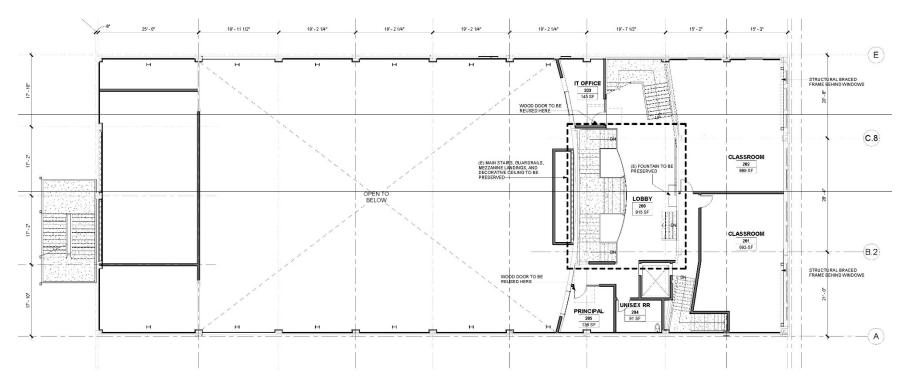


Figure 7: Proposed 2nd Floor Plans

Source: Plan Set dated 11/11/22

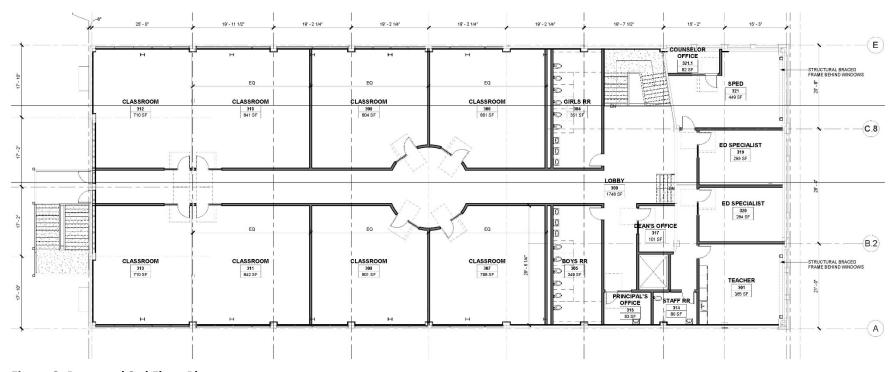
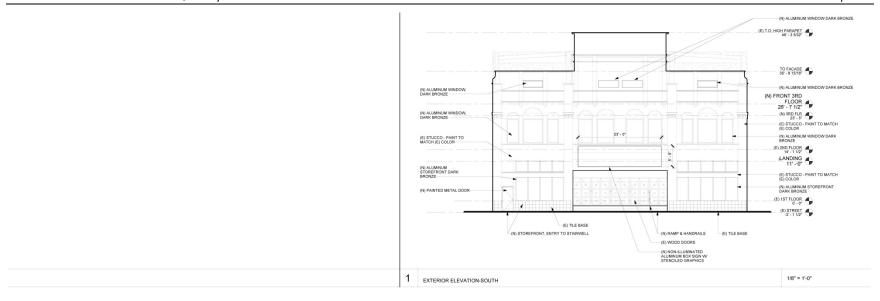
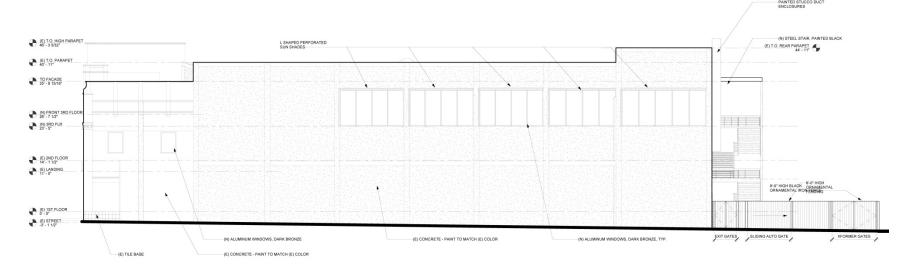


Figure 8: Proposed 3rd Floor Plans

SourcePlan Set dated 11/11/22

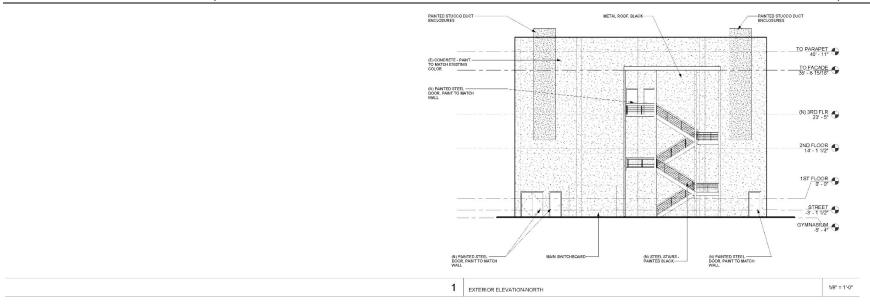


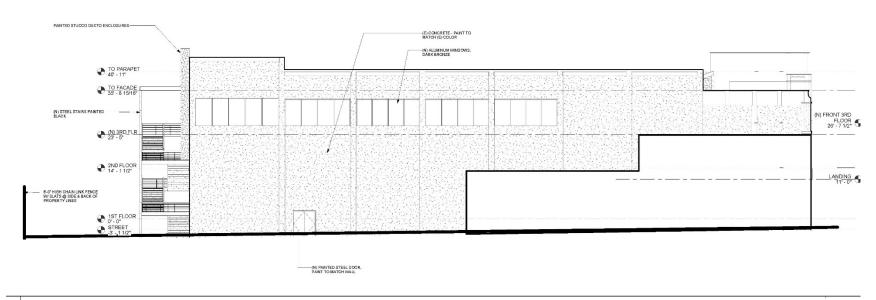


2 EXTERIOR ELEVATION-EAST

Figure 9: Proposed Exterior Elevations, South and East

Source: Plan Set dated 1/5/2023

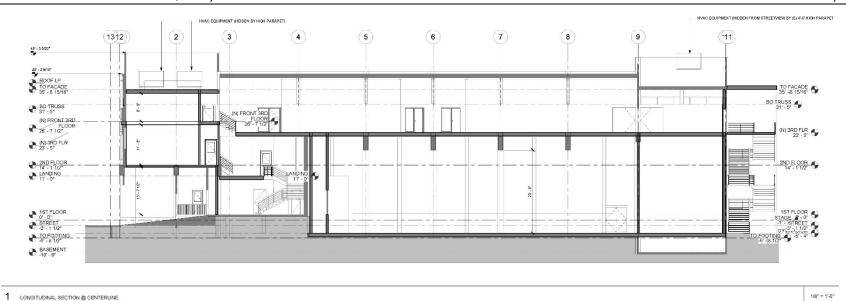




2 EXTERIOR ELEVATION-WEST

Figure 10: Proposed Exterior Elevations, North and West

Source: Plan Set dated 11/11/22



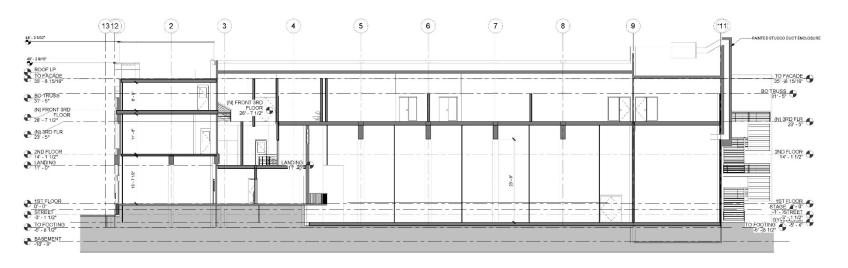
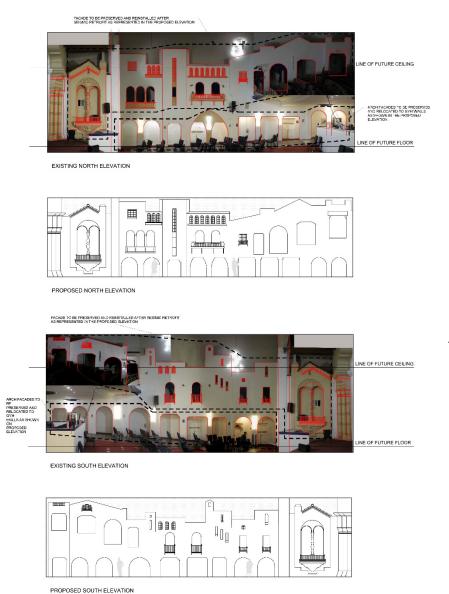


Figure 11: Proposed Building Cross Sections

Source: Plan Set dated 11/11/22

2 LONGITUDINAL SECTION BETWEEN C.8 & E

1/8" = 1"-0"



PHANTIC CRUIN CONTRACT STARE REASON TO BE PROSENTED AND FACE TO THE SECONDATION OF THE SECONDATION DEPOSED WEST BLEVATION

LINE OF FUTURE CEILING

EXISTING WEST ELEVATION

COLUMN OF THE PROSED BLAVATORY

TO BE PROSED BLAVATORY

FROM SECONDATION OF THE PROSED BLAVATORY

TO BE PROSED BLAVATORY

PROPOSED WEST ELEVATION

PROPOSED WEST ELEVATION

Figure 12: Detailed Existing and Proposed False Façade Cityscape Elevations

Source: Plan Set Sheet dated 12/13/22

Operational Details

Staffing

BayTech currently has an enrollment cap of 350 students and does not propose any change to that cap. At full enrollment, the school is expected to have approximately 160 middle school students, 190 high school students, and 40 faculty and staff.

Schedule

Monday, Tuesday, Thursday, and Friday are typical school days. The typical school day for middle school students begins at 8:15 am and concludes at 2:25 pm. The typical school day for high school students begins 15 minutes later (to allow for staggered morning drop-offs) at 8:30 am and concludes later at 3:30 pm. Lunch period for all students is held from 12:10 pm to 12:40 pm on a typical day.

BayTech collaborates with the separate entity, Higher Ground, to provide after school programming at BayTech. After school programs and sports practices for all grades run until about 5 pm (if lead by BayTech staff) or 6 pm (if run by separate after school program staff).

Wednesdays are a "minimum day," with a shortened class schedule after which BayTech faculty engage in meetings or professional development until 5 pm. There is no change in start times, but lunch is held for all students from 11:25 am to 11:55 am and middle school and high school classes conclude at 1:00 pm and 1:55pm respectively. No sports practices are held on Wednesdays, though after school programs run by Higher Ground are held until 6 pm.

BayTech offers Saturday School every other Saturday during the school year from 9 am-12 pm for catching up on absences and assignments and receiving additional teacher support. Approximately 25-50 students would attend each Saturday School.

After School Activities

The following after school activities are anticipated at the proposed project site on a typical day:

Activity	Attendance	Staff	End Time
Tutoring	30 Students	4	5 pm
Clubs	20 Students	2	5 pm
After School Program*	100 Students	5	6 pm
Fall Sports	15, Middle, 50 High Students	3	5 pm
Winter Sports	40, Middle, 40 High Students	3	5 pm
Spring Sports	20 Middle, 20 High Students	3	5 pm

^{*}The After School Program is run by Higher Ground out of school facilities

The only after school activity on Wednesdays is the After School Program until 6pm.

Rear Yard

The exterior rear yard would be used as outdoor recreational and lunchtime space for the proposed project. This space would be primarily used during the lunch period, when up to 200 students could use the space, then again for after school activities (about 30 students) and sports practice (about 30 of the sports students), which would end by or before 6 pm. The exterior rear yard would also be utilized during special events for parking.

Outdoor recreational facilities would not include regulation-sized courts or fields and would be used only for practice and play (no organized sports games).

Bells will ring inside and outside during the school day. Sports whistles could be used in the outdoor area during the lunch period and after school sports. Amplified speech related to school safety announcements would occur in the outdoor area. Amplified sound would occur during the special event "Field Days" (see Special Events below for additional detail).

Gymnasium Space

The regulation-sized high-school gymnasium would be used during the typical school day for Physical Education classes, lunch, and assembly. After school sports would use the gymnasium space for practice and for official high school basketball and volleyball games. Each week during basketball and volleyball seasons, up to two games could occur during normal after school hours (until approximately 5 pm) and up to one game on the weekend for 2 to 3 hours between 9 am to 3 pm. Approximately 40 to 50 attendees would be expected at games, which includes the home and visiting teams, staff, and spectators.

The gymnasium could also be used for recreational sports by community leagues on weekends. It is anticipated that 25 to 50 attendees would use the gymnasium at any time and would likely be limited to one to two events each weekend sometime between the hours of 9 am and 5 pm.

Special Events

A limited number of special events are anticipated to occur at the school over the course of the school year, as follows. Special events would be subject to City standards and procedures.

- BayTech Community Day
 - One Friday in July from 9am-3pm
 - Attendees: 100-150
 - One self-contained event truck (similar to Kona-Ice.com), which includes music and food and will park in rear yard of school
- BayTech Science Fairs
 - Once in November on a Saturday from 12pm-4pm & once in March from 12pm-4pm
 - o Attendees: 200-250
 - Mostly inside with the possibility to have outdoor experiments which would include an outdoor sound system for students to present their project to a small group around an experiment
- BayTech Back to School Night
 - One night during the week in August (5pm-6pm)
 - Attendees: 100-150
 - All indoors
- Field Day
 - Each year in April around the last Friday of the month (9am-2pm)
 - Attendees: 200 (only students and staff not a community event)
 - Outdoors with music (one self-contained event truck (kona-ice.com or similar) and sports in the gymnasium and on the outdoor recreation field
- Summer Orientation
 - o 3 days in August from 3pm-4pm OR 5pm-6pm (depending on the day)
 - o Attendees: 50-75
 - All indoors
- Summer Camp
 - 2 weeks in July

- o Attendees: 50
- o Indoor/Outdoor. It depends on the day, but it would be from 9am-1pm with the possibility of whistles and sports outside
- Graduation/8th Grade Promotion
 - o Approx. 3rd Friday or Saturday in May (11am-12pm & 4pm-5pm)
 - o Attendees: 100
 - o All Indoor

PROJECT'S CONSISTENCY WITH THE GENERAL PLAN AND ZONING

CEQA Guidelines Section 15183 allows 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." CEQA 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 (the LUTE) for which an EIR (the LUTE EIR) was certified.

General Plan Consistency

As demonstrated below, the proposed project is consistent with the land use and development assumptions, improvement strategies and individual policies of the LUTE of the City of Oakland General Plan.

Neighborhood Center Mixed Use Land Use Designation

The General Plan's land use classification for the project parcels containing the building and parking lot across East 15th Street is Neighborhood Center Mixed Use. This land use classification also applies to the surrounding properties along 23rd Avenue and along International Blvd. The Neighborhood Center Mixed Use classification is intended to maintain, identify, enhance, and create mixed use neighborhood commercial centers. Desired land uses include smaller scale pedestrian-oriented, continuous street frontages that consist of a mix of housing, retail, offices, eating and drinking establishments, active open space, personal and business services and smaller scale educational, cultural or entertainment uses. New developments should be pedestrian oriented and serve nearby neighborhoods, or urban residential with ground floor commercial. The Neighborhood Center Mixed Use land use allows for a maximum floor-area-ratio (FAR) of 4.0. The Neighborhood Center Mixed Use land use classification is one of the City's corridor mixed use land use classifications intended to promote the creation and improvement of multi-use commercial districts linking segments of multifamily housing, as well as supporting the confirmation and creation of neighborhood activity centers as focal points along the corridors.²

Consistency: The project site is located in a relatively small Neighborhood Center Mixed Use area that contains a mix of retail commercial uses and residences. Small scale educational uses are mentioned as an intended land use within the Neighborhood Center Mixed Use land use classification. However, as further addressed below, Community Education Civic Activities (i.e., schools) are conditionally permitted activities within the corresponding Neighborhood Commercial 3 (CN-3) zoning district. The project would have a FAR of approximately 1.4, which is within the 4.0 FAR maximum of the Neighborhood Center Mixed Use classification.

Mixed Housing Type Residential Land Use Designation

The parcel that includes the current parking lot behind the building is in the Mixed Housing Type Residential designation, as is much of the surrounding neighborhood. The Mixed Housing Type Residential classification is primarily used in the old, established neighborhood housing areas of Oakland where a mix of unit types (single family homes, townhouses, and small multi-unit buildings) along with small scale neighborhood serving

² City of Oakland, LUTE (1998) Land Use Classifications, page 148

businesses are frequently found in close proximity to each other. The Mixed Housing Type Residential classification is intended to create, maintain, and enhance residential areas typically located near the City's major arterials and characterized by a mix of single-family homes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate. Indicated desired land use types include residential uses, live-work types of development, small commercial enterprises, schools, and other small scale, compatible civic uses possible in appropriate locations. ³

Consistency: The project's rear lot and adjacent residential uses are located in a Mixed Housing Type Residential area. Schools are mentioned as an intended land use within this land use classification. However, as further addressed below, Community Education Civic Activities (i.e., schools) are conditionally permitted activities within the corresponding Neighborhood Commercial 3 (CN-3) zoning district. The project would have a FAR of approximately 1.4, which is within the 4.0 FAR maximum of the Neighborhood Center Mixed Use classification.

San Antonio Improvement Strategy

The area of 23rd Avenue and International Boulevard is identified in the LUTE as a key "Growth and Change" location for targeted community and economic development.⁴ It is identified as suffering from blighted conditions, many vacant buildings, and illegal activities that may affect the potential to attract businesses and other positive activities. Specific actions listed in the general plan include code enforcement, police enforcement, historic preservation, and façade improvements for commercial revitalization.⁵

Consistency: The project represents a targeted community development activity within an area specifically identified for "Growth and Change" and that would include reuse and historic preservation, façade improvements, and a current-day code compliant building.

Zoning Consistency

As demonstrated below, the proposed project is consistent with the land use and development regulations as provided in the OMC Chapters 17.33 and 17.17.

The project site and the surrounding blocks are zoned a mix of Neighborhood Center Commercial 3 (CN-3), including the project parcel containing the building, and Mixed Housing Type Residential Zone – 2 (RM-2), including both the parcels containing parking behind the building and across East 15th Street.

As a reuse project, there are no substantial proposed changes to the existing building footprint, height, setbacks, or massing and these are not further discussed.

CN-3 Zoning District - Permitted Uses

The CN-3 Neighborhood Center Commercial Zone is intended to, "create, preserve, and enhance mixed use neighborhood commercial centers that have a compact, vibrant pedestrian environment." Pursuant to OMC Table 17.33.01, Community Education Civic Activities (i.e., schools) are conditionally permitted activities within this zoning district. Conditionally permitted activities are permitted only upon the granting of a Conditional Use Permit (CUP). The following CUP criteria are also required:

- 1. That the proposal will not detract from the character desired for the area;
- 2. That the proposal will not impair a generally continuous wall of building facades;

City of Oakland, LUTE (1998) Land Use Classifications, page 146

⁴ City of Oakland, LUTE (1998) Implementation Program - Figure 9: Improvement Strategies for San Antonio, Fruitvale and Lower Hills.

⁵ Ibid, Area Views for San Antonio, Fruitvale and Lower Hills, page 216

- 3. That the proposal will not weaken the concentration and continuity of retail facilities at ground level, and will not impair the retention or creation of an important shopping frontage;
- 4. That the proposal will not interfere with the movement of people along an important pedestrian street; and
- 5. That the proposal will conform in all significant respects with any applicable district plan which has been adopted by the City Council.

Consistency: The project's proposed use of the site as a school (a Community Education Civic Activity) with approval of a CUP would be consistent with permitted uses within the CN-3 zone. The building façade would be restored, and the building is not currently in use as a retail facility.

RM-2 Zoning District – Permitted Uses

Both the parcels containing surface parking behind the building and across East 15th Street are zoned RM-2 Mixed Housing Type Residential. The intent of the RM-2 zone is, "to create, maintain, and enhance residential areas characterized by a mix of single-family homes, duplexes, townhouses, small multi-unit buildings, and neighborhood businesses where appropriate." Pursuant to OMC Table 17.17.01, Community Education Civic Activities (schools) are conditionally permitted activities within this zoning district. Conditionally permitted activities are permitted only upon the granting of a Conditional Use Permit (CUP), as discussed above.

Consistency: The project's proposed use of the site as a school (a Community Education Civic Activity) with approval of a CUP would be consistent with permitted uses within the RM-2 zone.

Conclusions

Based on the above, the project is consistent with the land use and development strategies for this site as presented in the Land Use and Transportation Element of the General Plan, and consistent with applicable zoning regulations of the OMC. Therefore, the project qualifies as a project that is consistent with a Community Plan or zoning pursuant to CEQA Guidelines Section 15183.

Since the project is consistent with the development assumptions of the LUTE and zoning, the project's potential contributions to cumulatively significant environmental effects have already been addressed in the prior LUTE EIR. CEQA Guidelines Section 15183 applies to the project, which allows for streamlined environmental review. The following CEQA Checklist considers whether there are project-specific effects peculiar to the project or its site, and otherwise relies on the streamlining provisions of CEQA Guidelines Section 15183 to address cumulative effects. The project is eligible for consideration of CEQA streamlining pursuant to California Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

Summary of Findings

An evaluation of the proposed project is provided in the Environmental Checklist below. This CEQA Analysis, including attachments, supports determinations that the proposed project, as separate and independent bases, qualifies for (1) an exemption per CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning); (2) streamlining provisions of CEQA under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for In-fill Projects),); and (3) an Addendum to the City of Oakland General Plan Land Use and Transportation Element (LUTE) EIR under Public Resources Code Section 21166 and CEQA Guidelines Section 15164(Addendum to an EIR).

Based on the evaluation in this CEQA Analysis, the following findings can be made:

The proposed project would not result in significant impacts that (1) would be peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or off-site effects in the LUTE EIR; or (3) were previously identified as significant but—as a result of substantial new information that was not known at the time the LUTE EIR was certified—would increase in severity above the level described in the EIR. Therefore, the proposed project is exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

The proposed project is a qualified infill project and would not cause any new significant impacts on the environment that were not already analyzed in the LUTE EIR or result in more significant impacts than those that were previously analyzed in the LUTE EIR. The effects of the proposed project have been addressed in the LUTE EIR, and no further environmental documents are required, in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.

The analyses conducted and the conclusions reached in the LUTE EIR remain valid, and no supplemental environmental review is required for the proposed project modifications. The proposed project would not cause new significant impacts that were not previously identified in the EIR or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to the circumstances surrounding the original project that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required and the project and an addendum to the LUTE EIR could be relied upon for CEQA clearance of the proposed project, in accordance with Public Resources Code Section 21166 and CEQA Guidelines Section 15164.

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

Environmental Checklist

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from approval and implementation of the project. It evaluates those potential environmental impacts in relation to the impacts evaluated in the prior Program EIRs (i.e., the LUTE EIR).

This CEQA Checklist incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified prior Program EIRs. Only those environmental topics that could have a potential project-level environmental impact are included. The 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:

- an equal or less severe impact than previously identified in the prior Program EIRs, or
- a new impact, or a substantial increase in the severity of a significant impact as identified in the prior Program EIRs

If the severity of a potential impact of the project would be the same as or less than the severity of the impact as described in the prior Program EIRs, the checkbox for "Equal or Less Severity of Impact" is checked. If the checkbox is marked as "New or Substantial Increase in Severity," that would indicate that the project's impacts that are either:

- peculiar to the project or the project site (pursuant to CEQA Guidelines §15183(b)(1))
- not identified in the prior Program EIRs (per CEQA Guidelines §15183(b)(2)), including off-site and cumulative impacts (per CEQA Guidelines §15183(b)(3)), or
- due to substantial new information that was not known at the time the prior Program EIRs were certified (per CEQA Guidelines §15183(b)(4))

In such a circumstance, a new EIR would be required for the project. None of these conditions are found for the project, as demonstrated throughout the following CEQA Checklist.

The Checklist uses the acronym SU for significant and unavoidable impacts, and LTS for less than significant impacts, and LTS w/SCAs for impacts that would be reduced to LTS with implementation of identified SCAs and/or detailed recommendations for the project pursuant to these SCAs. Topics for which no impact was identified in the prior Program EIRs remain potentially applicable to the project. The project is required to comply with applicable mitigation measures identified in the prior LUTE EIR (all of which are now incorporated into SCAs) and with other City of Oakland SCAs that are also now applicable. The project sponsor has agreed to incorporate and/or implement these required SCAs as part of the project. A dash (–) is used in the Checklist to indicate that the prior Program EIR did not identify any mitigation measures for the respective environmental impact, and to indicate that no SCAs related to that topic apply to the project. The abbreviation N/A is used when an MM was identified in the prior Program EIRs, but it does not apply to the project.

In some instances, the project applicant has submitted the analysis or plans as required in the SCA. In these cases, the Checklist describes the results or conclusions of these analyses or plans under the heading "Project Plans in Furtherance of SCAs." This heading further indicates any project-specific measures that are recommended to provide further clarification for the underlying SCA. In these cases, the Checklist describes these measures as "Project Recommendations in Furtherance of SCAs," which typically require project-specific measures to be implemented, including measures to address a non-CEQA impact.

Aesthetics

		Relatio	onship to LUTE EIR Findings	Project Cond	clusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
a) Have a substantial adverse effect on a scenic vista, or substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	LTS			-	No Impact
b) Substantially degrade the existing visual character or quality of the site and its surroundings?	LTS with MM	•		SCA Aesthetics-1, Trash and Blight Removal	LTS with SCAs
				SCA Aesthetics-2, Graffiti Control	
				SCA Aesthetics-3, Landscape Plan	
c) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	LTS			SCA Aesthetics-4, Lighting	LTS with SCA
d) Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors; Cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors; Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; or Cast shadow on an historic resource, as defined by CEQA Guidelines section 15064.5(a),6 such that the shadow would materially impair the resource's historic significance?	LTS with MM			N/A	LTS
e) Create winds that exceed 36 mph for more than one hour during daylight hours during the year? [The wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the	SU (Downtown)			N/A	No impact

following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.]		
f) 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 addressing the provision of adequate light related to appropriate uses?	-	- No Impact

Scenic Vistas and Scenic Resources

LUTE EIR

The LUTE EIR concluded that new development could potentially degrade or destroy existing scenic resources in the City, including hillsides, ridges, canyons, trees and riparian areas. However, the LUTE EIR concluded that existing policies in the Open Space, Conservation, and Recreation (OSCAR) Element provide mitigation of visual impacts, and with implementation of these policies, the LUTE EIR found impacts to scenic resources would be less than significant, and no further mitigation measures were required.

Project Analysis

The project site is in a flat, urban area of the City of Oakland, is not located along a designated scenic corridor, and is not located on or near a street or roadway that is designated as a Scenic Route. The site is not located near a state scenic highway, and no impact on scenic resources within a scenic highway would occur. The project is not a new development, and exterior restoration of the building would not alter any views or vistas. For these reasons, the project would have no impact on scenic vistas.

Visual Character and Quality

LUTE EIR Conclusions

The LUTE EIR concluded that policies of the LUTE encourage high-rise development in Downtown Oakland, and that such development could potentially block views, cast shadows, appear visually incongruous with adjacent low-rise development, and block views of the City skyline from surrounding neighborhoods. The LUTE EIR also 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. The LUTE EIR identified mitigation measures related to urban design guidelines, building heights and view corridors that are functionally equivalent to current SCAs to reduce these potential effects to less than significant.

Project Analysis

The project site is located in the San Antonio neighborhood of East Oakland (not Downtown). The project site is approximately one block north of International Boulevard and two blocks south of Foothill Boulevard. The project area is generally characterized by a mix of one- and two-story commercial and residential uses.

The exterior of the building would undergo restoration to rehabilitate its historic character and facilitate a school use with no substantial changes to the building envelope. The renovations would not substantially change the existing visual character or quality of the site or its surroundings.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to apply to all projects to discourage blight, graffiti defacement, and ensure continued compliance with applicable landscaping requirements.

SCA Aesthetics-1: Trash and Blight Removal (applies to all projects): 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.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA Aesthetics-2: Graffiti Control (applies to all projects):

- 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:
 - i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffitiattracting 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 trough Environmental Design (CPTED).
 - v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.
- b) The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:
 - 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.
 - ii. Covering with new paint to match the color of the surrounding surface.
 - Replacing with new surfacing (with City permits if required).

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA Aesthetics-3: Landscape Plan (applies to the establishment of new non-residential facilities):

a) <u>Landscape Plan Required</u>: 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, and with any applicable streetscape plan.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

b) <u>Landscape Installation</u>: The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or another 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 bid by a licensed contractor.

When Required: Prior to building permit final

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

c) <u>Landscape Maintenance</u>: 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 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.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Exterior Lighting

LUTE EIR Conclusions

The LUTE EIR concluded that potential impacts related to light and glare would be less than significant, based on City-wide lighting regulations.

Project Analysis

The project would introduce new sources of lighting, limited to wall packs, building and parking lot security lighting, and front signage. However, the surrounding streets (23rd Avenue and E. 15th Street) are well lighted, with streetlights spaced along each of these streets, and proposed lighting in accordance with existing regulations would not substantially change the existing urban lighting level of the area.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA, intended to minimize new source of substantial light or glare.

SCA Aesthetics-4: Lighting (applies to all projects containing new exterior lighting): 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.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Shadows and Wind

LUTE EIR Conclusions

The LUTE EIR found that development pursuant to the LUTE could cause changes in wind speeds at certain locations in the Downtown Showcase District. The LUTE EIR identified mitigation measures that require project sponsors to incorporate specific design elements in the final siting and designs for high-rise buildings that could reduce ground-level winds within the Downtown Showcase District (now required pursuant to City SCAs).

Project Analysis

The exterior mass of the existing building would not change, and the landscape plan would not introduce any elements that would cast significant shadows on adjacent lots. This impact would not be significant.

The project has no features that are 100 feet tall and is not located in an area requiring a wind study. Therefore, the project would have no wind-related impacts.

Interior Light

The project is not seeking any exception or variance to the policies and regulations of the General Plan, the Planning Code or the Uniform Building Code, and no design measures of the project present a fundamental conflict with policies and regulations addressing the provision of adequate light related to school use.

Conclusions

Based on an examination of the analysis, findings and conclusions of the Prior EIRs, implementation of the project would not substantially increase the severity of any significant aesthetic impacts identified in the Prior EIR, nor would it result in new significant impacts related to aesthetics or visual resources that were not previously identified. The Prior EIR did not identify any mitigation measures related to aesthetics or visual resources that would apply to the project and none would be needed. The SCAs identified above and listed in **Attachment A** pertaining to aesthetics would apply to the project.

Agriculture and Forestry Resources

		Relationship	to LUTE EIR Findings	Project Concl	<u>usions</u>
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact			-	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact			-	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact			-	No Impact
d) Result in the loss of forestland or conversion of forestland to non-forest use?	No Impact	•		-	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	No Impact			-	No Impact

LUTE EIR Conclusions

The LUTE EIR did not include further analysis of potential agricultural impacts. The potential for impacts to agriculture and forestlands were determined to be less significant in the LUTE EIR's Initial Study.

Project Analysis

The project site is identified as Urban Built-Up Land, and is not identified as Prime Farmland, Unique Farmland or Farmland of Statewide or Local Importance pursuant to the Farmland Mapping and Monitoring Program of

the California Resource Agency. The project site is not under a Williamson Act contract. There are no existing agricultural uses in the immediate area, and the project would not conflict with other existing agricultural uses.

Both lots of the project site are completely developed and paved. The project site clearly does not contain forestland or timber resources, nor is it zoned as forestland or for timber production. There are no existing forestry uses in the immediate area, and the project would not conflict with other forestland uses.

Conclusions

Based on an examination of the analysis, findings and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant agricultural or forestland impacts identified in the Prior EIR, nor would it result in new significant impacts related to agriculture or forestlands that were not previously identified. The Prior EIR did not identify any mitigation measures related to agriculture or forestlands that would apply to the project and none would be needed. No SCAs pertaining to agricultural resources would apply to the project.

⁶ California, Resources Agency, Farmland Mapping and Monitoring Program, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed 7/20/22

Air Quality

LUTE EIR Findings	Equal or Less	New or Substantial		
	<u>Severe</u>	Increase in Severity	Applicable SCAs	<u>Level of</u> <u>Significance</u>
LTS with MM	•		SCA Air-1, Dust Controls - Construction Related	LTS with SCAs
			SCA Air-2, Criteria Air Pollutant Controls - Construction Related	
SU	•		-	LTS
N/A			SCA Air-3, Asbestos in Structures	LTS with SCAs
N/A		П	-	No Impact
	SU	SU N/A	SU	Construction Related SCA Air-2, Criteria Air Pollutant Controls - Construction Related SU SU SCA Air-3, Asbestos in Structures

Ambient Air Quality Standards (CAAQS) of nine parts per million (ppm) averaged over eight hours, and 20 ppm for one hour?				
f) Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people?	LTS with MM		N/A	No Impact
g) 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?	N/A		SCA Air-4, Exposure to Air Pollution - Toxic Air Contaminants, Health Risk Reduction Measures	LTS with SCAs

For purposes of this CEQA review, a project-specific air quality analysis has been prepared:

 Illingworth & Rodkin, Inc., BayTech Charter School Emissions Assessment, January 5, 2023 (see Attachment D)

Information in the following section of this CEQA Checklist has been drawn directly from that project-specific air quality analysis.

Construction-Period Emissions of Criteria Pollutants

LUTE EIR Conclusions

The LUTE EIR found that construction activities associated with downtown projects in the Downtown and Coliseum Showcase Districts would generate dust (including the respirable fraction known as PM10) and combustion emissions. (The project is not within the Downtown and Coliseum Showcase Districts.) Mitigation measures requiring implementation of Basic Control Measures (which are substantially similar to current City SCAs) at all construction sites were found to reduce this impact to less than significant levels.

Project Analysis

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction of the project, based on land use types and size, and anticipated construction schedule.

Construction is estimated to take approximately nine months. Other than removal of the parking lot and resurfacing for the recreational area, the project is not anticipated to require extensive use of heavy construction equipment.

On-site emission sources are primarily construction equipment emissions, while off-site emissions include worker trips, hauling, and vendor traffic. Construction activities, particularly during between removal of the back parking lot and resurfacing for the recreational area, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust would include disturbed 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.

CalEEMod provides emission estimates for both on-site and off-site construction activities. Construction duration and equipment usage were based on CalEEMod default information for a 350-student school, with project-specific trip information per Attachment G. **Table 1** shows average daily construction emissions of ROG, NO_X, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project.

Table 1: Project				
<u>Scenario</u>	ROG	<u>NOx</u>	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Total Construction Emissions ¹	0.31 tons	0.64 tons	0.03 tons	0.03 tons
Average Daily Emissions (pounds per day) 1	6 lbs/day	6 lbs/day	0.2 lbs/day	0.2 lbs/day
Thresholds (pounds per day)	<i>54</i> lbs/day	54 lbs/day	82 lbs/day	54 lbs/day
Exceed Threshold?	No	No	No	No

Source: Illingworth & Rodkin, January 2023 (Attachment D)

As indicated, the predicted emissions of criteria pollutants during project construction would not exceed the significance thresholds and would be less than significant.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to reduce construction-period emissions of dust and criteria pollutants.

- **SCA Air-1, Dust Controls Construction Related** (applies to all projects involving construction activities): The project applicant shall implement all of the following applicable dust control measures during construction of the project:
 - i. 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.
 - ii. 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).
 - iii. 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.
 - iv. Limit vehicle speeds on unpaved roads to 15 miles per hour.
 - v. All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.
 - vi. All trucks and equipment, including tires, shall be washed off prior to leaving the site.
 - vii. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

¹ Emissions reported in this table do not factor in emissions reductions resulting from implementation of SCAs.

SCA Air-2, Criteria Air Pollutant Controls - Construction Related (applies to all projects involving construction activities): The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

- i. 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.
- ii. 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").
- iii. 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.
- iv. 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.
- v. Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.
- vi. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

With implementation of SCAs Air-1 and Air-2, dust and criteria pollutants would be further reduced, and the impacts of construction activities on air quality would be less than significant.

Operational Emissions of Criteria Pollutants

LUTE EIR Conclusions

The LUTE EIR determined that the LUTE would not be consistent with population and vehicle miles traveled (VMT) assumptions used at that time for regional air quality planning. The LUTE EIR concluded that the projected population resulting from implementation of the LUTE would exceed ABAG's population estimate by year 2020. Since the Clean Air Plan's (CAP's) emissions inventory was based on ABAG's population projections, exceeding ABAG's population projections was found to generate population-based emissions that would be greater than that assumed in the CAP, and attainment of the State air quality standards could be delayed. The LUTE EIR also found that the projected VMT growth rate pursuant to the LUTE would exceed the projected population growth rate, thereby hindering progress towards achieving VMT performance objectives. The LUTE EIR recommended mitigation requiring, to the extent permitted by law, that large new development within the City be required to implement Transportation Control Measures (TCMs) as recommended by the Bay Area Air

Quality Management District, but this measure was not found to reduce impacts to less than significant levels. While not assessed with the same methodology at the time of the LUTE EIR as it is today, an analysis of the project VMT with respect to VMT reduction goals is included in the Transportation section of this document and Attachment G.

The LUTE EIR also determined that cumulative development of projects in the Downtown Showcase District and the Coliseum Showcase District would result in long-term traffic increases and associated air pollutant emissions, which would adversely affect regional air quality (the project is not located in either the Downtown Showcase District or the Coliseum Showcase District). The LUTE EIR recommended mitigation requiring, to the extent permitted by law, that downtown projects should be required to implement Transportation Control Measures (now replaced by current City SCAs) to reduce mobile source emissions. Many of these measures already would be part of the downtown projects due to the proximity of these projects to existing local and regional transit facilities and existing limitations on parking availability, but this impact was found to be significant and unavoidable.

Project Analysis

Project operations would generate criteria air pollutant emissions (including ROG, NOx, PM₁₀, and PM_{2.5}) from mobile sources (vehicular traffic), area sources (consumer products, architectural coatings, and landscaping equipment), energy sources (electricity use), and indirect emissions attributed to increased water, wastewater, and solid waste demands. The CalEEMod model was used to compute operational air emissions from the project.

Table 2 shows average daily emissions of ROG, NO_X, total PM₁₀, and total PM_{2.5} during operation of the project.

Table 2: Project Operational Period Emissions						
<u>Scenario</u>	ROG	<u>NOx</u>	PM ₁₀	PM _{2.5}		
Annual Project Operational Emissions (tons per year)	0.35 tons	23 tons	0.35 tons	0.10 tons		
Thresholds (tons per year)	10 tons	10 tons	15 tons	10 tons		
Exceed Threshold?	No	No	No	No		
Daily Project Operational Emissions (pounds per day)	2.7 lbs	1.8 lbs	2.7 lbs	0.8 lbs		
Thresholds (pounds per day)	<i>54</i> lbs	54 lbs	<i>82</i> lbs	<i>54</i> lbs		
Exceed Threshold?	No	No	No	No		

Source: Illingworth & Rodkin, January 2023 (Attachment D)

The operational period emissions as shown above would not exceed the significance thresholds, and the project's operational emissions of criterial air pollutants would be less than significant.

Construction and Operational Period Emissions of TAC

LUTE EIR Conclusions

The 1998 LUTE EIR did not quantify or address toxic air contaminants (TACs) or related health risks. It did conclude that implementation of the LUTE would result in traffic increases along roadways in the City and that traffic could result in localized air quality impacts, but no additional mitigation measures were required.

Project Analysis

TACs are defined as substances in the air that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or future hazard to human health. Health effects from carcinogenic air toxins are typically described in terms of increased cancer risk, and those TACs that do not have carcinogenic effects (but that can result in chronic health effects such as asthma) are assessed based on the relative health index (or HI) rating. Some land uses are considered more sensitive to toxic air pollution than others due to the types of population groups affected, or activities involved. Children, pregnant women, older adults and people with existing health problems are especially vulnerable to the effects of toxic air pollution and TACs. Accordingly, land uses where these sensitive-receptor population groups are likely to be located (including hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes) are considered sensitive receptors.

During operation, the project would not have substantial sources of localized TAC emissions. Construction activities (i.e., on-site construction and truck hauling emissions) act as a temporary source of TACs. Construction activities for this project would include some demolition and mostly renovation work. The primary source of TAC emissions from construction work is large construction equipment typically used for groundwork (e.g., grading and excavation). This construction project would not have those types of phases. Because the project involves mostly renovation work, construction equipment that emits diesel particulate matter (a TAC) would not be used extensively. Therefore, construction-related health risks would be *less than significant*.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA intended to reduce construction-period emissions of toxic air contaminants.

SCA Air-3, Asbestos in Structures (applies to the projects as it involves renovation of structures known to contain, or that may contain asbestos): 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.

When Required: Prior to approval of construction-related permit Initial Approval: Applicable regulatory agency with jurisdiction Monitoring/Inspection: Applicable regulatory agency with jurisdiction

Resulting Level of Significance

With implementation of the require SCA, hazards to workers, the public, and the environment related to asbestos in structures would be reduced to less than significant levels.

Odor Nuisance

LUTE EIR Conclusions

The LUTE EIR concluded that the mix of commercial and residential uses could result in odor nuisance problems at residential receptors. The LUTE EIR recommended mitigation whereby residential development would be located above commercial uses, parking garages or any other uses with a potential to generate odors, the odorgenerating use should be properly vented (e.g., located on rooftops) and designed (e.g., equipped with afterburners) so as to minimize the potential for nuisance odor problems. This measure was found to reduce odor impacts to levels of less than significant.

Project Analysis

There is nothing about school uses that generate odors that adversely affect substantial number of people, and nothing unique or peculiar about this school that would generate such odors. The project would include a servery, but odors related to food handling would not be substantial and would not affect a substantial number of people. The project would have no impact related to odors.

Conclusions

Based on an examination of the analysis, findings and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant air quality impact as identified in the Prior EIR, nor would it result in new significant air quality impacts that were not previously identified. The Prior EIR did not identify any mitigation measures related to air quality that would apply to the project and none would be needed. The SCAs identified above and listed in **Attachment A** pertaining to air quality would apply to the project.

Non-CEQA Considerations, Health Risk Exposure of Students and Faculty to Ambient Air Conditions

For purposes of the City's review of the project and its compliance with General Plan policies, a project-specific health risk assessment to new students at the school has been prepared, and is included in:

Illingworth & Rodkin, Emissions Assessment, October 10, 2022 (Attachment D)

Information in the following section of this CEQA Analysis has been drawn directly from that project-specific health risk assessment.

Future students and faculty/staff at the project site could be exposed to existing and reasonably foreseeable future sources of TAC emissions. CEQA does not require the analysis or mitigation of potential effects that the existing environment may have on a project (with certain exceptions). However, the project is required to analyze exposure to TACs per SCA Air-4 because the project would include sensitive receptors (students) within 1,000 feet of multiple sources of TAC emissions.

Sources of TAC Emissions Affecting the Proposed School

Health risk impacts to new students and faculty/staff attending the project school were evaluated by considering multiple sources of TAC and PM_{2.5} emissions within a quarter mile of the project site. Within that one-quarter mile influence area, emissions sources include high volume roadways including E 12th Street, International Blvd, Foothill Blvd, 22nd Avenue, and 23rd Avenue. A public records request was made to BAAMQD to confirm the presence of other sources within the one-quarter mile influence area, and BAAQMD confirmed that there are five additional identified stationary sources of potentially hazardous emissions within one-quarter mile from the project site.

Local Roadway Sources

A review of the project's traffic study identified several local roadways that have traffic volumes greater than 10,000 ADT per day. Traffic ADT estimates were computed by assuming the ADT was ten times the average peak-hour volume. These roadways and respective daily traffic volumes include:

- 22nd Avenue, with ADT of 10,015
- East 12th Street, with ADT of 14,306
- Foothill Boulevard, with ADT of 8,758
- 23rd Avenue, with ADT of 6,511, and

International Boulevard, with ADT of 10,189

Traffic on all other vicinity local roadways have ADTs of less than 10,000 daily vehicles. Analysis of emissions from these roadways involves calculation of DPM, organic TACs and PM_{2.5} emissions from traffic using the Caltrans version of the EMFAC2017 emissions model, known as CT-EMFAC2017. This model provides emission factors for mobile source criteria pollutants and TACs, including DPM (greater details of emissions modeling methodology can be found in **Attachment D**). The average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model, which were then applied to the trip volumes to obtain estimated hourly traffic volumes and resulting emissions from the roadways. Operational traffic roadway travel emissions were modeled with the AERMOD model using line-volume sources (a series of adjacent volume sources along the roadway) to represent traffic emissions on roadway segments within one-quarter mile of the project site (detailed modeling calculations can be reviewed in **Attachment D**).

Interstate 880

Interstate 880 lies about 1,000 feet southwest of the project site. Nearest to the project site, I-880 has a traffic volume of 201,760 ADT, as reported by Caltrans. Caltrans' truck traffic information indicates that about 9.6 percent of this traffic is truck traffic, of which 6.6 percent is considered heavy-duty trucks and 3.0 percent is medium-duty trucks. DPM, organic TACs, and PM_{2.5} emissions for traffic on I-880 were computed using CT-EMFAC2017 2020 emission factors from the traffic mix as developed from Caltrans data. Emissions from traffic on I-880 was computed using the CARB EMFAC2017 emission factor model. Average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model, which were then applied to the average daily traffic volumes to obtain estimated hourly traffic volumes and emissions for I-880. Dispersion modeling of TAC and PM2.5 emissions was then conducted using the U.S. EPA AERMOD model. North- and south-bound traffic on I-880 within about one-quarter mile of the project site was evaluated with the model (detailed modeling calculations can be reviewed in **Attachment D**).

Stationary Sources

A total of five stationary sources are identified as being within a one-quarter mile influence area from the project site. Screening risk values and emissions rates from these sources were provided by BAAQMD. The screening level risks and hazards from these stationary sources were adjusted for distance using BAAQMD's Distance Adjustment Multiplier Tool for Generic Equipment and Gasoline Dispensing Facilities (detailed modeling calculations can be reviewed in **Attachment D**).

Health Risks for School Students

The onsite outdoor concentrations of TAC emissions was modeled separately to identify the respective health risks from each source, and also added to identify the cumulative health risks from all sources, combined.

Relative Health Risks at the Project Site

Using the modeled on-site emission concentrations and health risk parameters described above, increased cancer risks, non-cancer health effects, and PM_{2.5} concentrations was calculated for both single source and combined source emissions, as shown in **Table 3**.

As shown in Table 3, health risks at the project site are below applicable threshold levels. Health risks at the site would not be considered substantial and no additional measures would be required under SCA Air-4.

No age-sensitivity factor adjustment for older students (see Health Risk Parameters for School Students, below) was included in the screening analysis, so risks would be similar or lower if adjustments were included.

Table 3: Health Risk Impacts to Onsite Sensitive Receptors

	Cancer Risk	Annual PM _{2.5}	Hazard
<u>Source</u>	(per million)	<u>(μg/m³)</u>	<u>Index</u>
Rail Line	0.59	<0.01	<0.01
Combined Highway and Roadway Impacts	1.51	0.10	<0.01
East Bay Gas & Food (Facility ID #112492_1, Gas Dispensing Facility) Project Distance at 640 feet	0.05	0.00	0.01
Wong's Valero (Facility ID #110546_1, Gas Dispensing Facility) Project Distance at 480 feet	0.51	0.00	0.02
Several auto body shops (Facility ID #13344, 8994, 20856)	0.00	0.00	0.00
Combination of All Sources	2.66	<0.11	<0.05
Single-Source Threshold	10	0.3	1.0
Individually Exceed Single-Source Threshold?	No	No	No
Cumulative-Source Threshold	100	0.8	10.0
Exceed Cumulative-Source Threshold?	No	No	No

Source: Illingworth & Rodkin, January 2023 (Attachment D)

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to reduce exposure to toxic air contaminants.

- SCA Air-4, Exposure to Air Pollution Toxic Air Contaminants, Health Risk Reduction Measures (applies to the project as a new or expanded school located within 1,000' of a freeway, roadway with significant traffic and/or rail line with over 30 trains per day): The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:
- a) The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures 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. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.

Or -

b) The project applicant shall incorporate the following health risk reduction measures into the project. 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:

- i. Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.
- ii. Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
- iii. Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.
- iv. The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods.
- v. Sensitive receptors shall be located on the upper floors of buildings, if feasible.
- vi. Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (Pinus nigra var. maritima), Cypress (X Cupressocyparis leylandii), Hybrid poplar (Populus deltoids X trichocarpa), and Redwood (Sequoia sempervirens).
- vii. Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.
- viii. Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.
- ix. Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: installing electrical hook-ups for diesel trucks at loading docks; requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards; requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels; prohibiting trucks from idling for more than two minutes; or establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

c) Maintenance of Health Risk Reduction Measures: The project applicant shall maintain, repair, and/or replace any installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Biological Resources

		Relation	ship to LUTE EIR	Project Cond	lusions
Would the Project:	<u>LUTE EIR</u> <u>Findings</u>	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
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?	LTS with policy requirements			-	LTS
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	LTS with policy requirements			-	LTS
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?	LTS with policy requirements			-	LTS
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?	LTS with policy requirements			-	LTS
e) Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan?	LTS with policy requirements			-	No Impact
f) Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code (OMC) Chapter 12.36) by removal of	LTS with policy requirements			SCA Bio-1, Tree Permit	LTS with SCAs

protected trees under certain circumstances?			
g) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources?	LTS with policy requirements		No Impact

Special Status Species

LUTE EIR Conclusions

The LUTE EIR determined that development consistent with the LUTE could damage or remove potential habitat for special status species on undeveloped parcels within the City, particularly at the military bases, along the Estuary, and at Leona Quarry. It also determined that development consistent with the LUTE could affect the habitat of certain special status plants and result in the loss of special status plant species. This was concluded to be a less than significant impact due to existing policies in the OSCAR Element, proposed policies in the LUTE and CEQA requirements for subsequent environmental review.

Project Analysis

The project site and its immediate area does not provide suitable habitat for nearly all special status plants and animals, and the known range for most species is outside of the project site and its immediate area. No special status plant species are expected to occur at the project site due to its highly disturbed and developed nature. The project site is located in an area already subject to a long history of development. The site is currently covered by a building and paved areas. Remaining open space in the vicinity consists of urban parks, including Garfield Park, where vegetation is landscaped and dominated by turf grasses and non-native trees. Surrounding land uses are urban-residential and commercial. Vegetation on the project site is limited to several street trees.

The project's potential impacts on special status species is less than significant.

Riparian Habitat, Wetlands and Sensitive Natural Communities

LUTE EIR Conclusions

The LUTE EIR determined that development consistent with the LUTE could trigger impacts on adjacent lands designated for Resource Conservation (including riparian habitats, wetlands and sensitive natural communities). Greater levels of noise, traffic, lighting, urban runoff and human activity on lands adjacent to waterfront parks could reduce the value of these areas as wildlife habitat. This was concluded to be a less than significant impact with implementation of policies included in the City's OSCAR General Plan Element.

Project Analysis

There are no streams or other potentially jurisdictional drainages located on or adjacent to the project site. The area is heavily urbanized and supports no riparian habitat or other sensitive natural communities. No wetlands are present on or in the immediate vicinity of the project site. The project's potential impact on riparian habitat, wetlands and sensitive natural communities is less than significant.

Wildlife Movement

LUTE EIR Conclusions

The LUTE EIR found that new development, primarily in the Oakland Hills, could result in removal of vegetation, introduction of invasive plant species and displacement of wildlife, and could potentially block migratory corridors. These impacts were limited to heavily wooded areas in the upland hills that form transitional zones between large publicly owned open space lands. The LUTE EIR concluded that such impacts on sensitive habitat and wildlife corridors would be determined and mitigated on a project-specific basis, as future development is proposed on specific sites, and that with requirements for subsequent environmental review this impact was concluded to be less than significant.

Project Analysis

The project site lies within a heavily urbanized area of Oakland, adjacent to numerous heavily traveled city streets and within relatively close proximity to I-880. These transportation corridors all provide major impediments to wildlife movement. There are no stream corridors remaining aboveground within the project vicinity to facilitate wildlife movement and there are no natural plant communities remaining in the area. The project's potential impact on wildlife movement is less than significant.

Conflicts with the Oakland Tree Protection Ordinance

LUTE EIR Conclusions

The LUTE EIR determined that development consistent with the LUTE could result in the loss of mature trees on new development sites. Related impacts could include direct mortality of resident species due to construction activity, habitat loss or degradation, and disturbance of nests. These impacts were concluded to be less than significant based on project-specific mitigation to be implemented as future development is proposed on specific sites.

Project Analysis

There are two existing street trees along the project frontage, which are proposed to be retained. A Tree Permit may be required to specify protection of the existing trees during construction activities per SCA Bio-1. With implementation of City SCAs, the project's potential impact on protected trees is less than significant.

Creek Permit

LUTE EIR Conclusions

The LUTE EIR also concluded that although no wetlands were designated for development pursuant to the LUTE, intensified development activities could alter the quantity and quality of runoff into wetlands, creeks and ultimately San Francisco Bay. This was concluded to be a less than significant impact with implementation of policies included in the City's OSCAR General Plan Element.

Project Analysis

There are no creeks, streams or other potentially jurisdictional drainages located on or adjacent to the project site. The City's Creek Permit process would not apply to the project, and the project would not fundamentally conflict with the City Creek Permit requirements.

Conflict with Habitat Conservation Plan

There are no habitat conservation plans or natural community conservation plans that apply to the project site, and the project would not fundamentally conflict with any such plans.

Conclusions

Based on an examination of the analysis, findings, and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant impacts to biological resource as identified in the Prior EIR, nor would it result in new significant impacts to any biological resources that were not previously identified. The Prior EIR did not identify any mitigation measures related to biological resources that would apply to the project and none would be needed.

Cultural Resources

		Relationship	Relationship to LUTE EIR Findings		lusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines?	LTS with policy and MM	•		SCA Cultural-1, Construction Management Plan	LTS with SCAs
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?	LTS with MM			SCA Cultural-2, Archaeological and Paleontological Resources – Discovery during Construction	LTS with SCAs
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature	LTS	•		SCA Cultural-2, Archaeological and Paleontological Resources – Discovery during Construction	LTS with SCAs
d) Disturb any human remains, including those interred outside of formal cemeteries?	N/A			SCA Cultural -3 Human Remains – Discovery during Construction	LTS with SCAs

Historic Resources

LUTE EIR Conclusions

The LUTE EIR found that many of the City's historic resources are located Downtown and along transit corridors. Higher density uses are planned for these areas, where redevelopment is encouraged, and this could have direct impacts by increasing the pressure to remove or demolish older buildings, including historic structures. This impact was found to be less than significant with implementation of existing policies in the Historic Preservation Element, policies of the LUTE, and additional mitigation measures identified in the LUTE EIR (now included as City SCAs), which restrict removal of historic buildings and require appropriate treatment of retained features, as discussed further below. These measures included amendment of the zoning regulations to incorporate preservation regulations and incentives, and developing design guidelines for Landmarks and Preservation Districts.

Several policies from the 1994 Historic Preservation Element that are listed in the LUTE EIR and relevant to the project include:

Historic Preservation Policy 2.4:

Demolitions and removals involving Landmarks or Preservation Districts will generally not be permitted or be subject to postponement unless certain findings are made. Alterations or new construction involving Landmarks or Preservation Districts will normally be approved if they are found to meet Secretary of the Interior Standards for the Treatment of Historic Properties or if certain other findings are made.

Historic Preservation Policy 3.1:

The City will make all reasonable efforts to avoid or minimize adverse effects on the character-defining elements of existing or potential designated historic properties which could result from public or private projects requiring discretionary City actions.

Historic Preservation Policy 3.5:

For additions or alterations to Heritage Properties or Potential Designated Historic Properties requiring discretionary permits, the City will normally require that either: (1) the design match or be compatible with the property's existing or historical design; (2) the proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the character of the neighborhood; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

<u>Historic Preservation Policy 3.9 (a):</u>

Unless necessary to achieve some other General Plan goal or policy which is of greater significance, the base zone of existing eligible Preservation Districts shall not encourage demolition or removal of a District's contributing or potentially contributing structures nor encourage new construction that is incompatible with these properties.

The LUTE EIR also concluded that the LUTE'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, but that Design Review procedures would ensure that this this impact remains less than significant.

Project Analysis

A historic assessment of the existing building and technical report of the planned renovations have been conducted for this environmental review:

 Page & Turnbull, Cultural Resources Technical Report, Bay Tech Charter School Project, dated January 17, 2023 (see Attachment E)

The following information pertaining to historic resources is as summarized from those reports.

Historic Context

The Palace Theatre was built in 1923 for owner Allen E. King of the King Realty and Amusement Company, but was sold to the chain of T. & D. Junior Enterprises before its opening in August of that year. It was one of several theaters to open in the city during the mid-1920s. In its early years of operation, it featured vaudeville performers in addition to motion pictures. One performer was Bill Robinson, before his rise to fame as Bojangles.

In 1931, the building was purchased by the Golden State Theater Circuit and underwent extensive interior renovation, including wiring for sound, as motion pictures were no longer silent. The interior renovations were done by the Reid Brothers, one of the best known and most well-respected architecture firms in San Francisco around the turn of the century.

The building also featured two storefront spaces that flanked the theater entrance. Beginning in 1924, 1443 23rd Avenue operated as a beauty salon, with the last one closing in 1951, and 1453 23rd Avenue operated as a confectionary, with the last one closing in 1944.

In 1943 the National Housing Agency sponsored conversion of the building office areas into three apartment units, as part of their broader efforts to provide wartime worker housing. The following year the theater was purchased by the Fox West Coast Agency Corp.

In 1953, the building was bought by Mt. Calvary Missionary Baptist Church, and operated as the home for that church until 2017. The storefronts on 23rd Avenue briefly operated as a shoe repair shop (1967-1969) and a restaurant (1967-1970).

The marquee was removed by the church in 1957. The ticket booth has also been removed, though the date is unknown.

Description of Existing Building

The former Palace Theatre is a two-story, stucco clad concrete building with Spanish Colonial Revival style design elements (see **Figure 13**). The building is separated into three main areas -the front "lobby" portion faces 23rd Avenue has a flat roof and stepped parapets; the "auditorium" portion is behind the lobby and has a slightly higher roofline than the lobby, a shallow-pitched gable roof with low, unadorned concrete parapets, and a small central rooftop dome; and the rear "backstage" portion, with the highest roofline and low, unadorned concrete parapets. The front entrance is recessed and flanked by two storefront bays.

The southeast façade facing 23rd Avenue includes the majority of the building's exterior design features, cast concrete ornament forming finials, spiral scrolls, and decorative edging on the parapet. There are symmetrical windows on the second story. The southwest façade is mainly obscured by the adjoining building but has some decorative elements on the set back portion of the parapet. The back of the building is separated into four structural bays by three rectangular pilasters. There is one door and no windows on this side. The northeast façade, facing E. 15th Street, has windows and decorative elements in the front lobby portion of the building. The rest of the façade is separated into seven structural bays, and small rectangular windows on the first and second floors. There are two doors at ground level in the first and fourth bays, and two doors on the second level in the third and seventh bays, with one metal staircase going to the door in the third bay.

The interior of the building is separated into three main sections – the lobby and mezzanine, the auditorium section and the backstage area. The lobby and mezzanine area features a staircase that splits into two wings, leading to the two sides of the mezzanine. The auditorium occupies the full height of the building and is decorated in a Spanish Colonial Revival style that evokes a village setting cityscape, with plaster-cast false façades built out on the southwest and northeast walls (see **Figure 14**).

Exterior and interior defining features and whether or not they are proposed for retention are shown in **Table 4**.

Table 4. Proposed Retention and Removal of Character-Defining Features				
Character-Defining Feature	Retained?			
Exterior Features				
Reinforced concrete construction	Yes			
Two-story height	Yes			
Plaster cladding at front "lobby" portion of exterior	Yes			
Ground floor arrangement of storefronts with recessed entrances flanking the theater's main entrance	Partially			
Location and configuration of recessed entrance to upper floors at southwest side of southeast façade, including rectangular transom	Yes			
Tile flooring with "shadow" of ticket booth at theater entrance	Yes			
Deeply recessed theater entrance (placement of entrance is significant and character-defining, although door materials are not original)	Yes			
Four rectangular pilasters with terracotta capitals at the second story, capped by urn- shaped finials	Yes			
Second story fenestration pattern, with blind-arched window surrounds and rectangular pilasters (window sash materials are not original)	Yes			
Stepped parapet at primary, southeast façade	Yes			
Symmetrically arranged ornamentation at second story and parapet, including rectangular pilasters with shield and scroll motifs, an arcaded intermediate cornice, a leaf and urn motif frieze, and a simple cornice with projecting scrolls	Yes			
Interior Features				
Circulation pattern of entrance, lobby, staircases, mezzanine, and auditorium	Yes			
Location and configuration of lobby staircases (carpeting not original or character-defining)	Yes			
Two glazed tile drinking fountains in lobby and mezzanine	Yes (one relocated)			
Cased beam painted wood ceiling at staircase/mezzanine and auditorium stage	Partially			
Undivided volume of auditorium	No			
"False façade" ornamentation at auditorium side walls, including arched openings, variable "roof" lines, spiral columns, spandrel panels, and iron balconette railings	Partially			
Ornamentation at stage and proscenium arch, including engaged columns, blind arches with molded decoration, tile-clad shed roof segments, and molded balconettes with iron railings	Partially			
Location, curved plan, and stepped seating configuration of balcony	No			
Wrought iron railing at balcony and lobby staircase	Partially			
Location of projection room and projector openings with sliding metal covers at rear of balcony	No			
Four wood plank doors with decorative strap hinges at mezzanine	Partially (two relocated)			





Figure 13: Exterior Views of Existing Building

Source: Page & Turnbull, Cultural Resources Technical Report, 1/17/2023





Figure 14: Interior Views of Existing Building

Source: Page & Turnbull, Cultural Resources Technical Report, 1/17/2023

Historic Evaluation

CEQA Guidelines define a "historical resource" as a resource that is: a) listed in, or determined to be eligible for listing in the National Register or California Register; b) a resource included in a local register of historical resources; c) a resource identified as significant in a historical resource survey; or d) which the lead agency determines to be historically significant, provided this determination is supported by substantial evidence. The Historic Preservation Element of the City of Oakland General Plan (Policy 3.8: Definition of "Local Register of Historical Resources") specifically identifies the following types of properties that constitute the City of Oakland's Local Register of Historical Resources:

- All designated Historic Properties (including Oakland Landmarks, properties within S-7 and S-20 Preservation Combining Zones, Preservation Study List properties and Heritage properties)
- those Potential Designated Historic Properties (PDHPs) that have an OCHS rating of "A" or "B" and those PDHPs that located within an Area of Primary Importance (API)
- Oakland Landmarks
- S-7 Preservation Combining Zone properties, and
- Preservation Study List properties

The building was previously evaluated for eligibility for listing in Oakland's Local Register and was assigned a rating of B*2+.

To be eligible for listing on the California Register, a resource must be historically significant at the local, state, or national level under one or more of the following four criteria:

- 1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- 2. It is associated with the lives of persons important to local, California or national history.
- 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
- 4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

The following summarizes the assessment of each of these four California Register criteria:

- Associated Events: The Palace Theatre was one of several theaters built across Oakland in the 1920s and was
 not an early or influential example of an Oakland theater. It was built on an already developed commercial
 street and was not associated with the early development of the area, though was in a series of theaters for
 this neighborhood. There are no identifiable events of historic importance associated with the building or
 the property, and the subject resources do not meet California Register Criterion 1.
- Associated Persons: Although the first owner, Allen E. King, can be considered a significant figure in local
 entertainment, the theater was sold before it opened. Noteworthy artists performed there during its
 operation as a theater, but the building is not uniquely representative of the significance of any of these
 artists. Pastor George Washington Killens and later pastors, and members of the Mt. Calvary Missionary
 Baptist Church were active in the social and economic movements of the African American community in
 Oakland after World War II, but the use of the building as a church does not meet the criteria for significance
 under the California Register. Therefore, the Palace Theatre does not meet California Register Criterion 2.
- Design/Construction: The former Palace Theatre building is a good example of the Spanish Colonial Revival style in a neighborhood movie theater. The interior of the building is reminiscent of a Spanish Colonial village streetscape, as designed by the Reid Brothers in 1931. While the theater's original designer and

builder, F. T. Kennedy, does not appear to have been a significant or influential practitioner during his years of work in the San Francisco Bay area, the Reid Brothers are considered master architects for their larger body of work. The subject building does meet California Register Criterion 3 for a local level of significance.

• Important Information: The subject building does not appear to have any further historical information potential. Thus, the facility does not meet California Register Criterion 4.

A further qualification needed for listing in any local, state or national historic register is that the property must retain its integrity, defined by the California Office of Historic Preservation as "the authenticity an historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." Page & Turnbull evaluated the building against the seven variables published by the National Register Bulletin⁸, location, setting, design, materials, workmanship, feeling, and association. The building was determined to retain all seven aspects of integrity fully or substantially.

The former Palace Theatre building, while not significant for its role as a theater or a church, does meet the criteria for defining a historic resource pursuant to CEQA due to its architectural design. It is eligible to be listed on the California Register of Historical Resources and is currently designated as a historic resource on Oakland's Local Register of Historic Properties.

Consideration of Interior Features Under CEQA

According to CEQA Guidelines subsection 15064.5(b)(2) and the City of Oakland CEQA Thresholds of Significance Guidelines regarding impacts to cultural and historic resources, a project which "demolishes or materially alters in an adverse manner" the physical characteristics of a resource which justify its listing on or eligibility for the California Register, or which account for its listing on a local register of historical resources, could have a significant impact on the environment. Frequently, for CEQA review the character-defining features of privately owned residences and some institutional and commercial buildings are limited to exterior features which can be observed from public rights-of-way. CEQA review does not, for example, include the interior features of private single-family residences. For some types of historical resources, however, interior character-defining features are important to a building's ability to convey its significance, and are included in the finding of eligibility for the California Register or justification for listing on a local register.

Theater and church buildings are among those which often have significant, publicly accessible interior spaces. The lobbies, auditoriums, and sanctuaries of these buildings frequently include distinctive stylistic details and spatial relationships which convey their use and architectural character. For example, interior character-defining features of the lobby and auditorium of Crest Theater in Los Angeles; the lobby, balcony, and auditorium of the Strand Theater in San Francisco; the sanctuary of the church building at 240 Page Street, San Francisco; and the narthex, nave, and choir loft of the Sacred Heart Church in San Francisco have been included in recent years in project analyses and mitigations under CEQA.

The Palace Theatre building is currently listed on Oakland's Local Register of Historical Resources, with the "atmospheric interior by eminent theater architects Reid Bros." identified by the Oakland Cultural Heritage Survey as an aspect of the building's significance. Interior features designed by the Reid Bros. within public areas of the Palace Theatre, including the lobby, mezzanine, and auditorium, contribute to the building's significance as a historical resource listed on the Local Register. Proposed alterations to or removal of these interior features will therefore be considered in this CEQA analysis of the proposed project.

Project Renovations

Historic Preservation Policies 2.4 and 3.9(a) restrict full demolition of a historic resource. Alterations that would be necessary for project use include seismic retrofitting, construction of a third story within the building's

⁸ U.S. Department of the Interior, National Park Service, *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Washington, D.C.: National Park Service, 1997), 44.

existing auditorium space, conversion of the auditorium to a gymnasium, and renovation of existing office, kitchen, classroom, and backstage spaces for office and classroom use.

Of the character-defining features of the exterior of the building, all of them would be fully retained with the exception of the ground floor arrangement of storefronts with recessed entrances (see Table 4). These would be partially retained, with the entrances being removed. The primary façade on 23rd Avenue would continue to be used for the primary building entrance. Non-historic windows on the second story would be replaced, and new windows would be added to the historic parapet.

As also shown in Table 4, of the character-defining features of the interior of the building, the historic elements specific to the layout of a theater-type use would be lost, including the undivided volume of the auditorium, the balcony area and features, and the projection room and openings. All other character-defining interior features would be wholly or partially retained. Interior renovations would retain the circulation pattern of the entrance, lobby, staircases, mezzanine and auditorium; the location and configuration of the lobby staircases; the glazed tile drinking fountains in the mezzanine and lobby (the latter with relocation); and the lobby portion of the cased beam painted wood ceiling. Two of the four wood plank doors would be reused as office doors in the mezzanine area. Additionally, the false façade cityscape ornamentation at the side walls of the auditorium would be temporarily removed during seismic retrofit work, altered to reduce their height so they fit within the shortened auditorium space, and partially reinstalled. The tripartite columns and arch segments from each side of the stage would also be temporarily removed and re-installed at the rear (northwestern) wall of the gymnasium, in a similar location to that existing. Beams from the decorative cased beam stage ceiling would be salvaged and installed in the new science classroom in a similar location to the former stage, with the painted panels between each beam recreated in the new location based on photo documentation.

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings provides standards and guidance for reviewing proposed work on historic properties. The Standards for the Treatment of Historic Properties are used by federal agencies in evaluating work on historic properties. They have also been adopted by local government bodies across the country for reviewing proposed rehabilitation work on historic properties under local preservation ordinances. The Standards for the Treatment of Historic Properties are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. Typically, one set of standards is chosen for a project based on the project scope. In this case, the proposed project scope is seeking to alter a historic building for continued use. Therefore, the Standards for Rehabilitation are applied. Projects that comply with the Standards for the Treatment of Historic Properties benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historic resource. Projects that do not comply with the Standards for the Treatment of Historic Properties may cause either a substantial or less-than-substantial adverse change in the significance of a historic resource.

Standard 1: A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

Discussion: The proposed project would involve a change in the use of the Palace Theatre building from its current use as a church, its use since 1953, to use as a middle and high school. While many character-defining features would be preserved at the interior and exterior, and the use would remain quasi-public including an assembly space, rehabilitation of the building for use as a school would require substantial

Anne E. Grimmer, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, (U.S. Department of the Interior National Park Service Technical Preservation Services, Washington, D.C. 2017).

alterations to significant interior features, resulting in the subdivision of the auditorium space; removal of the auditorium balcony, projection room, and most of the proscenium arch; and alteration of the façade ornamentation at the auditorium side walls and decorative cased beam stage ceiling. As such, significant interior spaces which convey the building's identity as a theater, as well as character-defining features which convey the building's 1931 renovation by the Reid Brothers, would be lost or significantly altered. As designed, the proposed project would not comply with Standard 1.

Standard 2: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the property will be avoided.

Discussion: The proposed project would retain many character-defining features at the exterior of the Palace Theatre building, as well as in the interior lobby and mezzanine spaces. However, several character-defining features which relate to its original design and use would be altered or removed. At the exterior the recessed entrance doors to the storefronts would be removed and replaced with continuous storefront window systems. At the interior, the auditorium space would be vertically partitioned to build a third story. The balcony and most of the proscenium arch would be removed. The false façade side wall décor in the auditorium decorative cased beam stage ceiling would be altered and relocated within the subdivided auditorium and stage spaces. As designed, the proposed project would not comply with Standard 2.

Standard 3: Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historical properties, will not be undertaken.

Discussion: The proposed project would not add conjectural features or elements from other historic properties. New doors and windows at the exterior, and new interior finishes would be contemporary in style and visually distinct from the building's historic features. Several interior historic features would be relocated within the rehabilitated Palace Theatre building. The false facade details at the side walls of the auditorium would be temporarily removed during seismic retrofit work, altered to reduce their height, and reinstalled. Beams from the decorative cased beam stage ceiling would be salvaged and installed in a new classroom space at the location of the stage, with the painted panels between each beam recreated in the new location based on photo documentation. The decorative tile drinking fountain at the entrance lobby would be moved within the space in which it was originally installed. Rather than creating a false sense of historical development, these retained and recreated features would interpret the building's history as a theater and convey its historic significance in its new use as a school. As designed, the proposed project would comply with Standard 3.

Standard 4: Changes to a property that have acquired significance in their own right will be retained and preserved.

Discussion: No features at the Palace Theatre building which date outside of its 1923-1931 period of significance have acquired significance in their own right. As designed, the proposed project would comply with Standard 4.

Standard 5: Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

Discussion: As discussed above with respect to Standards 1 and 2, the project proposes to alter and remove several character-defining features which date to the theater's 1931 renovation designed by the Reid Brothers, and which convey the Spanish Colonial Revival character of the building's interior. The "village" streetscape elements within the auditorium, including the false façade elements at the side walls and a portion of the proscenium arch, would be removed, altered, and reinstalled within the renovated gymnasium space. The decorative beams of the stage ceiling would be relocated to a classroom space. These

features, like stage sets for the experiences of theater patrons, reflect the craftsmanship that was required to create the atmospheric movie palaces of the 1920s and 1930s. Although the features would be partially retained to interpret the building's history and convey some of its significant historic character, the retained elements would not fully convey the theater auditorium space as a place to be experienced as a small world apart from patrons' day-to-day lives. As designed, the proposed project would not comply with Standard 5.

Standard 6: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

Discussion: Historic features which would be retained at the Palace Theatre building, including the exterior plaster and terracotta ornamentation at the primary façade, the decorative tile drinking fountains in the entry and mezzanine lobbies, the cased beam staircase and mezzanine ceilings, and the historic staircase and railing, would be repaired. Repairs to the altered and reinstalled village streetscape, and recreation of the decorative pattern between the beams of the relocated stage ceiling, would be based on documentation of the historic appearance of these features. Exterior windows and doors which the project would replace in their existing openings are later 20th-century replacements not original to the building. As designed, the proposed project would comply with Standard 6.

Standard 7: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

Discussion: While the proposed project has not yet developed its plan for rehabilitation and repair of historic materials at the Palace Theatre building in detail, any treatments would use the gentlest means possible. The proposed project would comply with Standard 7.

Standard 8: Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Discussion: The project does not propose to conduct any substantial new ground disturbance at the site of the Palace Theatre or the non-historic parcel opposite the historic building on East 15th Street which will be developed as a staff parking lot. However, if archaeological materials or deposits are discovered during project activities, the proposed project would comply with Rehabilitation Standard 8 as long as the standard discovery procedures outlined by SCA Cultural-2 are followed.

Standard 9: New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work should be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and environment.

Discussion: The proposed new exterior elements at the Palace Theatre building, such as replacement windows and doors, replacement storefront systems, new openings and windows, and the exterior staircase at the rear façade, would be designed in a simple contemporary style which would be distinct from the building's Spanish Colonial Revival style while allowing original materials to remain visually prominent. The proposed vertical addition at the southeast portion of the building, to accommodate construction of a third story, would be set behind the existing historic parapets, and would by minimally visible from public rights-of-way. However, as discussed above with respect to Standard 1, the recessed entrance doors to the storefronts would be removed and replaced with continuous storefront window systems. This exterior alteration would change the spatial relationship of the property to the pedestrian right-of-way by changing the building from having the appearance of three separate entrances accessing three businesses to a building with one primary entrance. As designed, the proposed project would not comply with Standard 9.

Standard 10: New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Discussion: The construction of the third story at the interior of the Palace Theatre site, which requires an addition at the southeast side of the building behind the historic parapet, would require substantial alterations to the interior spaces and features of the existing auditorium, balcony, and projection room. In theory, the addition proposed to accommodate the southeast portion of the new third story could be removed without impacting the historic integrity of the building at its exterior. However, alteration, relocation, and removal of interior character-defining features to facilitate construction of the third story, of which the addition would be a part, would be irreversible. This loss of integrity would be limited to the interior of the building. New construction at the site of the Palace Theatre would also include the proposed exterior staircase at the rear façade of the building, and development of the open space in the parcel from paved parking and vehicle circulation area to a recreation area for the school's students. If the staircase and recreation features were removed in the future, the essential form and integrity of the exterior of the property would be unimpaired. As designed, the proposed project would substantially comply with Standard 10.

As the above analysis demonstrates, as currently designed, the project appears to be in compliance or substantial compliance with six of the ten Secretary of the Interior's Standards for Rehabilitation. The project is not in compliance with Standards 1, 2, 5, and 9, which relate to alteration or removal of historic features, spatial relationships, and materials which characterize a property.

Impact Analysis of the Changes to a Historic Resource

According to Section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project complies with the Standards for Rehabilitation, the project's impact "will generally be considered mitigated below a level of significance and thus is not significant." As the proposed project does not comply with all of the Standards for Rehabilitation, it may cause a significant adverse impact under CEQA. The following analysis is provided to determine if the proposed project may affect the Palace Theatre building's character-defining features and historic integrity to the extent that its significance would be materially impaired.

The Palace Theatre building is significant under California Register Criterion 3 as a good example of a neighborhood theater designed in the early 1920s in a Spanish Colonial Revival style, and for its association with master architects, the Reid Brothers, who designed the 1931 interior renovation. Its period of significance is 1923-1931.

Proposed changes to the exterior of the Palace Theatre building would include the removal of two recessed storefront entrances; replacement of non-historic windows, doors, and storefront systems in existing openings; the addition of new openings, with new windows and doors, on all façades; the addition of an exterior staircase at the rear façade; and conversion of the paved area at the rear of the building to recreational space. A small vertical addition at the southeast side of the building would be located behind the historic parapet. The proposed new and replacement windows and doors would have a simple, contemporary style which would not remove, replace, or detract from the exterior character-defining features of the building such as its overall height and massing and ornamented second story and parapet at the primary façade. Removal of the two recessed storefront entrances to either side of the main theater entrance would remove character-defining features and disrupt the spatial relationship of the building with the adjacent pedestrian right-of-way. However, removal of these two entrances would not alter the appearance of the building to the extent that, when viewed from the outside, it would not be able to convey its original design and use as a theater. With its wide and deeply recessed central entrance, configuration and ornamentation of the primary façade, and bulky massing related to the interior auditorium and stage spaces, the building's original use would continue to be legible. It would thus continue to convey its significance under Criterion 3 of the California Register as a neighborhood

theater built in the 1920s. Though several distinctive exterior features have been removed through time, including the marquee and ticket booth, the integrity of the Palace Theater building relative to other examples of its building type and period in Oakland would remain good. Smaller in scale and simpler in ornamentation than its downtown theater contemporaries like the rehabilitated Paramount and Fox theaters, the Palace Theatre building represents a once-common property type for which there are few good lasting examples in Oakland's smaller commercial neighborhoods.

Proposed interior changes at the Palace Theatre building would include subdivision of the auditorium space for construction of a third story within its existing volume and removal of the balcony, projection room, majority of the proscenium arch, and stage. The false façade cityscape details installed as part of the 1931 renovation would be removed during installation of seismic bracing, then altered to fit within the lower-height gymnasium space and reinstalled on the side walls. The spatial relationships and features of the entry and mezzanine lobbies, including the split staircase, would be preserved. At its interior, the building would retain several features associated with the building's 1931 renovation designed by the architectural firm of the Reid Brothers. However, with the false façade cityscape side walls in a renovated gymnasium, the cased beam stage ceiling recreated in a science classroom, and the balcony and most of the proscenium arch removed, the interior space would lose much of its ability to convey the Reid Brothers' design for an atmospheric motion picture theater with a Spanish Colonial style cityscape. The proposed interior alterations would diminish the Palace Theatre building's integrity of design, materials, workmanship, feeling, and association. This could affect the ability of the building to remain eligible for listing on the California Register and Local Register as an individual resource, constituting a significant adverse impact. The impact could become less than significant with the implementation of Standard Conditions of Approval (SCAs) and associated cultural resources management measures to rehabilitate retained historic features as detailed below, requiring documentation of historic and existing conditions at the site, salvage of historic materials for interpretive use, and public interpretation about the building's history and original design.

Impact Analysis to the 23rd Avenue Commercial District Area of Secondary Importance

The 23rd Avenue Commercial District ASI includes 23 contributing buildings constructed between ca. 1890 and 1931, centered around 23rd Avenue, International Boulevard, and East 15th Street. Three contributors are identified as primary to the district's character: the Palace Theatre building (1443-1453 23rd Avenue), the Globe Theatre building (1424 23rd Avenue), and the Kronenberg Bros. department store building (2285 International Boulevard). Located at an intersection and taller than nearby contributors, the Palace Theatre building is an important visual feature within the district, and conveys the district's significance as a neighborhood commercial center through the first decades of the twentieth century. Proposed exterior alterations to the Palace Theatre building would retain most of the exterior character-defining features which date to its 1923-1932 period of significance, allowing it to retain its status as a primary contributor to the ASI. Further, rehabilitation of the building for use as a school would repair its exterior historic decorative features and increase pedestrian activity in this portion of the district, increasing both the visual appeal and public awareness of the Palace Theatre and district's history. The project would not result in an adverse environmental impact with respect to the historic district.

Cumulative Historic Resources Impacts

To evaluate the potential cumulative impact of the proposed project to Oakland's existing historic built environment, Page & Turnbull reviewed projects listed in the City of Oakland Major Development Projects List map and spreadsheet, dated May 21, 2022. Projects with potential impacts to the 23rd Avenue Commercial District ASI and with the potential to impact historic theater buildings of the 1920s and 1930s were identified for the consideration of cumulative impacts.

Of the dozens of theaters which once operated in Oakland's neighborhoods, a small number of buildings remain which represent the early growth of motion picture theaters from the 1920s (and earlier) into the 1930s. These include the buildings of the Eastmont Theatre (7402 MacArthur Boulevard, opened 1927); the Granada Theatre

(8820 International Boulevard, opened 1924); the Fairfax Theatre (5345 Foothill Boulevard, opened 1926); the Hopkins Theatre (3529 MacArthur Boulevard, opened 1939), Rialto Theatre (2723 San Pablo Avenue, opened 1914); Roxie (Dufwin) Theatre (517 17th Street, opened 1928), and the Parkway Theater (1834 Park Boulevard, opened 1925). With a few exceptions such as the Parkway Theater, these buildings are no longer in use as entertainment venues, and interiors have been modified for commercial or religious uses.

Cumulative Impacts to Historic Neighborhood Theaters of the 1920s and 1930s: One current project, the 7300 MacArthur Project (PLN22084), will demolish the former Eastmont Theatre at 7402 MacArthur Boulevard, most recently in commercial use as a pharmacy. This building has not been found to be historically significant as an example of a theater, and it does not appear to retain exterior features which identify or convey its original use. The current project also does not propose to demolish a theater building, and would retain most of the exterior character-defining features of the Palace Theatre building that allow it to convey its original use. As such, the proposed project would not contribute to a cumulative impact to historic resources.

Cumulative Impacts to the 23rd Avenue Commercial District ASI: One current project, the 2372 International Boulevard Project (PLN20116), is located within the 23rd Avenue Commercial District ASI. This project is located in a newly subdivided parcel to the rear of the historic Grant D. Miller Mortuary and Garage building (currently the Agnes Memorial Church) at 2372 International Boulevard, which is a contributor to the ASI. The 2372 International Boulevard Project will demolish non-historic commercial and industrial buildings behind the existing historic mortuary building to construct a four-story, 60-unit affordable housing development for senior citizens. That project will not remove or alter a district contributor, and will result in new development which is set back from the main axes of the ASI, International Boulevard and 23rd Avenue. The 2372 International Boulevard Project would not, when combined with the proposed project, contribute to a cumulative impact to historic resources within the ASI.

The Palace Theatre building at 1443-1453 23rd Avenue, Oakland is historically significant as an example of a 1920s-1930s neighborhood theater, and for its association with the architectural firm of the Reid Brothers, who designed a Spanish Colonial Revival-style interior renovation to the building in 1931. The building is eligible for listing in the California Register as an individual resource under Criterion 3, is listed on Oakland's Local Register of Historical Resources, and is a primary contributor to the 23rd Avenue Commercial District ASI. The building is a historical resource for the purposes of CEQA.

Summary Historic Impacts Conclusions

The proposed project could cause a significant impact on the Palace Theatre building, as it would alter and remove character-defining features of a historic building, particularly interior features, which convey the building's historic significance. It could diminish the building's historic integrity and may impair its ability to convey its historical associations to the extent that it would lose its eligibility for listing in the California Register and Local Register. Without implementation of appropriate cultural resources management measures in support of the City of Oakland's Standard Conditions of Approval, this could constitute a significant impact under CEQA. The impact would be reduced to a less than significant level with measures developed to ensure the preservation of retained character-defining features, documentation of the historic and existing conditions of the resource, and increased public awareness of the building's history through salvage and interpretive use of interior features and installation of a permanent interpretive display.

Standard Conditions of Approval

While not a required SCA, as the project does not meet the conditions of a major development project, the project would voluntarily be subject to the following City of Oakland SCAs, as it applies to cultural resource management:

SCA Cultural-1, Construction Management Plan. Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP)

for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department, Department of Transportation, and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

The CMP would include measures identified by historical consultants Page & Turnbull required to minimize the impact to historical resources and would be formalized as Conditions of Approval.

Project Recommendations in Furtherance of SCAs

To implement Historic Preservation Policy 3.1, and cultural resource management pursuant to SCA Cultural-1, the project would prepare plans for cultural resource management to minimize adverse effects on the character-defining elements of the historic property. The cultural resource management plan would include the following measures:

Cultural Resource Management Measure 1.1: Rehabilitation Treatment Plan: A detailed conditions analysis and rehabilitation plan for retained exterior and interior character-defining features at the Palace Theatre building, including but not limited to the exterior plaster and terracotta decorative elements, exterior floor tile, interior cased beam ceilings, interior auditorium false façade elements, interior staircase and railing, and interior tiled drinking fountains, should be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for Historic Architecture. The plan should include procedures for removal, storage, rehabilitation, and installation of historic elements which are proposed to be relocated within the building, including a contingency plan if there are changes to the project, ownership, and/or schedule mid-stream. The storage plan should specify where removed and retained elements will be held for the duration of project activities prior to reinstallation, and how they will be transported and secured during storage. The rehabilitation plan should additionally describe measures for the protection of historic materials where alterations to the building, such as non-original windows, interface with character-defining historic features such as original window and storefront openings. This rehabilitation plan should include narrative descriptions of proposed activities, significance diagrams, plans, elevations, and section drawings, as needed. The rehabilitation plan should be consistent with the standards outlined in the following documents:

- The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, with specific reference to the Secretary of the Interior's Standards for Rehabilitation.
- The City of Oakland's 1994 Historic Preservation Element of the Oakland General Plan.

The rehabilitation plan should be submitted for review and approval by the Director of the Planning & Building Department or their designee, prior to issuance of any construction-related site permit.

<u>Cultural Resource Management Measure 1.2: Historic American Building Survey (HABS)-Type</u>
<u>Documentation:</u> The project sponsor should retain a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to prepare written and photographic documentation of the Palace Theatre building. The documentation should be prepared

based on the National Park Service's Historic American Building Survey (HABS) Guidelines, and should include the following:

- Drawings: Efforts should be made to locate original construction and renovation drawings dating to
 the building's period of significance. If located, these drawings should be photographed or scanned at
 high resolution, reproduced, and included in the dataset. If construction drawings or plans cannot be
 located, as-built drawings should be produced. The as-built drawings should be reviewed by a
 professional who meets the Secretary of the Interior's Professional Qualification Standards for
 Architecture or Historic Architecture and be reviewed by the professional retained to prepare the
 written history.
- 2. Photographs: Standard large-format or digital photography should be used. If large-format photography is undertaken, it should follow the HABS/HAER/HALS Photography Guidelines (November 2011; updated June 2015). If digital photography is used, it should follow the National Park Service's National Register Photo Policy Factsheet (June 2013), including ink and paper combinations for printing photographs that have a permanency rating of approximately 115 years. Digital photographs should be saved in uncompressed TIF file format. The size of each image should be 1600x1200 pixels at 300 pixels per inch or larger, color format, and printed in black and white. The file name for each electronic image should correspond with the index of photographs and photograph label. Photograph views for the dataset should include:
 - Exterior contextual views.
 - Oblique views of the exterior of the building;
 - Orthogonal views of each side of the building, where possible;
 - Interior views;
 - Detail views of exterior and interior character-defining features.

All views should be referenced on a photographic key. This photograph key should be on a map of the property and should show the photograph number with an arrow indicating the direction of the view. Historical photographs should also be collected, reproduced, and included in the dataset.

- 3. Interior and Exterior 3D Photographic Models: New or existing digital models based on 3D photography should be included in the documentation package. The interior model should provide the capability for user-guided access to all character-defining interior spaces.
- 4. Written History: A historical report should be prepared for the building, summarizing the history of the building, property description, and historical significance. Documentation should adhere to National Park Service standards for "outline form" HABS documentation.

The documentation should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site.

Copies of the drawings, photographs, and report should be given to the Oakland Planning Department and Oakland Cultural Heritage Survey (OCHS), and offered to publicly accessible repositories such as the Oakland Public Library's Oakland History Center and the Bancroft Library at the University of California, Berkeley. Repositories may specify their preference for print and/or digital formats. This measure would create a collection of reference materials that would be available to the public and inform future research.

<u>Cultural Resources Management Mitigation Measure 1.3: Commemoration and Public Interpretation</u>. The Project Sponsor should prepare a permanent exhibit/display, in coordination with an experienced interpretation/exhibit designer, of the history of the Palace Theatre, including but not limited to historic

and current condition photographs, interpretive text, and drawings. Content should focus on the original and renovated interior appearance, the Reid Brothers architectural firm, and the original use of the building as a venue for motion pictures and live performances. The interpretive display should be placed in a suitable publicly accessible space(s) at the project site. As the altered auditorium streetscape elements and relocated stage ceiling would serve more as salvaged interpretive elements rather than as preserved original features, the process of removal, alteration, and reinstallation of these features should be clearly described in on-site interpretive materials.

Design sketches, exhibit text, and narrative descriptions should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History, and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site. Planning & Building Department staff should inspect the installed interpretive display to confirm its adherence to mitigation measure requirements prior to issuance of a Certificate of Occupancy.

<u>Cultural Resource Management Measure 1.4: Salvage:</u> In consultation with a professional who meets the Secretary of the of the Interior's Professional Qualifications Standards for Architectural History, the project sponsor should prepare a Salvage Plan which identifies elements of interior character-defining features not proposed for retention and reuse on site, and which may be salvaged for use in public interpretation. Appropriate venues for interpretation may include but would not necessarily be limited to off-site displays which interpret the history of the 23rd Avenue Commercial District ASI, the history of Oakland's early motion picture theaters, or the work of the Reid Bros. architectural firm. Materials that may be salvaged from the auditorium, balcony, or lobbies for interpretive use may include, but are not limited to: theater seats, iron railings, terracotta roof tiles, and wood or plaster decorative features. The Salvage Plan should describe the procedures to be undertaken by the project sponsor for advertising the availability of salvaged materials for use at appropriate off-site display venues and for removal and transfer of elements to other entities. Planning & Building Department staff should review the Salvage Plan prior to issuance of any construction permits for the site.

Resulting Level of Significance

While some historic elements would be removed or modified, with implementation of SCA Cultural-1 and the identified implementing measures, the building would retain the existing eligibility for listing in the California Register and Local Register as a historically significant example of a 1920s-1930s neighborhood theater, and for its association with the architectural firm of the Reid Brothers, who designed a Spanish Colonial Revival-style interior renovation to the building in 1931. Rehabilitation of historic exterior features and adaptive reuse of the Palace Theatre building as a school would enhance its public visibility in the community, and contribute to public awareness of the neighborhood's history. The project would therefore have a less than significant impact with respect to historic resources.

Archaeological and Paleontological Resources

LUTE EIR Conclusions

The LUTE EIR found that excavation at future development sites could unearth paleontological remains or archaeological resources, and that some of these resources and remains could have scientific importance. The LUTE EIR concluded that if fossils are unearthed during future excavations, a qualified paleontologist should be consulted so that the resource is not damaged or destroyed, and included mitigation measures to 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 (now included in applicable SCAs). These impacts were found to be less than significant with mitigation.

Project Analysis

The project has limited potential to result in an inadvertent discovery of currently unknown buried archaeological resources. The project involves adaptation of an existing building on the site. The paved area behind the building would be demolished with little to no grading or excavation. The parking lot at 2280 E. 15th Street would only have surface level work done.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to protect currently unidentified archaeological resources as a result of new construction.

- SCA Cultural-2, Archaeological and Paleontological Resources Discovery during Construction (applies to all projects involving construction). 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 significance of the find.
 - i. 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.
 - ii. 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 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.
 - iii. 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.
 - iv. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

- **SCA Cultural-3: Human Remains Discovery during Construction** (applies to all projects involving construction). 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.
 - ii. In the event that the remains are Native American, the City shall contact the 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

With implementation of SCAs Cultural-2 and Cultural-3, the potential for the project to cause a substantial adverse change in the significance of an archaeological or paleontological resource, or to disturb any human remains, would be less than significant.

Conclusions

Based on an examination of the analysis, findings and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant impacts to historic, archaeological or cultural resources as identified in the Prior EIR, nor would it result in new significant impacts to these resources that were not previously identified. The Prior EIR did identify mitigation measures to address impacts to historical and archaeological resources, which are now fully incorporated into City SCAs. The SCAs identified above and listed in **Attachment A** pertaining to historic, archaeological and cultural resources would apply to the project.

Tribal Cultural Resources

		Relationship to LUTE EIR Findings		Project Cor	nclusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> <u>Significance</u>
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: • Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or • A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	N/A			SCA Cultural-1, Archaeological and Paleontological Resources – Discovery during Construction SCA Cultural -2, Human Remains – Discovery during Construction	LTS with SCAs

Tribal Cultural Resources

LUTE EIR Conclusions

At the time of preparation of the LUTE EIR, CEQA Guidelines provided that a project will have a significant effect on the environment if it will "disrupt or adversely affect a prehistoric or historic archaeological site or property of historic or cultural significance to a community or ethnic group or social group, or a paleontological site

except as part of a scientific study." Disruption or an adverse effect to an archaeological site was further defined in Attachment I of the CEQA Guidelines as, "alteration or destruction of the site, including both physical and aesthetic effects." CEQA has since expanded its definitions and considerations of tribal cultural resources as separate and distinct from archaeological resources, as more fully addressed, below.

Project Analysis

The project has limited potential to result in an inadvertent discovery of currently unknown buried tribal cultural resources. The project involves adaptation of an existing building on the site. The paved area behind the building would be demolished with little to no grading or excavation. The parking lot at 2280 E. 15th Street would only have surface level work done. As the project does not have the potential to disturb native soil, no record searches or tribal contacts were made for this project. The City's SCAs listed above (SCA Cultural-2 and Cultural-3) would serve to protect any such buried tribal cultural resources as may be discovered during construction, and this impact would be less than significant.

Conclusions

Based on an examination of the analysis, findings and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant impacts to tribal cultural resources as identified in the Prior EIR, nor would it result in new significant impacts to these resources that were not previously identified. The Prior EIR did identify mitigation measures to address impacts to cultural resources, which are now fully incorporated into City SCAs. SCAs Cultural-2 and Cultural -3 identified above and listed in **Attachment** A would apply to the project, and potential impacts to tribal cultural resource would be less than significant.

Energy

Would the Project:	LUTE EIR Findings	Relationship to Equal or Less Severe	New or Substantial Increase in Severity	Project Conclusions Applicable SCAs or Mitigation Level of Measures Significance
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS			SCA Energy-1, Green LTS with Building SCAs Requirements – Small Projects
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	LTS	•		

Efficient Use of Energy

LUTE EIR Conclusions

The LUTE EIR determined that development consistent with the LUTE would result in a marginal increase in energy consumption. This marginal increase in energy demand was not considered to be a significant impact because electric and natural gas consumption may increase, but petroleum use (the largest component of energy use in California) would decrease due to the transit-oriented development pattern promoted by the LUTE, and its emphasis on restoring a balance between jobs and housing. The energy benefits of the LUTE were found to be positive on a regional rather than local basis, and because energy conservation is strongly encouraged by policies in the OSCAR Element.

Project Analysis

Construction of the project would result in the consumption of fuel for construction vehicles and equipment for the renovation of the building and the demolition of the paved area behind the building and creation of new outdoor surfaces. This energy use would be typical of similar construction and would be minimized by repurposing the existing building for school use. Energy used during construction would not be wasteful, inefficient, or unnecessary.

Repurposing of the existing building for use as a school would result in an increased demand for energy related to heating and cooling systems, electricity demands, and other utility systems compared to its use as a church. These energy demands would be typical of a small school use, and would not be a wasteful, inefficient, or unnecessary consumption of energy resources. The project would be required to comply with SCA Energy-1, which require the project applicant to comply with the applicable requirements of the California Green Building Standards (CALGreen) and City's Green Building Ordinance. With implementation of SCA Energy-1, the project would not result in wasteful, inefficient, or unnecessary energy use, and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and this impact would be less than significant.

Conflict with Renewable Energy/Energy Efficiency Plans

Project Analysis

The project would be required to comply with all standards of Title 24 of the California Code of Regulations and CALGreen standards as applicable, incorporating energy-conserving design and construction. Although construction and operation of the project would incrementally increase energy consumption, it would comply with all applicable regulations and energy standards, and its use of energy would not be wasteful, inefficient, or unnecessary. The electrical system would be upgraded to a current, more efficient design. The project would also include implementation of measures identified in the City's 2030 Equity and Climate Action Plan related to energy use and efficiency (see also Greenhouse Gas Emissions). The project's impact related to energy resources would be less than significant.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to address cumulative reduction in citywide energy use. The project would be rated using the Small Commercial Checklist and involves alteration of 5,000 to 25,000 square feet of total floor area to a Historic Non-Residential Building and would therefore be subject to the following SCA.

SCA Energy-1, Green Building Requirements – Small Projects

- a) Compliance with Green Building Requirements during Plan-Check: 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) for projects using the StopWaste.Org Small Commercial Checklist.
 - i. The following information shall be submitted to the City for review and approval with the application for a building permit:
 - 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.
 - Permit plans that show, in general notes, detailed design drawings, and specifications as necessary compliance with the items listed in subsection (b) below.
 - ii. The set of plans in subsection (a) shall demonstrate compliance with the following:
 - CALGreen mandatory measures.
 - All applicable green building measures identified on the checklist approved during the review of a
 Planning and Zoning permit, or submittal of a Request for Revision Plan-check application that
 shows the previously approved points that will be eliminated or substituted.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

- b) Compliance with Green Building Requirements during Construction: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction. The following information shall be submitted to the City for review and approval:
 - i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.

ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

With implementation of the applicable Green Building requirements per SCA Energy-1 identified above and consistent with the project applicant's commitments, the project's construction and operations would not conflict with state or local plans for renewable energy or energy efficiency.

Conclusions

Based on an examination of the analysis, findings, and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant impacts related to energy as identified in the Prior EIR, nor would it result in new significant impacts related to energy demands that were not previously identified. The Prior EIR did not identify mitigation measures to address impacts to energy use, but the energy benefits of the LUTE were found to be positive on a regional rather than local basis because energy conservation is strongly encouraged by policies in the OSCAR Element. The SCA identified above and listed in **Attachment A** pertaining to energy would apply to the project.

Geology and Soils

		Relationship to LUTE EIR Findings		<u>Project Conclu</u>	sions_
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of significance
a) Expose people or structures to substantial risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse? iv. Landslides?	LTS with policy and regulation			SCA Geology-1, Construction-Related Permits SCA Geology-2, Seismic Hazards Zone - Landslide/ Liquefaction	LTS with SCAs
b) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creek/waterways?	LTS with policy and regulation			SCA Hydrology-1, Erosion and Sedimentation Control Measures for Construction	LTS with SCAs
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?	LTS with policy and regulation	•		SCA Geology-1, Construction-Related Permits SCA Geology-2, Seismic Hazards Zone - Landslide/ Liquefaction	LTS with SCAs
d) 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 be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property?	LTS with policy and regulation			-	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	N/A			-	No Impact

Technical information available to support the assessment of environmental impacts in this CEQA analysis included a preliminary Geotechnical Engineering Study. ¹⁰ While site soils were characterized, project design details and anticipated structural loads were not available for that study. An updated study would be required prior to issuance of construction permits.

Surface Faults and other Seismic-Related Hazards

LUTE EIR Conclusions

The LUTE EIR concluded that, in the event of an earthquake, damage from surface fault rupture could affect structures, foundations, and underground utilities, and that damage from strong ground shaking or ground failure (liquefaction, densification, or landsliding) could affect structures, foundations, and underground utilities. Human injury and life also could be risked. This was determined to be a less than significant impact with implementation of existing regulations and existing policies including the Seismic Hazards Mapping Act and related regulations contained in Title 24 of the California Code of Regulations, the Uniform Building Code and the Unreinforced Masonry Program.

The LUTE EIR also found that development of many areas of the City would be subject to geologic hazards including steep slopes, high erosion potential, and landsliding and mud sliding. This impact was found to be less than significant with required implementation of policies related to soil loss at new development sites, soil-related development controls, slide hazards, and graded slope and retaining wall maintenance requirements (now all incorporated into City SCAs).

Project Analysis

The project site area is not within an Alquist-Priolo Earthquake Fault Zone as defined by the California State Department of Conservation Geological Survey, and no active or potentially active faults exist on or in the immediate vicinity of the site. ¹¹ Although surface fault rupture is not necessarily restricted to the area within an Alquist-Priolo Earthquake Fault Zone, the potential risk of surface rupture is highest along active faults. There is low potential that fault rupture would occur within the project site, and project impacts related to surface fault rupture would be less than significant.

The project site is approximately 2.6 miles southwest of the active Hayward Fault Zone and 16 miles northeast of the San Andreas Fault Zone. The Hayward fault is designated by the Alquist-Priolo Earthquake Fault Zoning Act as an active fault. The effects of seismic shaking at the project site are primarily governed by the activity of the Hayward Fault, although ground shaking from future earthquakes on other faults including the Calaveras, San Andreas and Mt. Diablo Faults, would be felt at the site. The intensity of earthquake ground motion at the site would depend upon the characteristics of the generating fault, distance to the earthquake epicenter, and magnitude and duration of the earthquake. However, moderately strong to very strong ground shaking could occur at the site during a large earthquake on one of the nearby faults.

Based on seismic hazard zone maps prepared by the California Department of Conservation Geological Survey, the project site is located within a seismic hazard zone for liquefaction. ¹² In accordance with the Seismic Hazard Mapping Act, a site-specific geotechnical investigation was conducted, as referenced above.

Geo-Engineering Solutions, Inc., Geotechnical Engineering Study, Palace Theatre Renovations – Charter School, 1445 23rd Avenue, Oakland, CA 94606, dated January 18, 2022, available as part of the project application file.

California State Department of Conservation Geological Survey website, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed 9/9/22

¹² Ibid

Based on soil borings at the site, the subsurface sediments consist of medium stiff moderately plastic clay to depths of 10 feet, underlain by clay to the total depths explored of 70 feet. Several thin isolated layers of silty sand were found at depths of about 15 and 30 feet. These layers would be most prone to liquefaction. Given these soils conditions, with the thickness of the non-liquefiable layer overlying the potentially liquefiable layer, the potential for loss of bearing capacity due to liquefaction is low. ¹³

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to address seismic hazards for all new construction or changed occupancy for existing buildings (i.e., to school use).

SCA Geology-1, Construction-Related Permits (applies to all projects requiring a construction-related permit):

The project applicant shall obtain all required construction-related permits and 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA Geology-2, Seismic Hazards Zone - Landslide/Liquefaction (applies to projects located in a Seismic Hazards Zone per the State Seismic Hazards Mapping Act, pertaining to seismically-induced liquefaction and landslides, and involves major additions or alterations, defined as exceeding 50 % of the value of the structure or 50% of the floor area of the structure): 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. The geotechnical report shall contain 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

According to California Building Code (CBC) Section 3408A: Change of Occupancy or Function, "No change shall be made in the use or occupancy of any building that would place the building . . . in a different group of occupancies, unless such building is made to comply with the requirements of this code for that use or occupancy." This provision of the CBC requires that the existing building must be brought into compliance with current (CBC, 2019 Edition) seismic safety standards for a new structure, prior to occupancy as a school.

With construction activities and retrofits conducted consistent with approved building permits per the above SCAs, the seismic hazards related to the project would be brought into conformance with current seismic safety codes and seismic-related impacts would be reduced to levels of less than significant.

Geo-Engineering Solutions, Inc., Geotechnical Engineering Study, Palace Theatre Renovations – Charter School, 1445 23rd Avenue, Oakland, CA 94606, dated January 18, 2022, available as part of the project application file.

Soil Erosion

LUTE EIR Conclusions

The LUTE EIR found that new development that requires grading and earthmoving activities, especially in hillside areas, could increase the potential for erosion that could cause clogging of local culverts, decrease downstream channel capacity, and degrade water quality. This was found to be a less than significant impact with required implementation of policies related to hillside cuts and fills, grading ordinance requirements and grading guidelines (now incorporated into City SCAs).

Project Analysis

Nearly the entire project site is currently covered with asphalt paving or concrete, and not undergoing active erosion. There is the potential for soil erosion to occur during the site preparations for creating new outdoor surfacing, once the existing pavement and concrete is removed. Soils exposed during this period could be subject to erosion from heavy winds or rain.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to reduce soil erosion during construction:

SCA Hydrology-1, Erosion and Sedimentation Control Measures for Construction (applies to all projects that involve construction but do not require a grading permit – see Hydrology section of this CEQA Analysis)

Pursuant to SCA Hydrology-1, the project applicant would need to follow Best Management Practices during construction activities to reduce the potential for erosion, sedimentation and the impacts of construction on water quality and soil erosion impacts would be less than significant.

Differential Settlement and Expansive Soils

LUTE EIR Conclusions

The LUTE EIR found that new development on existing soil conditions at various locations throughout the City could cause structural damage to new and existing buildings, unless properly constructed. This was concluded to be a less than significant impact based on required implementation of policies related to development on fill soils, and consideration of soil constraints for new development (now incorporated as SCAs).

Project Analysis

Dynamic compaction settlement can occur when loose, relatively clean, sandy soil above the water table is subjected to vibrations from strong seismic shaking or vibratory equipment, and can damage buildings and their foundations and result in breakage of underground pipes. The presence of lean to silty clay above the water table determined that the potential for vibration-induced settlement is low.

Expansive soils possess a "shrink-swell" behavior, which is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments as they get wet and then dry. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Soils at the project site are characterized by moderately expansive fine-grained soils in the upper five feet. The geotechnical report would be updated with project design details and structural loads to make conclusions regarding required measures to address site characteristics.

Standard Conditions of Approval

The existing building on the project site has been in place since early 1920s and has not experienced substantial settlement or expansive soil conditions. Pursuant to *SCA Geology-1, Construction-Related Permits* and *SCA Geology-2, Seismic Hazards Zone - Landslide/Liquefaction*, the project would be required to follow the recommendations of the site-specific geotechnical report. The project applicant would be required to obtain all required construction-related permits and approvals prior to construction, and to comply with all standards, requirements and conditions contained in construction-related codes that ensure structural integrity and safe construction as applicable at the time.

With implementation of the City SCAs, potentially damaging soils conditions at the site would be fully addressed by appropriate building standards, and these impacts would be reduced to a level of less than significant.

Conclusions

Based on an examination of the analysis, findings, and conclusions of the Prior EIR, implementation of the project would not substantially increase the severity of any significant impacts related to geology or geologic hazards as identified in the Prior EIR, nor would it result in new significant impacts related to geology and geologic hazards that were not previously identified. The Prior EIR did identify policy and regulatory requirements to address geologic impacts, and these requirements are now fully incorporated into City SCAs. The SCAs identified above and listed in **Attachment A** pertaining to geology would apply to the project.

Greenhouse Gas Emissions

		Relationship to LUTE EIR Findings		Project Cond	clusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
a) Involve a stationary source producing total emissions of more than 10,000 metric tons of CO2e annually (stationary sources are projects that require a BAAQMD permit to operate)?	Not addressed				LTS
b) Involving a land use development that fails to demonstrate consistency with the 2030 Equitable Climate Action Plan adopted by the City Council on July 28, 2020 (land use developments are projects that do not require a BAAQMD permit to operate)?	Not addressed	•		SCA GHG-1, Project Compliance with the Equitable Climate Action Plan (ECAP Consistency Checklist	e SCAs
Consistency with the 2030 ECAP can be shown by either:					
a) committing to all of the GHG emissions reductions strategies described on the ECAP Consistency Checklist, or					
b) compliance 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.					

LUTE EIR Conclusions

Climate change and greenhouse gas emissions were not expressly addressed in the 1998 LUTE EIR. However, since information on climate change and GHG emissions was known, or could have been known when the LUTE Program EIR was certified, it is not actually new information as specifically defined under CEQA. 14

This conclusion is consistent with the First District Court of Appeal's ruling in Concerned Dublin Citizens v. City of Dublin, 214 Cal.App.4th 1301 (2013)

Project Analysis

2030 Equitable Climate Action Plan

In July of 2020, the Oakland City Council adopted the 2030 ECAP with the intention that additional policies and ordinances would be adopted to implement some of the 2030 ECAP strategies. The 2030 ECAP sets forth a detailed, equitable path toward cost-effectively reducing Oakland's local GHG emissions by a minimum of 56% below baseline 2005 GHG emission levels by 2030, transitioning away from fossil fuel dependence, removing carbon from the atmosphere through local projects, and ensuring that all of Oakland's communities are resilient to the foreseeable impacts of climate change by 2030. The current statewide goal pursuant to Senate Bill (SB) 32) is to reduce California's GHG emissions to 40 percent below 1990 levels by 2030. Oakland's adopted 2030 reductions target of 56% below Oakland's 2005 GHG emission reaches beyond that of the State's 40% target. The 2030 ECAP contains not only deeper targets, but also qualitatively different and more focused actions than those contained in the previous 2020 Energy and Climate Action Plan, including a major focus on building decarbonization and energy resilience, fully removing natural gas from the built environment and installing energy storage systems where appropriate and feasible.

The City's 2030 ECAP does not have a specific numeric threshold for GHG emissions from individual projects. Instead, in December 2020, the City Planning Commission adopted an ECAP Checklist that every project applicant must complete to show consistency with the 2030 ECAP. The ECAP Consistency Checklist includes topics such as consistency with the General Plan, parking limitations to reduce vehicle trip generation, electric vehicle charging infrastructure requirements, and all electric buildings (i.e., no natural gas connections). If a project can qualitatively demonstrate compliance with the ECAP Consistency Checklist items, or alternatively demonstrate to the City's satisfaction that a Checklist item is not applicable, then the project would be considered in compliance with the City's 2020 CEQA GHG threshold of significance.

Standard Conditions of Approval

The project is subject to applicable City of Oakland SCAs related to greenhouse gas emissions, as listed below.

- SCA GHG-1: Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist (applies to all projects that submit an Equitable Climate Action Plan Consistency Checklist and that commit to all the measures in the ECAP Consistency Checklist): 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.
 - 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Planning

b) For physical ECAP Consistency Checklist measures to be incorporated into the design of the project, the measures shall be implemented during construction.

When Required: During construction Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building

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 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.

When Required: Ongoing

Monitoring/Inspection: Bureau of Planning

Project Compliance with SCAs

The project applicants have completed an ECAP Consistency Checklist, which answers affirmatively to all applicable Checklist questions, meaning that the project would fully comply with the City's 2030 ECAP, and would incorporate all 2030 ECAP Consistency Checklist items into the project's design, construction, and operation. The ECAP Consistency Checklist and respective answers are provided below in **Table 5**.

Table 5: ECAP Consistency Checklist

Yes No

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1. 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?

Pursuant to Oakland Municipal Code Table 17.72.01, schools are a conditionally permitted activity within the zoning that applies to the project site, permitted through the CUP process. Although the project would not take advantage of allowable density and/or FAR standards, the project would reuse an existing building that has been underutilized for many years, repurposing that building for school use.

Yes No



2. For developments in "Transit Accessible Areas" as defined in the Planning Code, would the project provide: i) less than half the maximum allowable parking, ii) the minimum allowable parking, or iii) take advantage of available parking reductions?

The project site is located within a "Transit Accessible Area" as defined in the Planning Code. The project is located within 0.10 miles from stops on two high-frequency transit routes (AC Transit Route 1T bus rapid transit and Route 40, thereby meeting the screening criteria for being located within 0.5 mile of an existing major transit stop or existing stop along a high-quality transit corridor.

Pursuant to Oakland Planning Code Section 17.116.070: Off-street parking—Civic Activities, the number of parking spaces for a Community Education - high school use is not specified but is to be prescribed by the Director of City Planning.

The project would provide 19 to 23 parking spots (depending on whether valet parking is utilized) for the 40 faculty and staff and additional parking for visitors along the frontage outside of school loading hours. There will be no parking for students. While there is no quantified maximum or minimum parking under the Planning Code, it is anticipated the proposed parking would be determined to represent reduced parking to take advantage of available transit in the area.

As to the relationship between parking and GHG emissions, the transportation analysis presented in this CEQA Analysis demonstrates that the daily VMT rate for the proposed project is calculated to be 8.0 VMT per student and staff, or approximately 40% below the existing City of Oakland VMT per capita threshold of 13.5 VMT per person miles. Therefore, the project does not result in a significant impact based on VMT, and mobile source GHG emissions would be similarly low.

Yes No

N/A

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)

The project is not providing any structured parking.

Yes No

4. For projects that are subject to a Transportation Demand Management Program, would the project include transit passes for employees and/or residents?

The project would generate more than 50 peak hour trips and is therefore subject to TDM requirements. The project is proposing to provide subsidized/discounted or free public transit passes for 100 students.

Yes No

N/A

5. For projects that are not 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 car-share program; guaranteed ride home programs)

The project would generate more than 50 peak hour trips and is therefore subject to TDM requirements.

Yes No

N/A

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?

The project consists of repurposing an existing building for use as school and relying on the separate paved lot that is currently marked to accommodate parking spaces. Plug-in electric vehicle (PEV) charging infrastructure is not part of the existing parking lot.

Yes No

N/A

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)

The existing building on the property has been used as a church by different groups for decades. No demolition of residential or commercial space would occur.

Yes No

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)

There are no designated existing or proposed bicycle routes along the project frontages. That being said, the project proposes a school loading zone along the E. 15th Street frontage and does not propose any new curb cuts for vehicle access.

Yes No



9. Does the project not create any new natural gas connections/hook-ups?

The project consists of repurposing an existing building for use as a school, and the building is currently served by existing natural gas connections. The project would not create any new natural gas connections or hook-ups and an electric heating and cooling system is proposed.

Yes No

10. Does the project comply with the City of Oakland Green Building Ordinance (Chapter 18.02 of the Oakland Municipal Code), if applicable?

Per the City's Green Building Ordinance, the project (as a historic non-residential Additions and Alterations between 5,000 – 25,000 square feet) is required to comply with Small Commercial Checklist. The Small Commercial Checklist was completed as required and indicates compliance with all applicable measures.

Yes No

N/A

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?

The project is not a retrofit of a City-owned or City-controlled building.

Yes No

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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)?

The project would comply with the Construction Demolition Ordinance by providing a minimum of 75% diversion of construction and demolition waste (including Alternative Daily Cover).

Yes No

N/A

13. For City projects: Have opportunities to eliminate/minimize fossil fuel dependency been analyzed in project design and construction?

The project is not a City project.

Yes No

N/A

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?

The project is not located in a Very High Fire Hazard Severity Zone.

Yes No

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?

The project will not remove any trees, but will add new trees as part of landscape plans for the site.

Yes No

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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?

The project will comply with all applicable NPDES C.3 requirements for protection of water quality, consistent with applicable SCAs. There is not any on-site or near-site feature that meets the definition of a creek, and the City Creek Protection Ordinance does not apply.

The project is a development project subject to SCA GHG-1. The above ECAP Consistency Checklist qualitatively demonstrates compliance with the Checklist items as part of the project's design, or alternatively demonstrates that certain items are not applicable. The project is in compliance with the City's CEQA GHG threshold of significance, and its GHG impacts would be less than significant. Since the project does commit to all of the applicable GHG emissions reductions strategies described on the ECAP Consistency Checklist, the project is not required to implement SCA GHG-2, Greenhouse Gas Reduction Plan.

Conclusions

The Prior LUTE EIR did not address potential impacts associated with greenhouse gas emissions. However, the project would not result in new significant impacts related to greenhouse gas emissions. The Prior EIR did not identify mitigation measures to address greenhouse gas emissions, and none would apply. SCA GHG-1 identified above and listed in **Attachment A** pertaining to greenhouse gas emissions and climate change applies to the project, and the project has demonstrated compliance with the requirements of this SCA.

Hazards and Hazardous Materials

		Relationship to LUTE EIR Findings		Project Conc	<u>lusions</u>
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> <u>Significance</u>
a) 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?	LTS with regulations			N/A	LTS
b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? — Or, 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? — Or, Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors, Or- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	LTS with regulations			SCA Hazards-1, Hazardous Building Materials and Site Contamination SCA Hazards-2, Hazardous Material Related to Construction SCA Air-4, Asbestos in Structures	s
c) 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?	N/A			-	LTS
d) 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, and would result in a significant safety hazard for people residing or working in the project area; Or - Be located within the vicinity of a private airstrip,	N/A			-	LTS

and would result in a significant safety hazard for people residing or working in the project area?				
e) Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	N/A		-	LTS
f) 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?	N/A		-	LTS

Technical information available to support the assessment of environmental impacts in this CEQA analysis included a Phase I Environmental Assessment of the properties, ¹⁵ and a hazardous building materials survey of the existing building. ¹⁶

Hazardous Materials Site LUTE EIR Conclusions

The LUTE EIR determined that new development pursuant to the LUTE would increase the potential for construction activities that could increase the likelihood of encountering contaminated soil or groundwater, and potentially exposing workers and the community to hazardous substances. The LUTE EIR also found that remediation efforts at identified hazardous sites could expose workers and the public to hazardous substances. These impacts were concluded to be less than significant, with implementation of existing laws, regulations and policies including those of the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), the California Department of Toxic Substances Control (DTSC), the Bay Area Air Quality Management District (BAAQMD) and the Alameda County Department of Environmental Health (ACDEH). No additional mitigation measures were required.

Project Analysis

The Phase I Environmental Assessment of the properties included a visual inspection of the sites and regulatory and records searches. No recognized environmental conditions were found for the project site. Nearby sites were found to have potential concerns, with multiple properties having a history of automobile servicing or dry cleaning, however, no property was considered to be a significant environmental concern to the project site. There was a mechanical unit in the basement that was probably a part of a former ventilation system and had used mineral oil. If this area of the basement undergoes renovation, the unit would need to be removed and/or any remaining oil would need to be assessed and disposed of per hazardous waste regulations. The project impacts related to hazardous materials site would be less than significant.¹⁷

ACC Environmental Consultants, Phase I Environmental Site Assessment, 1445-1453 23rd Avenue and 2280 East 15th Street, Oakland, California, 94606, dated February 4, 2022, available as part of the project application file.

Milani & Associates, Hazardous Material Survey and Assessment for the Word Assembly Family of Churches Building located at 1453 23rd Ave, Oakland, CA 94606, dated January 11, 2022, available as part of the project application file.

ACC Environmental Consultants, Phase I Environmental Site Assessment, 1445-1453 23rd Avenue and 2280 East 15th Street, Oakland, California, 94606, dated February 4, 2022, available as part of the project application file.

Hazardous Building Material, Hazardous Construction Materials and Disposal of Hazardous Materials

LUTE EIR Conclusions

The LUTE EIR concluded that new development pursuant to the LUTE would increase the potential for demolition and renovation activities and that many of the demolished or redeveloped buildings could contain hazardous building materials that could result in increased exposure to asbestos, lead, mercury or PCBs, with associated public health concerns. This was determined to be less than significant impact with implementation of applicable existing laws and regulations and oversight from outside agencies, including ACDEH (which are now incorporated into City SCAs).

Project Analysis

Materials Used during Construction

Project construction activities may involve the use, transport and disposal of hazardous materials such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances used during construction. Construction and renovation of the project would also require the use of gasoline and diesel-powered equipment. Inadvertent release of large quantities hazardous materials into the environment could adversely impact soil, surface waters, or groundwater quality.

Existing Hazardous Building Materials

In January of 2022, Milani & Associates (Milani) performed a limited pre-renovation hazardous materials survey to determine the potential for hazardous building materials in the existing structure, as follows. ¹⁸

- A visual survey for asbestos containing materials was conducted according to applicable regulations. ¹⁹ No bulk samples were collected or tested. Fifty-four (54) suspect building components were identified as possibly containing asbestos and should be treated as asbestos containing unless further tests prove otherwise.
- Milani's lead paint survey used x-ray fluorescence to detect concentrations of lead in representative painted and coated surfaces, relative to worker health and safety and preliminary waste characterization. The survey found ten categories of painted surfaces with levels high enough to qualify as lead-based paint, and 11 categories of surfaces containing lead but below lead-based paint categorization measures.
- Milani also conducted a visual inspection for Other Regulated Materials, Universal Wastes and PCB-containing materials. Materials that potentially contain PCB include fluorescent light fixtures, expansion/window joint caulking, ballasts, window glazing, and 9-inch floor tiles. Other materials that may be regulated include HVAC components, furnace room and water heater units, electrical switches and kitchen equipment.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs, intended to apply to all projects to reduce the potential for hazardous building materials to present a hazard to workers, the public or the environment.

SCA Hazards-2, Hazardous Building Materials and Site Contamination (applies to projects involving redevelopment or change of use of a historically industrial or commercial site)

Milani & Associates, Hazardous Material Survey and Assessment for the Word Assembly Family of Churches Building located at 1453 23rd Ave, Oakland, CA 94606, dated January 11, 2022, available as part of the project application file.

Visual survey conducted in accordance with the listed criteria in California Occupational Safety and Health Administration Title 8 Code of Regulations 1529, BAAQMD Regulation 11, Rule 2 Section 303.8, OSHA Title 29 Code of Federal Regulations (CFR) 1926.1101, and Environmental Protection Agency Title 40 CFR Section 61.145 Subpart M.

a) Hazardous Building Materials Assessment: 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.

When Required: Prior to approval of demolition, grading, or building permits

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building / ACDEH

b) Environmental Site Assessment Required: 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.

When Required: Prior to approval of construction-related permit Initial Approval: Applicable regulatory agency with jurisdiction Monitoring/Inspection: Applicable regulatory agency with jurisdiction /ACDEH

c) Health and Safety Plan Required: 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building / ACDEH

- **SCA Hazards-3, Hazardous Materials Related to Construction** (applies to all projects involving construction). 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:
 - i. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction;
 - ii. Avoid overtopping construction equipment fuel gas tanks;
 - iii. During routine maintenance of construction equipment, properly contain and remove grease and oils;
 - iv. Properly dispose of discarded containers of fuels and other chemicals;
 - v. 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
 - vi. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA Air-3, Asbestos in Structures also applies to the project, as it involves renovation of structures known to contain, or that may contain asbestos. See Air Quality section of this CEQA Analysis.

With implementation of these SCAs, hazards to workers, the public, and the environment related to hazardous building materials would be reduced to less than significant levels.

Operational Hazards

LUTE EIR Conclusions

The LUTE EIR determined that new development pursuant to the LUTE could encourage new business and the expansion of existing businesses, with the potential to increase the quantities of hazardous substances used, stored and transported, and also increasing the potential for accidents or spills and the potential to expose workers, the public and the environment to these chemicals. This was concluded to be a less than significant impact with implementation of all existing and applicable laws and regulations ACDEH (which are now incorporated as requirements of City SCAs).

Project Analysis

Chemicals that might be used at the school during operations may include typical household hazardous materials or special school-related substances, such as laboratory chemicals, paints, photo processing chemicals, cleaning products, and pesticides and fertilizers. When used according to the manufacturers' recommendations and labeling, these chemicals would not create a significant hazard to the environment. It is not expected that the project would store or use such chemicals at reportable quantities (i.e., not more than 55 gallons of a liquid, 200 cubic feet of a gas, or 500 pounds of a solid), as most of the site would be paved or covered with artificial turf, with minimal landscaping around the perimeter of the back lot The use of typical household and landscape chemicals consistent with manufacturers labeling would be a less than significant environmental impact.

Conflicts with Public or Private Airports

LUTE EIR Conclusions

The LUTE EIR did not directly address the issue of conflicts with operations or safety hazards related to public or private airports.

Project Analysis

The project site is not located in the vicinity of a public airport or private airstrip. The project site is located approximately 3 miles away from the Oakland International Airport, and approximately 10.5 miles from the

Hayward Executive Airport. The project would not conflict with airport operations or result in a safety hazard regarding airport operations.

Emergency Response / Emergency Evacuation

LUTE EIR Conclusions

The LUTE EIR did not directly address the issue of emergency response and emergency evacuations.

Project Analysis

The project is directly accessible from two sides via public streets. Additionally, the basketball hardcourt area is identified as emergency vehicle access along a third building side. A fire safety plan would be submitted, and reviewed by the local fire officials or appropriate City departments as part of the design review process. This would include fire apparatus access, roadway emergency access during construction and during operational procedures. Emergency access requirements applicable to the project are included in the Oakland Fire Code, which adopts the California Fire Code with amendments. ²⁰ Since adequate emergency access is required as part of the Oakland Fire Code, and project plans would be reviewed by local fire officials as part of the design review process, the project would have a less than significant impact with respect to emergency access. There is no adopted emergency response plan or emergency evacuation plan that the project would conflict with.

Wildfire Hazards

LUTE EIR Conclusions

The LUTE EIR did not directly address the issue of wildfire hazards.

Project Analysis

The project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. The project site is not at or near an area where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, nor is it located within a High Fire hazard Severity Zone (either State of Local Responsibility Area) as determined by the California Department of Forestry and Fire Protection.²¹

City of Oakland, Oakland Fire Code. https://library.municode.com/ca/oakland/codes/code_of_ordinances?nodeId=TIT15BUCO_CH15.12OAFICO. Accessed Aug 23, 2022.

California Department of Forestry and Fire Protection, High Fire hazard Severity Zone map, accessed at: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

Hydrology and Water Quality

		Relationship to LUTE EIR Findings		Project Conc	lusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> Significance
a) Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters?	LTS with regulations	•		SCA Hydrology-1, Erosion and Sedimentation Control Measures for Construction	LTS with SCAs
b) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water quality?	LTS			SCA Hydrology-2, Site Design Measures to Reduce Stormwater Runoff SCA Hydrology-3, Source Control Measures to Limit Stormwater Pollution	
c) Create or contribute substantial runoff which would be an additional source of polluted runoff, or which would exceed the capacity of existing or planned stormwater drainage system?	LTS	•		-	LTS
e) 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	LTS			-	LTS
f) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater water quality?	LTS			-	LTS
f) Result in substantial flooding on- or off-site; 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; 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;	LTS with regulations			-	LTS

or expose people or structures to a substantial risk of loss, injury, or death as a result in inundation by tsunami?				
f) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources?	LTS with regulations		-	LTS

Construction Impacts on Water Quality

LUTE EIR Conclusions

The LUTE EIR determined that increased development activity throughout the City, including at locations adjacent to creeks and waterways, could result in water quality impacts during construction. This was concluded to be a less than significant impact, with implementation of existing regulations including the Grading, Erosion Control and Sedimentation ordinance, the Creek Protection Stormwater Management and Discharge Control ordinance, as well as NPDES stormwater permit requirements.

Project Analysis

The existing building would remain and be rehabilitated for school use, with minimal exterior alteration. The existing asphalt which covers almost all of the remaining surface area of the lot behind the building would be removed and replaced with a hard court, seating area, service area, and a synthetic turf field, with a narrow strip of landscaping around the perimeter of the back lot. The property at 2280 E. 15th Street is covered by asphalt and would remain intact, only undergoing any necessary repairs. These construction activities could potentially result in polluted runoff or increased sediment into the storm drain system.

Grading and improvement plans prepared by the applicant indicate that site preparation and grading activities would not meet the 500 cubic yards limit at which a grading permit is required.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs, intended to apply to all projects that do not require a grading permit, to reduce the potential for construction-related impacts to water quality.

SCA Hydrology-1, Erosion and Sedimentation Control Measures for Construction (applies to all projects involving construction activities that do not require a grading permit per OMC sec. 15.04.660)

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.

When Required: During construction-

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

With implementation of this SCA, measures required of the Construction General Permit and included in applicable BMPs would reduce adverse effects of construction-related erosion, siltation and contamination to less than significant levels.

Post-Construction Impacts on Water Quality

LUTE EIR Conclusions

The LUTE EIR found that development pursuant to the LUTE could potentially affect the quality of stormwater runoff, but implementation of regulatory requirements (i.e., NPDES C.3 measures) would reduce impacts to less than significant. The LUTE EIR also found that those areas of the City with the greatest potential for change are already developed with similar uses, and the resulting changes in water quality would be negligible. This was concluded to be a less than significant impact.

Project Analysis

Implementation of the project would result in increased activity at the site that, absent adequate controls, could contribute to non-point source pollution levels in the Oakland Estuary and San Francisco Bay. Non-point sources of pollutants from rooftops, landscape areas, and streets and parking areas may be carried by stormwater into the drainage network. Elevated levels of oil and grease, petroleum hydrocarbons, metals and nutrients could enter into site runoff, and could contribute pollutants that would adversely affect water quality.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs, as a project that is replacing some impervious surface area but would not be considered a Regulated project under the NPDES C.3 requirements.

SCA Hydrology-2, Site Design Measures to Reduce Stormwater Runoff (applies to all projects that create or replace (any amount) of impervious surface, except projects considered Regulated Projects under the NPDES C.3 requirements)

Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:

- a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas;
- b. Utilize permeable paving in place of impervious paving where appropriate;
- c. Cluster structures;
- d. Direct roof runoff to vegetated areas;
- e. Preserve quality open space; and
- f. Establish vegetated buffer areas.

When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: N/A

SCA Hydrology-3, Source Control Measures to Limit Stormwater Pollution (applies to all projects except those considered Regulated Projects under the NPDES C.3 requirements)

Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:

a. Stencil storm drain inlets "No Dumping – Drains to Bay;"

- b. Minimize the use of pesticides and fertilizers;
- c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;
- d. Cover trash, food waste, and compactor enclosures; and
- e. Plumb the following discharges to the sanitary sewer system, subject to City approval:
- f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;
- g. Dumpster drips from covered trash, food waste, and compactor enclosures;
- h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;
- i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and
- j. Fire sprinkler teat water, if discharge to on-site vegetated areas is not feasible.

When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: N/A

With implementation of SCAs Hydrology-2 and Hydrology-3, the potential for the project's new operations to introduce new sources of pollutants into the storm drain system and eventually to the Oakland Estuary and San Francisco Bay would be reduced to levels of less than significant.

Increased Stormwater Runoff

LUTE EIR Conclusions

The LUTE EIR found that development pursuant to the LUTE could potentially increase impermeable surfaces leading to an increase in the volume of runoff, but since the areas with the greatest potential for change pursuant to the LUTE are already developed with similar uses, the changes in runoff patterns and volume were found to be negligible. This was concluded to be a less than significant impact.

Project Analysis

Nearly the entire project site is currently covered with impervious surfaces (rooftops and paving). None of these existing surface types are effectively (easily) penetrated by water, as defined by the City of Oakland's Supplemental Stormwater Form, and the project would replace approximately 5,100 square feet of the back lot with pervious surfaces, which would decrease the volume of post-project runoff from the site. The project site is not located in a susceptible area as indicated on the Hydromodification Susceptibility Map, and as such, would not create or contribute substantial additional runoff that could exceed the capacity of the stormwater drainage system, would not substantially alter the existing drainage patterns increasing the rate or amount of runoff that could result in substantial off-site erosion, siltation or flooding, and is not required to incorporate hydromodification measures into its stormwater plans.

Groundwater

LUTE EIR Conclusions

The LUTE EIR's Initial Study concluded that change in groundwater and groundwater quality would be less than significant.

Project Analysis

The project site is nearly completely covered with impervious surface (rooftop and paving), and the E. 15th Street property is also covered with asphalt paving, surfaces not effectively (easily) penetrated by water. Little to no groundwater recharge occurs on the site. The project would decrease the impervious surface area from approximately 100% of the outdoor area to approximately 44% of that area and therefore would not result in a decrease in groundwater recharge. The parking lot on E. 15th Street would remain 100% impervious. Water supplies for the City, including the project, are provided by EBMUD, no groundwater wells are proposed, and the project would not deplete local groundwater supplies.

Flooding

LUTE EIR Conclusions

The LUTE EIR recognized mapped flood hazard zones that show extensive areas of Oakland that would be inundated during a 100-year flood, but found that flooding would generally occur only as sheet flow with depths of several inches in most areas and that few areas would be subject to flood levels greater than one or two feet. The LUTE EIR cited the Federal Emergency Management Agency's National Flood Insurance Program that restricts development in flood-prone areas, and requirements for communities to evaluate and establish flood plain management regulations to participate in the Flood Insurance Program. The LUTE EIR did not make a specific CEQA conclusion as to specific impacts related to flooding.

Project Analysis

The project site is not located within a designated as a Flood Hazard Area²² (i.e., it is not within the 100-year or 500-year floodplain). The likelihood of flooding from tsunamis, seiches or mudflows is negligible in inland areas such as the project site. The project would not expose people or structures to the risk of loss due to flooding, would not result in substantial flooding on- or off-site, and would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map.

Creek Protection Ordinance

LUTE EIR Conclusions

The current form of the City's Creek Protection Ordinance did not exist at the time the LUTE EIR was prepared. However, the LUTE EIR did determine that increased development activity adjacent to creeks and waterways could result in water quality impacts that would be less than significant with implementation of regulations that did apply at the time, including the Creek Protection, Stormwater Management and Discharge Control ordinance.

Project Analysis

The project site lies in a highly urbanized area of East Oakland that is flat and covered primarily by impervious surfaces (commercial and residential buildings, paved areas and parking lots). There are no creeks or streams that cross the project site, or that are within 100 feet of the project site. The project would pose no potential conflicts with the City's Creek Protection Ordinance and would not require a Creek Permit.

Federal Emergency Management Agency (FEMA), Flood Insurance Rate maps, accessed at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=122.30533076554285,37.79076327833007,-122.26378871231911,37.80771833963476

Land Use and Planning

		Relationship to LUTE EIR Findings		Project Conclusions	
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> <u>Significance</u>
a) Physically divide an established community?	N/A				LTS
b) Result in a fundamental conflict between adjacent or nearby land uses?	LTS with MM			N/A	LTS
c) Conflict with any applicable land use plan, policy, or the 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?	LTS			-	LTS
d) Conflict with any applicable habitat conservation plan or natural community conservation plan	No Impact			-	No Impact

Division of a Community

LUTE EIR Conclusions

The LUTE EIR did not directly address the issue of physical divisions of established communities, but does identify policies intended to protect existing industrial, residential, and commercial activities and areas from the intrusion of potentially incompatible uses.

Project Analysis

Land uses within the immediate vicinity of the project site are primarily residences and commercial uses. The project consists of repurposing an existing building that was previously utilized as a theater then church to now accommodate a charter school, and to change an existing paved lot into outdoor areas for the school. There is nothing about these activities that would divide any existing commercial activities, or divide an established community. The project would not divide an established community, and its impacts would be less than significant.

Land Use Conflicts

LUTE EIR Conclusions

The LUTE EIR concluded that redevelopment of large parts of the City pursuant to LUTE policies would change land uses in a number of locations in a manner that could be inconsistent with existing surrounding land uses, and that zoning changes could render some existing land uses as nonconforming. Mitigation measures identified in the LUTE EIR included establishing adequate buffers between commercial/industrial lands and residential

uses, establishing appropriate locations for live/work uses, ensuring that structures and sites are designed in an attractive manner, and establishing performance-based standards for noise, odors, light/glare, traffic volumes, and other characteristics of industrial activities that are located near commercial or residential areas. With implementation of these mitigation measures, the LUTE EIR concluded this impact to be reduced to levels of less than significant.

Project Analysis

The General Plan designation for the project site is a mix of Neighborhood Center Mixed Use and Mixed Housing Type Residential, and the zoning is a mix of Neighborhood Commercial - 3 (CN-3) and Mixed Housing Type Residential (RM-2).²³ The project site is located in an area that contains a mix of commercial and residential uses. Within this neighborhood, the addition of a small charter school would not result in a fundamental land use conflict. Schools are allowed in CN-3 and RM-2 zones with the granting of a Conditional Use Permit (CUP). The project's consistency with the General Plan and zoning is discussed in more detail in that section earlier in this document.

Conflicts with Land Use Policy Intended to Avoid or Mitigate Impacts

LUTE EIR Conclusions

The LUTE EIR concluded that the plans and policies contained in the LUTE for land use and transportation topics would be consistent with federal, state and regional policies (except for the Clean Air Plan), as well as policies and programs of adjacent jurisdictions.

Project Analysis

Oakland Policies and Standards

Potential conflicts with General Plan policies are not an inherently significant effect on the environment within the context of CEQA. Only if the project were to be in conflict with policies or regulations intended to reduce or avoid the potential impacts of the project on the environment would such conflicts be considered significant.

As indicated within each section of this CEQA Analysis, the project would not cause any environmental effects that would be detrimental to nearby residential areas. The project would not cause environmental effects that would adversely affect public health, safety or general welfare of the community, and the project does not involve substantial routine use of hazardous material or hazardous waste.

The City of Oakland has established SCAs that are applied uniformly to development projects and that the City has found to substantially mitigate environmental effects. These SCAs incorporate policies and standards from other adopted plans, policies and ordinances such as the Oakland Planning and Municipal Code, Stormwater Water Management and Discharge Control Ordinance, Oakland Protected Trees Ordinance, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, and the 2030 Equity and Climate Action Plan, among others. These SCAs would be adopted as standard requirements of the project if the project is approved, and would substantially mitigate environmental effects attributed to the project, and/or the project's potential contribution to broader cumulative effects. As such, the project would be required to comply with, rather than conflict with any plans or policies adopted for the purpose of avoiding or mitigating any if its potential environmental effects.

As discussed in the zoning consistency section of this document, with approval of the proposed merging of the lot with the building and adjacent lot with the proposed recreational area, that school site would have a CN-3 zoning. The existing accessory parking lot across E. 15th Street would remain in the RM-2 zone. As no significant changes are proposed to the use of the separate parking lot, the RM-2 zoning is not further discussed,

Habitat Conservation Plans/Natural Community Conservation Plans

As described in greater detail in the Biology section of this CEQA Checklist, the project site is located in an urbanized and previously developed portion of the city, and the site itself is predominantly covered by a building and paved areas. There are no adopted habitat conservation plans or natural community conservation plans that apply to the site or the surrounding area, and the project would not conflict with any such plans.

Noise

		Relationship to LUTE EIR Findings		Project Conc	lusions
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> <u>Significance</u>
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, or generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code section 8.18.020) regarding persistent construction-related noise?	SU			SCA Noise-1, Construction Days/Hours SCA Noise-2, Construction Noise SCA Noise-3, Extreme Construction Noise	
b) During project construction, expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA)?	SU			SCA Noise-4, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities	LTS with SCA
c) Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding operational noise, or expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency?	LTS with regulations			SCA Noise-5, Operational Noise	LTS with SCA
d) 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, and a 3 dBA permanent increase is attributable to the project?	LTS			-	LTS
e) 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	LTs			-	LTS

working in the project area to		
excessive noise levels?		

¹ SCA Noise-3 is strictly applicable to all construction projects, but would only be triggered if extreme noise-generating (90 dBA or above) construction activities, such as pile driving, are subsequently proposed.

For purposes of this CEQA review, a project-specific noise analysis has been prepared:

 Illingworth & Rodkin, Inc., Bay Area Technology School Noise and Vibration Assessment, January 11, 2023 (see Attachment F)

Information in the following section of this CEQA document has been drawn from this project-specific noise and vibration analysis.

Existing Noise Environment

A noise monitoring survey was performed to quantify and characterize ambient noise levels at the project site. These surveys were conducted between Tuesday, July 26, 2022, and Thursday, July 28, 2022.

The monitoring survey included two long-term measurements (LT-1 and LT-2) and two short-term noise measurements (ST-1 and ST-2). The noise environment results primarily from local traffic along E. 15th Street and 23rd Avenue. Other secondary sources of noise, including traffic along International Boulevard, BART operations, aircraft, dogs barking, and children playing, are audible in the site vicinity.

- Long-term measurement LT-1 was made in the existing main parking lot, approximately 100 feet
 southwest of the centerline of E. 15th Street. This location was chosen to represent ambient noise levels
 on-site as well as at nearby residential land-uses northwest of the site. Typical hourly average noise
 levels at this location ranged from 52 to 61 dBA Leq during the day and from 46 to 56 dBA Leq at night.
 The day-night average noise level on Wednesday, July 23, 2022, was 59 dBA Ldn.
- Long-term measurement LT-2 was made in the existing smaller parking lot, approximately 75 feet
 northeast of the centerline of E. 15th Street. This location was chosen to represent ambient noise levels
 at nearby residential land-uses northeast of the site. Typical hourly average noise levels at this location
 ranged from 53 to 62 dBA Leq during the day and from 46 to 55 dBA Leq at night. The day-night average
 noise level on Wednesday, July 23, 2022, was 60 dBA Ldn.
- Short-term noise measurement ST-1 was made over a 10-minute period on Tuesday, July 26, 2022, between 10:20 a.m. and 10:30 a.m. This location was approximately 40 feet southwest of the centerline of E. 15th Street and quantified typical noise levels at the residential building facades along E. 15th Street, adjacent to the existing Palace Theater building. Eleven vehicles passed along E. 15th Street during the measurement, including one truck and one motorcycle. Recorded noise levels from smaller vehicles passing by ranged from 56 to 64 dBA, while the truck and motorcycle produced noise levels of 72 dBA and 67 dBA, respectively. Distant traffic noise from other local roads and I-880 ranged from 52 to 55 dBA. A helicopter generated noise levels up to 62 dBA, while dogs barking ranged from 53 to 55 dBA and sounds of children playing ranged from 55 to 57 dBA. The 10-minute Leq measured at ST-1 was 58 dBA.
- Short-term noise measurement ST-2 was made concurrently with ST-1 over a 10-minute period on Tuesday, July 26, 2022, between 10:20 a.m. and 10:30 a.m. This location was approximately 35 feet northeast of the centerline of E. 15th Street and quantified typical noise levels at the residential building facades along E. 15th Street, across from the existing Palace Theater building. Noise sources and levels similar to those at ST-1 were identified and measured. The 10-minute Leq measured at ST-1 was 57 dBA.

The specific locations and daily trends in noise levels at all long-term locations are shown in **Attachment F**.

Construction Noise

LUTE EIR Conclusions

The LUTE EIR determined that new development, particularly in the Downtown and in the Coliseum Showcase Districts, would generate short-term increases in noise due to construction. (The project is not within the Downtown and Coliseum Showcase Districts.) Mitigation measures require project sponsors to implement noise control techniques to minimize disturbance to adjacent or nearby sensitive noise receptors during project construction (now required pursuant to City SCAs), but this impact was determined to be significant and unavoidable.

Project Analysis

Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, the distance between construction noise sources and noise-sensitive receptors, any shielding provided by intervening structures or terrain, and ambient noise levels. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating.

Construction activities are expected to last for approximately nine months and are to take place mainly inside the existing building. However, minor construction and restoration is planned for the exterior of the building, including cutting holes to create space for new windows. The main parking lot is to be demolished to make way for the proposed recreational-use area. The parking lot demolition is assumed to last for less than 10 days. Minor repair work on the smaller parking lot is not expected to generate significant noise levels.

Construction would take place Monday through Friday during the hours of 7:00 a.m. to 7:00 p.m., consistent with the Planning Code. Using typical construction noise levels for schools, noise from outdoor construction activities would range from 75 to 84 dBA Leq at a distance of 50 feet assuming the that only minimal equipment would be present at site given the relatively small exterior work areas. The nearest residential property line is located about 35 feet northwest of the approximate center of construction. At this distance, construction noise levels may reach 87 dBA Leq during parking lot demolition. This would result in an increase of 23 to 28 dBA over the existing daytime ambient noise level of 59 to 64 dBA Leq along the property line. The nearest nonresidential property line is located about 75 feet southwest of the approximate center of construction. Noise levels during parking lot demolition may reach 80 dBA Leq at the property line. This would result in an increase of up to 21 dBA over the existing daytime ambient noise level of 59 dBA Leq at the property line. While both of these noise levels are above receiving property line maximum standards, such standards would not be applicable because this portion of the work would last less than 10 days. Most other construction work would occur inside of the existing building, which will shield the nearby properties from the noise. Interior construction noise is not anticipated to cause a significant noise increase at nearby property lines.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs, intended to reduce the impacts of construction noise on nearby receptors.

SCA Noise-1, Construction Days/Hours (applies to all projects involving construction): The project applicant shall comply with the following restrictions concerning construction days and hours:

- i. 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.
- ii. 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.
- iii. 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

SCA Noise-2, Construction Noise (applies to all projects involving construction): 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:

- i. 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.
- ii. 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.
- iii. Applicant shall use temporary power poles instead of generators where feasible.
- iv. 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.
- v. 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

SCA Noise-3, Extreme Construction Noise (applies to all projects involving construction, but is not anticipated to be triggered by the proposed construction activities):

- a. Construction Noise Management Plan Required: 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:
 - i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
 - 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;
 - iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
 - 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
 - v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Public Notification Required: 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.

When Required: During construction Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

The SCAs listed above are consistent with the requirements of the Oakland Municipal Code. As such, the project's construction noise impacts would be less than significant.

Construction Vibration

LUTE EIR Conclusions

The LUTE EIR determined that new development, particularly in the Downtown and in the Coliseum Showcase Districts, would generate short-term increases in vibrations due to construction. (The project is not within the

Downtown and Coliseum Showcase Districts.) Mitigation measures require project sponsors to implement control techniques to minimize vibration disturbance to adjacent or nearby sensitive receptors during project construction (now required pursuant to City SCAs), but this impact was determined to be significant and unavoidable.

Project Analysis

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, etc.) are used in areas adjacent to developed properties. Construction activities would include demolition of an existing parking lot, parking lot renovation, minor construction and restoration of the exterior of the building, and interior construction of offices, classrooms, and a gymnasium/multi-purpose area.

The City of Oakland does not establish a vibration limit for construction. The California Department of Transportation recommends a vibration limit of 0.3 in/sec PPV for buildings that are found to be structurally sound and designed to modern engineering standards. ²⁴ Groundborne vibration levels exceeding 0.3 in/sec PPV at surrounding structures of modern construction would have the potential to result in a significant vibration impact.

Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity of the work area. Pile driving would not be used as a method of construction for the project.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Residences are located as close as about 15 feet from the northwestern property line of the main site. At this distance, vibration levels resulting from potential heavy equipment use (e.g., vibratory rollers, clam shovel drops) would be expected to be about 0.354 to 0.368 in/sec PPV, which would be above the 0.3 in/sec PPV limit recommended by the California Department of Transportation.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA, intended to reduce vibration impacts from construction activities (including the use of heavy off-road equipment to perform earthwork) in close proximity to adjacent properties that contain buildings near the adjoining property line, or adjacent to vibration sensitive activities where vibration could substantially interfere with normal operations.

SCA Noise-4, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at the adjacent residential building at 2263 E. 15th Street . The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.

When Required: Prior to construction Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building

The California Department of Transportation also recommends a vibration limit of 0.25 in/sec PPV for historic and some old buildings. The nearest historic building to the site is the California Cotton Mills located approximately 1,100 feet to the southwest at 1091 Calcot Place. This is farther than the potential impact of construction vibration from the project location so is not further considered in this analysis.

Project Plans in Furtherance of SCAs

Pursuant to SCA Noise-4, the Noise and Vibration study prepared for this CEQA review (see **Attachment F**) was prepared by an acoustical engineer. The Study identifies threshold levels of vibration that could damage structures and/or substantially interfere with activities located at the adjacent residential building at 2263 E. 15th Street, and identifies the following means and methods of construction to be utilized in order to not exceed the vibration thresholds.

Project Recommendations in Furtherance of SCAs

To further implement SCA Noise-4, the following site-specific recommendations from the Noise and Vibration Study (see **Attachment F**) will be implemented.

<u>Noise Improvement 4.1: Vibration Reduction.</u> The following construction methods are recommended pursuant to SCA Noise-4 to reduce vibration levels due to the project's construction activities to less than 0.3 in/sec PPV threshold at nearby buildings:

- a) Avoid using heavy construction equipment such as vibratory rollers, hoe rams, large bulldozers, and tampers within 20 feet of nearby structures.
- b) Avoid dropping heavy objects or materials within 20 feet of nearby structures.
- c) Place operating equipment on the construction site as far as possible from vibration-sensitive receptors.
- d) Use smaller equipment to minimize vibration levels below the limits.
- e) Select demolition methods not involving impact tools.

Implementation of these identified means and methods of construction pursuant to SCA Noise-4 would ensure that vibration impacts of the project would be less than significant.

Operational Noise

LUTE EIR Conclusions

The LUTE EIR found that land use changes proposed pursuant to the LUTE would allow a mix of commercial and residential uses, which could pose noise compatibility problems between residential and commercial uses. The LUTE EIR also found that permitting live/work and other forms of housing in transitional industrial areas could pose future noise compatibility problems. These impacts were concluded to be less than significant with implementation of policies included in the LUTE, implementation of the Oakland Noise Ordinance and other measures to reduce the potential for noise conflicts between residential uses and existing or future industrial uses. These policies, ordinances and measures are now fully incorporated into City SCAs.

Project Analysis

Operational noise sources attributable to the proposed Project include parking lot activities and outdoor recreational activities at the proposed outdoor-use area. Table Oakland-2 of the City of Oakland Planning Code establishes maximum allowable noise levels at residential, civic, and commercial receiving land uses to be enforced during daytime operational hours.

Parking Lot

Parking for the project would be provided at an existing 0.10-acre parking lot across E. 15th Street from the main site. Noise-sensitive residential land uses are adjacent to the parking lot, to the northwest and southeast, with the closest being approximately 30-feet from the center of the parking lot.

Noise sources associated with the use of the parking lots include vehicular circulation, engines, car alarms, squealing tires, door slams, and human voices. The sound of engines starting, doors slam closing, and people talking in the parking lot typically reach maximum levels of 50 to 60 dBA Lmax at a distance of 50 feet. Parking lot noise would generate maximum noise levels in the range of 54 to 64 dBA Lmax at a distance of 30 feet. The hourly average noise level resulting from all these noise-generating activities in a small parking lot would be anticipated to reach 40 dBA Leq at a distance of 50 feet, and 44 dBA Leq at a distance of 50 feet from the parking area.

Maximum noise levels generated in the parking lot would be lower in level than existing maximum noise levels in the area and would be below the 80 dBA Lmax daytime threshold established by the City of Oakland. This is a less-than-significant impact.

Recreational Area

An outdoor recreational use area would be located on the northwestern portion of the main site. Noise-sensitive residential land uses are to the northwest, with the closest receptor location being approximately 40-feet from the assumed center of the recreational use area. The noise standards contained in Table Oakland-2 are reduced by 5 dBA for noise consisting primarily of speech, therefore the applicable noise limit would be 55 dBA at the adjacent residential property.

The loudest part of the day would be during lunchtime when up to 200 students would be expected to be outside. However, during this time, many of the students would be eating lunch and not participating in louder recreational activities. Only about 30 students at a time are expected outside during after school activities, and the noise levels would be much lower than at lunchtime.

The noise associated with the use of playground areas is typically characterized by children yelling and playing and whistles during recess or after school activities. Average noise levels generated during playground activities typically range from 59 to 65 dBA Leq at a distance of 50 feet. At a distance of 40 feet, average noise levels during recess periods could reach 61 to 67 dBA Leq at the nearest residential property line, which would exceed the 55 dBA limit by 6 to 12 dBA. The existing walls along the commercial property lines would be sufficient to maintain noise levels at or below City of Oakland standards, and noise levels at the residences across E. 15th Street would not exceed 55 dBA.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA, intended to reduce the impacts of operational noise of all projects:

SCA Noise-5, Operational Noise: 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.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Project Plans in Furtherance of SCAs

Pursuant to SCA Noise-5, the Noise and Vibration study prepared for this CEQA review (see **Attachment F**) was prepared by an acoustical engineer. The Study identifies the following noise reduction improvement in order to not exceed the vibration thresholds.

Project Recommendations in Furtherance of SCAs

To further implement SCA Noise-5, the following site-specific recommendations from the Noise and Vibration Study (see **Attachment F**) will be implemented.

<u>Noise Improvement 5.1: Operational Noise Reduction</u>. The following improvement shall be constructed as a part of the project to ensure operational noise levels would remain within Oakland performance standards:

a) Construct a solid noise barrier along the northwest residential property line to shield adjacent residential land-uses from outdoor area noise. This noise barrier shall be a minimum of 8 feet tall except in the 10 feet adjacent to the property line with E. 15th Street, which shall be a minimum of 6 feet tall.

The location of the existing and proposed noise barriers is shown in **Figure 15**.

Implementation of the identified noise reduction improvement pursuant to SCA Noise-5 would ensure that operational noise impacts of the project would be less than significant.

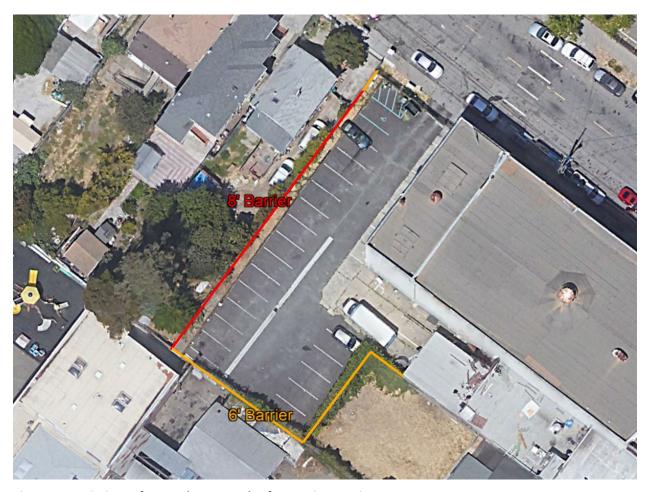


Figure 15: Existing 6-foot and Proposed 8-foot Noise Barriers

Source: Illingworth & Rodkin, Noise and Vibration Analysis, January 2023 (Attachment F)

Permanent Noise Increase due to Project Traffic

LUTE EIR Conclusions

The LUTE EIR concluded that implementation of the LUTE would increase noise levels along streets throughout the City, but that the traffic increase based on anticipated growth rates for the City would only increase noise levels by 2 decibels (dBA) or less on selected street segments. Noise increases of less than 3 dBA were found to be generally not perceptible to most people, and the future traffic noise increase of 2 dBA or less was found to be less than significant.

Project Analysis

Project trip generation numbers and area traffic volumes were provided by Parisi Transportation Consulting (see Transportation section below and **Attachment G**) and these were used to calculate permanent traffic noise increases attributable to the project.

Existing ambient noise levels in the surrounding area ranged from 52 to 62 dBA Leq at receptors along roadways. Per Oakland standards, a significant impact would occur if traffic due to the project would permanently increase ambient traffic noise levels by 3 5 dBA Ldn or greater, with a future noise level of less than 60 dBA Ldn, or b) the noise level increase is 3 dBA Ldn or greater, with a future noise level of 60 dBA Ldn or greater. For reference, a noise increase of 3 dBA Ldn due to project traffic would generally only occur if the project were to double existing traffic volumes along a roadway, over a daily basis.

Traffic noise increases resulting from daily operations were calculated based on existing daily traffic counts and proposed daily project trip generation numbers. Based on the calculations, the project would generate a daily traffic noise level increase of less than 1 dBA, as well as peak a.m. hour and peak p.m. hour increases of less than 1 dBA.

Traffic resulting from daily operations would not measurably increase daily noise levels in the site vicinity. Hourly trip generation resulting from typical daily project operations would not significantly increase noise levels above that of the existing ambient noise environment, which ranged from 52 to 62 dBA Leq during the measurement survey. This is a less-than-significant impact.

Excessive Aircraft Noise

LUTE EIR Conclusions

The LUTE EIR's analysis of consistency with the Alameda County Airport Land Use Policy Plan concluded that no noise-sensitive land uses, and no residential development is indicated within the restricted noise contour lines associated with the Oakland International Airport, and did not identify aircraft noise as a significant impact on future land uses.

Project Analysis

The project site is located approximately 3 miles north of Oakland International Airport, and would not expose people residing or working in the project area to excessive aircraft noise. In addition, a review of the Airport Land Use Compatibility Plan shows that the project site is located well outside the noise contour of 60 dBA CNEL. The exterior and interior noise levels due to aircraft from Oakland International Airport are compatible with the proposed use, and this would be a less than significant impact.

Non-CEQA, Noise and Land Use Compatibility Assessment

CEQA does not require the analysis or mitigation of potential effects that the existing environment may have on a project (with certain exceptions). However, if future students and faculty/staff at the project site could be exposed to ambient noise levels that exceed City-established standards in the Noise Element for school use, SCA Noise-6: Exposure to Community Noise would require preparation of a Noise Reduction Plan. The following analysis if provided for informational purposes to demonstrate General Plan policy consistency and that the SCA related to Exposure to Community Noise would not be applicable to the proposed project.

Future students and faculty/staff at the project site could be exposed to ambient noise levels that exceed Cityestablished standards in the Noise Element for school use. CEQA does not require the analysis or mitigation of potential effects that the existing environment may have on a project (with certain exceptions). However, the project is required to prepare a Noise Reduction Plan under SCA Noise-6: Exposure to Community Noise because of the project site's exposure to these noise levels. Accordingly, this CEQA document presents the following analysis of the effects that ambient noise conditions may have on the project for informational purposes and to address questions of General Plan policy consistency, but does not identify these effects as significant impacts of the project pursuant to CEQA.

LUTE EIR Conclusions

The LUTE EIR identified a number of locations where major transportation corridors could pose noise compatibility problems for residential uses, and where a mix of commercial and residential uses could pose noise compatibility problems. The LUTE EIR identified a number of factors that should be considered when rezoning mixed-use areas, including the future intentions of existing residents or businesses, natural features, and health hazards.

Project Analysis

A summary of that Land Use Compatibility Assessment is presented below.

Applicable Regulatory and Policy Standards

The applicable State of California and City of Oakland General Plan policies were presented in detail in the Regulatory Background section and are summarized below:

- The City of Oakland General Plan specifies exterior noise level standards for school uses. An exterior noise level up to 60 dBA Ldn is considered 'normally acceptable' and an exterior noise level of 60 to 70 dBA Ldn is considered 'conditionally acceptable.'
- The Cal Green Code establishes a maximum interior noise limit of 50 dBA Leq (1-hr) for occupied areas of non-residential buildings during any hour of operation.

Future Exterior Noise Environment

The future exterior noise environment at the project site would continue to result primarily from local traffic along 23rd Avenue and E. 15th Street. Based on measurement data, noise levels throughout the site would be dependent on distance from local roadways. Noise levels would range from 59 dBA Ldn to about 64 dBA Ldn on-site where outdoor-use areas are planned. This falls within both the 'normally acceptable' and 'conditionally acceptable' range of noise levels specified for school land uses in the City of Oakland General Plan.

Project plans indicate that an outdoor recreation area would replace the existing parking lot on the northwestern side of the existing building. Given the proximity of E. 15th Street, the outdoor-use area would need to be set back approximately 80 feet from the centerline of E. 15th Street to ensure that traffic noise levels are below the 60 dBA Ldn 'normally acceptable' criterion. This distance from the centerline would extend onto the project site approximately 45 feet from the outdoor area fence line and would encompass mostly site and

building egress features, entry landscaping, and a portion of the hardscape basketball hoop area. The outdoor seating area, service area, and mini soccer field would be within the normally acceptable noise level area. No outdoor-use areas are planned along 23rd Avenue. Considering that the majority of the outdoor recreation area (80%) would be exposed to 'normally acceptable' noise levels, no additional noise control or analysis is recommended.

Future Interior Noise Environment

The Cal Green Code requires that interior noise levels attributable to exterior sources not exceed 50 dBA Leq (1-hr) in occupied areas of non-residential uses during any hour of operation. Based on the results of the noise monitoring survey, peak-hour noise levels would be up 2 dBA higher than day-night average levels and would range from 61 dBA Leq to 62 dBA Leq (1-hr). The greatest noise exposure would occur along 23rd Avenue and E. 15th Street. According to the Noise Element of the Oakland General Plan, the project site falls within the 65 Ldn noise contour, and peak-hour noise levels would be expected to be up to 67 dBA Leq (1-hr) along 23rd Avenue. The on-site noise study conducted by Illingworth & Rodkin correlated well with the noise contour map.

The second-floor rooms along 23rd Avenue have existing windows. In good condition, the standard noise attenuation factor is around 20 dBA for an older structure, resulting in interior noise levels below the Cal Green Code standard of 50 dBA Leq (1-hr) along 23rd Avenue. New windows are to be added to the existing building façade along 23rd Avenue and E. 15th Street. The noise attenuation factor for new construction is around 25 dBA. Because the noise environment along E. 15th Street is quieter than along 23rd Avenue and because the new construction will have a higher attenuation factor, the resulting interior noise levels along E. 15th Street will also be below the Cal Green Code standard of 50 dBA Leq (1-hr). Future traffic noise levels are expected to result in a noise level increase of less than 1 dBA in the vicinity of the project.

Additionally, the project would include a forced-air heating and cooling system, which would allow for windows to be closed to control noise if necessary.

The existing construction and proposed improvements would be sufficient in reducing interior noise levels to below the Cal Green Code standard of 50 dBA Leq (1-hr). Other sides of the existing building would be exposed to less noise.

Population and Housing

		Relationship to LUTE EIR Findings		Project Conclusions	
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)??	LTS			-	LTS
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	LTS			-	LTS

Population and Housing

LUTE EIR Conclusions

The LUTE EIR determined that the LUTE's plans and polices would result in a net increase in employment development, particularly with redevelopment of military bases and land within the Coliseum Area. The policy emphasis on Downtown and corridor redevelopment would also result in substantially higher employment in the retail, service and government sectors, with projected employment levels significantly higher than anticipated by ABAG, creating a demand for new housing and increasing Oakland's jobs housing ratio. It also determined that the LUTE would increase housing capacity in Oakland by providing greater allowances for higher density housing in commercial areas, by reclassifying several transit corridors for urban-density housing, and by accommodating additional residential development Downtown, at Oak Knoll, along the Estuary, and at BART Stations. The LUTE EIR concluded that impacts related to the City's jobs/housing balance could be mitigated with measures to increase affordable and market rate housing in appropriate locations, and that other impacts related to population and housing would be less than significant.

Project Analysis

The project anticipates accommodating up to 350 middle and high school students, and approximately 40 faculty/staff members. This is the same as the current enrollment cap at the school's existing location, with no plan to increase that cap. There would be no changes that would lead to population or job growth.

The project site currently consists of an existing building space used as a church and open pavement, and the project would not displace any people or housing. The project does not require the extension of any public roads or other infrastructure that would lead to growth inducing impacts.

Public Services and Recreation

		Relationship to LUTE EIR Findings		Project Conclusions	
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	Level of Significance
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:	SU (Fire Protection) LTS (all others)			SCA Services-1, Capital Improvements Impact Fee	LTS with SCAs
a) Fire protection?					
b) Police protection					
c) Schools					
d) Parks and Recreation					

Public Services and Recreation

LUTE EIR Conclusions

Fire Protection Services

The LUTE EIR concluded that future development would result in higher levels of population in steep hillside areas of the City where firefighting and evacuation constraints presently exist, and that construction of a new fire station in the North Oakland Hills would reduce service deficiencies and the risk of catastrophic wildfire, but that this impact remained significant and unavoidable. (The project is not located in the hillside area.) Elsewhere in the City, the LUTE EIR found that higher levels of population and employment would increase demands for fire protection and emergency medical services, but that these impacts could be reduced to levels of less than significant through City-sponsored measures to address fire service needs.

Police Services

The LUTE EIR found that higher levels of population and employment would increase demands for police services, but that these impacts could be reduced to levels of less than significant through City-sponsored measures to address police service needs.

Schools

The LUTE EIR found that higher levels of population and employment would increase the number of students served by the Oakland Unified School District, and identified a number of mitigation measures available to the School District to reduce overcrowding, concluding this impact to be less than significant with mitigation.

Parks and Recreation Services

The LUTE EIR found that higher levels of population and employment would increase the demand for parks and recreation services particularly in areas targeted for reuse and intensification, where development would place even greater demands on the limited park acreage in these neighborhoods, unless additional park area was provided. However, the LUTE EIR concluded this impact to be less than significant, and no mitigation was required.

Project Analysis

Fire Protection Services

Fire Station 13 is located at 1225 Derby Avenue, approximately 0.8 miles from the project site and Station 4 is located at 1235 East 14th Street, approximately 0.9 miles from the project site. Approximate response time to the project site is estimated to be 3 to 4 minutes. The Oakland Fire Department currently provides fire suppression and emergency medical response services to the project site, and would continue to do so from existing facilities with implementation of the project. The project would not result in a significant impact related to the provision of fire protection services.

Police Services

Although the new student population at the project site could potentially result in an increase in reported crimes (on a simple basis of reported crimes per population), there is nothing about this school or its student population that would be more or less likely to commit crimes, and their presence in school is more likely to decrease the potential for crime than if they were not in school. The project site would continue to be served by police personnel from existing facilities including the main police station at 455 7th Street, approximately 3.3 miles northwest of the project site. The project would not require the construction of new police facilities or physically altered police facilities that would result in significant environmental impacts. The project would not result in a significant impact related to the provision of police protection services.

Schools

The project is an existing school moving to a new location, providing middle and high school services to the same general area as it does currently. All impacts related to the currently proposed school project are fully addressed in this CEQA Analysis.

Parks and Recreation Services

The project is located in the San Antonio Planning Area, which is underserved by parks and open space, providing well below the adopted citywide goal of 4.0 acres of local-serving parkland per 1,000 residents. According to the OSCAR Element of the General Plan, the San Antonio Planning Area has the second lowest per capita parks and open space acreage of all of the City's planning areas. Whereas the new student population would increase local demand for parks and recreational services, the majority of students anticipated to attend school at the project site would be from the surrounding community, and therefore represent an existing population. The school would not add a substantial increment of new student population to this area, but provide a new location for an existing school.

While not considered park or open space, the project would represent additional community recreational opportunity through offering the regulation-sized high-school gymnasium for recreational sports by community leagues on weekends.

The project would not require the construction of new public parks or recreation facilities, or physically altered public parks or recreation facilities (other than those included as part of the project) that would result in significant environmental impacts. The project would not result in a significant impact on the provision of parks or recreational services.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA, intended to address the cumulative demands on public services.

SCA Services-1, Capital Improvements Impact Fee (applies to all projects subject to the Capital Improvements Impact Fee Ordinance per OMC chap. 15.74): 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).

When Required: Prior to issuance of building permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

Transportation

			ship to LUTE EIR Findings	Project Conclu	<u>isions</u>
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> Significance
a) Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay)?	LTS			SCA Transportation-1, Transportation Impact Fee SCA Transportation-2, Bicycle Parking	LTS with SCAs
b) Cause substantial additional vehicle miles traveled (per capita, per service population, or other appropriate efficiency measure)?	N/A			SCA Transportation-3, Transportation and Parking Demand Management	LTS with SCAs
c) Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed flow lanes) or by adding new roadways to the network?	N/A			-	LTS
d) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	N/A			SCA Transportation-4, Construction Activity in the Public Right-of-War SCA Transportation-5, Transportation Improvements	SCAs
e) Result in inadequate emergency access?	N/A			SCA Transportation-4, Construction Activity in the Public Right-of-Wa	1 SCAs

A Transportation Impact Analysis (TIA) for the proposed BayTech Charter School has been prepared as part of the City's review of this project:

 Parisi Transportation Consulting, CEQA Transportation Impact Analysis for BayTech Charter School Project, updated November 14, 2022 (see Attachment G)

Trip Generation

Trip generation rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual;* 11th *Edition* (2021) were used to estimate the number of trips the project would generate. *Trip Generation* provides rates for several land use types, and this analysis uses rates associated with Land Use Code #525 for high schools, which are shown in **Table 6**.

Mode share for project trips is based on the mode split adjustments provided in the Transportation Impact Review Guidelines (TIRG). As the proposed project is within 0.5 miles from the nearest Bus Rapid Transit (BRT) station at 24th Avenue and International Boulevard, vehicle trips will reduce by 47% to an estimated 53% of the total trips for this context.

Table 6: Proposed Project Trip Generation									
Proposed	Qty Unit	Daily	AM Peak Hour			PM Peak Hour			
Project		Unit	Trips	In	Out	Total	In	Out	Total
Trip Generation Rates for High School (ITE 525)		ol Size (based on er of students)	1.94	68%	32%	0.51	32%	68%	0.32
Gross Trip Generation	350	Students	679	121	57	179	36	76	112
Vehicle Trip Reduction		(47%)	(318)	(57)	(27)	(84)	(17)	(36)	(53)
Net Vehicle Trip Generation	350	Students	361	64	30	95	19	40	59

<u>Source</u>: ITE Trip Generation Manual, 11th Edition (2021); City of Oakland Transportation Impact Review Guidelines for Land Use Development Projects

Note that ITE Trip Generation Rates for schools utilize the number of students to represent the size of the school. Trip generation results include all trips made by students, staff, visitors, deliveries, and others.

As shown above, the project would generate a total of 95 AM peak hour vehicle trips, 59 PM peak hour trips, and 361 daily trips.

Conflicts with a Program, Plan, Ordinance or Policy Addressing the Circulation System

LUTE EIR Conclusions

The LUTE EIR concluded that future development pursuant to the LUTE would primarily be urban infill that would generate relatively less vehicle traffic and relatively greater use of transit and other alternative travel means than comparable development in less dense regions of the Bay Area. The increased transit demand was not considered a significant impact and no mitigation measures were identified.

Project Analysis

The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This would be a less than significant impact. The project would relocate an existing charter school from the Eastmont Hills / Oak Knoll-Golf Links neighborhood in the Oakland Hills to an existing theater building in the San Antonio neighborhood in East Oakland. All project improvements would be made within the existing site with no planned changes to the circulation system. The project would not cause conflicts with proposed programs or plans to improve the circulation system for all users, including transit passengers, vehicles, bicyclists or pedestrians.

Consistency with General Plan Transportation Policy

The primary policies addressing the City's overall circulation system are those of the City of Oakland's General Plan LUTE. The LUTE includes seven overarching transportation goals, and the project would not conflict with any of them, as discussed below:

- Capitalize on our Location: Take full advantage of Oakland's position as a major West Coast transportation hub.
 - The project location is approximately a half mile away from the I-880 freeways, is approximately 0.10 mile away from two arterial roadways (International and Foothill boulevards), and 0.10 mile away from two high-frequency transit routes (AC Transit Route 1T bus rapid transit (BRT) and Route 40).
- Integrate Land Use and Transportation Planning: Integrate transportation and land use planning at the neighborhood, city, and regional levels by developing transit-oriented development, where appropriate, at transit and commercial nodes.
 - The project's location near two existing high-frequency transit routes within an existing dense, mixed use urban area supports the City's goal of an integrated transportation network. The project does not interfere with any planned improvements to the transportation network.
- Reduce Congestion: Reduce congestion and improve traffic flow by developing and integrated road system and traffic demand management system that provides an appropriate mix or mobility and accessibility throughout the city.
 - The project is located near two existing high-frequency transit routes within a dense urban area that allows for a high percentage of non-drive modes.
- *Promote Alternative Transportation Options*: Reduce dependency on the automobile by providing facilities that support use of transportation modes.
 - The project is located between two high-frequency transit routes, including one BRT route, and is integrated into the City's existing bicycle and pedestrian networks. The City's TIRG guidelines forecast that nearly one-half of the project trips will use non-drive modes, supporting the goal of reducing dependency on the automobile.
- *Find Funding:* Program and provide adequate funding for needed transportation facilities and services, and related investments.
 - The project would work with the City and appropriate agencies to determine its cost responsibility for transportation improvements as part of its Travel Demand Management Plan as a Standard Condition of Approval.
- Safety: Provide safe streets.
 - The project would contributing its fair share toward infrastructure improvements at the E. 15th Street / 22nd Avenue intersection that include marking the crosswalks, adding crosswalk warning signs, marking yield lines, adding edge line markings, and installing pedestrian safety zones at each corner.
 - At the 23rd Avenue / E. 15th Street, 23rd Avenue / International Boulevard and E. 15th Street / Miller Avenue, the project would convert the marked crosswalks to yellow school crosswalks. The project would install School Area Warning Signs consistent with the California Manual on Uniform Traffic Control Devices (CA MUTCD).
 - The project would coordinate with the City of Oakland to increase the pedestrian crossing time at the International Boulevard / Miller Avenue intersection.
- Improve the Environment. Improve air quality and reduce exposure to traffic noise.
 - The project is located near between two high-frequency transit routes, including one BRT route, and is integrated into the City's existing bicycle and pedestrian networks. The City's TIRG guidelines forecast that nearly one-half of the project trips will use non-drive modes.

Since the project would not make off-site improvements that would conflict with planned programs, plans, ordinances, or policies related to transportation and circulation in the project vicinity and would implement the TDM strategies as a Standard Condition of Approval, the project would result in a less than significant impact.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to ensure consistency with City transportation-related policies and ordinances.

SCA Transportation-1, Transportation Impact Fee (applies to all projects subject to the Transportation Impact Fee Ordinance, per OMC chap. 15.74): 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).

When Required: Prior to issuance of building permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

SCA Transportation-2, Bicycle Parking: 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

Vehicle Miles Traveled (VMT)

LUTE EIR Conclusions

At the time the LUTE EIR was prepared and certified, the City relied on a variety of level of service (LOS) thresholds to assess potential traffic impacts. Relying on LOS thresholds, the LUTE EIR concluded that new development would result in the degradation of the level of service on several roadway segments and intersections, and that these impacts would be significant and unavoidable. Since that time, CEQA Guidelines and City CEQA thresholds have changed, such that vehicle miles traveled (VMT) metrics are now used to measure potential transportation impacts, rather than LOS thresholds. The LUTE EIR did not address VMT as a CEQA threshold.

Project Analysis

The thresholds of significance used by the City of Oakland are intended to determine whether land uses of similar functions to residential, office, or retail use would result in significant impacts as it relates to VMT. Under these thresholds, the project's proposed land use (school) is treated as an office use, and the following threshold of significance applies to the project:²⁵

• For office projects [used here as a proxy for a school], the project would cause substantial additional VMT if it exceeds the existing regional VMT per employee, minus 15 percent.

VMT Screening

A VMT screening analysis was conducted to assess whether the project meets the City's established screening criteria for those types of projects that are assumed to meet this threshold, and therefore result in a less than significant VMT impact. Screening criteria include small projects, projects that are located within a low-VMT

²⁵ Thresholds provided by the City of Oakland Transportation Impact Review Guidelines (TIRG)

area, and projects that are located near a major transit stop or existing stop along a high-quality transit corridor. The results of the VMT screening analysis for the project indicate the following:

- Small Projects Screening: The project would generate more than 100 daily vehicle trips (see Table 6, above) and would not meet the Small Project screening criteria. The project is estimated to generate 361 net new daily vehicle trips, 95 net new weekday a.m. peak hour vehicle trips, and 59 net new weekday p.m. peak hour vehicle trips. Because the project would generate more than 100 daily vehicle trips, the project would not meet the established screening criteria for a small size project.
- Low-VMT Area Screening: The project is not located within a low-VMT area, and would not meet the Low VMT screening criteria. The average daily VMT per worker in the Traffic Analysis Zone (TAZ) where the project is located (TAZ 928) is 18.9 miles. The regional average daily VMT per worker is 15.9 miles, and the threshold (15 percent below the regional average) is 13.5 miles. The daily VMT per worker for land uses within TAZ 928 (including the project site) exceeds the regional average minus 15%, so it does not screen out for being located in a low-VMT area.
- **Near Transit Station Screening:** The project is located within one-half mile of an existing major transit stop or existing stop along a high-quality transit corridor, and meets the Near Transit Station screening criteria. The project is located 0.15 miles from the BRT stop at the intersection of International Boulevard and 24th Avenue (see Figure 1). The project meets the screening criteria for being located within 0.5 mile of an existing major transit stop or existing stop along a high-quality transit corridor, and its relative impact related to VMT is presumed to be less than significant.

City of Oakland guidelines require that projects that may screen out for being near transit stations may still have a significant impact if other VMT generating indicators are applicable. **Table 7** shows the indicators' applicability to the project.

Table 7: VMT Generating Indicators for Near Transit Station VMT Screen							
VMT Generating Indicator	Conclusion	Significant VMT Generated?					
Floor Area Ratio (FAR) less than 0.75	Approximate FAR for all project parcels is 1.4	No					
Project includes more parking than required	The project includes 19 to 23 parking spots (depending on whether valet parking is utilized) for the 40 faculty and staff and additional parking for visitors along the frontage outside of school loading hours. There would be no parking for students. While there is no quantified maximum or minimum parking under the Planning Code for this type of use, it is anticipated the proposed parking would be determined to represent reduced parking to take advantage of available transit in the area and in any case would not be considered to generate significant additional VMT due to the amount of parking.	No					
Inconsistent with Sustainable Communities Strategy	The project is in a priority development area	No					
Retail component greater than 80,000 sf.	N/A	No					

Source: Paris Transportation Consulting, November 2022 (see Attachment G)

As the nearest BRT station is within 0.5 miles of the project location and therefore qualifies the project for "Near Transit Station" screening, and project-specific information in Table 7 does not indicate that significant levels of VMT would otherwise be generated, this screening criteria for being near a major transit stop is met, and it is determined that the Project would have a less than significant impact on VMT.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to reduce vehicle trips and to address the effects of new vehicle trips on the surrounding roadway network.

- **SCA Transportation-3, Transportation and Parking Demand Management** (applies to all projects generating 50 or more net new a.m. or p.m. peak hour vehicle trips)
- a) Transportation and Parking Demand Management (TDM) Plan Required: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. The goals of the TDM Plan shall be the following:
 - i. Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable.
 - ii. Achieve the following project vehicle trip reductions (VTR); Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR, Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR
 - iii. Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.
 - iv. Enhance the City's transportation system, consistent with City policies and programs.
- b) The TDM Plan should include the following:
 - i. Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable.
 - ii. Proposed TDM strategies to achieve VTR goals.
 - iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer-Based Trip Reduction Program.
- c) Mandatory TDM strategies must be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project's VTR.
- d) The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.

When Required: Prior to approval of planning application

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

e) TDM Implementation – Physical Improvements: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

f) TDM Implementation – Operational Strategies: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall

submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.

When Required: Ongoing

Initial Approval: Department of Transportation

Monitoring/Inspection: Department of Transportation

Project Plans in Furtherance of the SCAs

Pursuant to SCA Transportation-3, a TDM Plan has been prepared by the CEQA traffic consultant, and recommended for the project.²⁶ This recommended TDM Plan is designed to reduce the number of vehicle trips generated by the project by at least 20 percent; provide location-dependent pedestrian network improvements; increase pedestrian, bicycle, transit and carpool modes of travel; and enhance the City's transportation system. Implementation of this TDM plan would also further reduce VMT generated by the project.

The TDM Plan comprises those applicable TDM measures that are indicated as being mandatory per the City of Oakland's Transportation Impact Review Guidelines, as well as additional measures that have been recommended based on their ability to contribute toward meeting the required 20 percent vehicle trip reduction requirement for the project. However, the non-mandatory portion of the TDM plan is flexible, and the effectiveness of the TDM Plan will be evaluated over time as part of a required monitoring and reporting program. Other non-mandatory strategies can be substituted or altered throughout the life of the project if alternate measures are preferable or deemed more effective. The project would generate fewer than 100 net new AM or PM peak trips, therefore an annual TDM compliance report would not be required.

Mandatory TDM Measures in furtherance of the SCA per City Transportation Impact Review Guidelines

A summary of the mandatory physical improvement measures identified in the TDM Plan, based on an analysis of the project's location relative to transit, pedestrian and bicycle infrastructure deficiencies and the project's incremental demands, include the following. Note that the specifics of these implementing measures are preliminary at this point and could be revised through coordination with the City as part of the normal permitting process.

<u>TDM Improvement Measure 3.1 - Bus Shelters.</u> The project shall consult with AC Transit and the City to identify feasibility of installing bus shelters for the following bus flag stops:

- Stop 51284, Route 62: 23rd Ave northbound at International Blvd
- Stop 57505, Route 62: 23rd Ave southbound at International Blvd
- Stop 54554, Route 62: 23rd Ave northbound at 16th St
- Stop 54448, Route 40: Foothill Blvd eastbound at 23rd Ave

If these stops have 25 or more passenger boardings per day and construction of the bus shelters is feasible, the project will contribute its fair share cost responsibility toward new bus shelters.

Paris Transportation Consulting, BayTech Charter School Transportation Impact Review, September 20, 2022 draft, Chapter 4 Transportation and Parking Demand Management.

<u>TDM Improvement Measure 3.2 – Intersection Pedestrian Improvements.</u> The project shall contribute its fair share cost responsibility for improvements at the 22nd Ave & East 15th St Intersection (Improvement Measure TR-5, see below):

- Install high visibility yellow-striped crosswalks with signage and advanced yield markings (Short-Term Countermeasure).
- Install pedestrian safety zones extending from the curb (Short-Term Countermeasure).
- Add edge line markings on East 15th Street for street narrowing and parking definition. Restrict onstreet parking within 20-feet of intersection and marked crosswalks (Short-Term Countermeasure).
- Install curb extensions on each corner (Long-Term Countermeasure).

The project sponsor shall work with the City to convert the marked crosswalks to yellow school crosswalks at 23rd Avenue and East 15th Street and 23rd Avenue and International Boulevard.

The project sponsor shall work with the City to add yield markings on 23rd Avenue at East 15th Street.

TDM Improvement Measure 3.3 – Pedestrian Crossing Improvements, Pedestrian-Supportive Signal Changes.

The project sponsor shall work with the City to optimize the pedestrian Walk phase timing when parallel traffic on International Boulevard has the green phase; this may be achieved by setting phases to 'rest in walk', lengthening the pedestrian walk phase, increasing the Walk phase frequency by shortening the signal cycle (to and from the BRT platform), or by other means at the following crossings (Improvement Measure TR-5.6, see below):

- 23rd Avenue at International Boulevard (east crosswalk)
- 24th Avenue at International Boulevard (east and south crosswalks)

<u>TDM Improvement Measure 3.4 – Relocating Bus Stops to Far Side.</u> The project shall consult with AC Transit and the City to determine if the following near side bus stops should be relocated to the far side:

- Stop 57505, Route 62: 23rd Ave southbound approach to International Blvd
- Stop 54554, Route 62: 23rd Ave northbound approach to 16th St/Foothill Blvd
- Stop 54448, Route 40: Foothill Blvd eastbound approach to 23rd Ave

If the transit stop relocations are found to be feasible, then the project sponsor will contribute its fair share cost responsibility toward the transit stop relocation.

Additional Recommended TDM Measures

Additional TDM measures are recommended to help achieve the required 10% reduction in vehicle trips (VTR) and other goals of the TDM Plan as required pursuant to SCA Transportation-3, including the following. Note that the specifics of these implementing measures are preliminary at this point and could be revised through coordination with the City as part of the normal permitting process.

TDM Program Coordinator

The TDM Program Coordinator would be responsible for implementation, monitoring, and reporting of the TDM Plan. The TDM Coordinator would facilitate site inspections by City staff to verify that the standards specified as conditions of approval are met. This person(s) could be a school employee or a third-party provider that runs the program.

The TDM Program Coordinator would be responsible for managing T-7 Implement Commute Trip Reduction Marketing, T-9 Implement Subsidized or Discounted Transit Program, and T-41 Implement a School Pool Program.

Target Users: Students and staff

Estimated VTR: N/A

T-7 Implement Commute Trip Reduction Marketing

The project sponsor would implement a marketing strategy to promote a commute trip reduction (CTR) program. Information sharing and marketing promote and educate students and staff about their travel choices to the project location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.

Target Users: Students and staff
Range of Effectiveness: Up to 4%

Estimated VTR: 4%

T-9 Implement Subsidized or Discounted Transit Program

The project sponsor would provide subsidized or discounted, or free transit passes for 100 students. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and thus a reduction in GHG emissions.

Target Users: Students and staff
Range of Effectiveness: Up to 5.5%

Estimated VTR: 1.6%

T-10 Provide End-of-Trip Bicycle Facilities

The project sponsor would install and maintain end-of-trip facilities for employee use. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions. This measure is consistent with project SCA Transportation-2, Bicycle Parking.

Target Users: Students and staff
Range of Effectiveness: Up to 4.4%

Estimated VTR: 0.6%

T-18 Provide Pedestrian Network Improvement

This measure would increase the sidewalk coverage to improve pedestrian access, which may include crossing safety improvements. Providing sidewalks and an enhanced pedestrian network would encourage people to walk instead of drive. This mode shift would result in a reduction in VMT and GHG emissions.

Target Users: Students and staff
Range of Effectiveness: Up to 6.4%

Estimated VTR: 1.0%

<u>T-41 Implement a School Pool Program (CAPCOA 2010 TRT-10)</u>

The project sponsor would create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School pool helps match parents to transport students to private schools, or to schools where students cannot walk or bike but do not meet the requirements for bussing. A school pool program can help reduce onsite air pollutant emissions at the school by reducing private vehicle trips, especially if the pool vehicle is zero emissions.

Target Users: Students

Range of Effectiveness: 7.2 – 15.8%

Estimated VTR: 7.2%

The vehicle trip reductions achieved by this TDM Plan will depend on how the measures are implemented, and the level of adoption or aggressiveness of the strategies. Based on methods provided by the California Air Pollution Control Officers Association (CAPCOA), implementation of the selected TDM measures is calculated to potentially achieve as much as a 14.4 percent reduction in vehicle trips to and from the school.

Roadway Capacity

LUTE EIR Conclusions

The LUTE EIR did not specifically address the threshold question of inducing additional automobile travel by increasing physical roadway capacity.

Project Analysis

The project would not modify the roadway network surrounding the project site. It would not increase the physical roadway capacity or add new roadways to the network, and would therefore not induce additional automobile traffic. The project would have no impact in this regard.

Roadway Hazards

LUTE EIR Conclusions

The LUTE EIR did not specifically address the threshold question of potentially hazardous roadway conditions or roadway design hazards.

Project Analysis

The project does not represent an incompatible use for transportation in the area. The project is not proposing to make off-site improvements to the local transportation network that would result in sharp curves, dangerous intersections, or other hazards. Access to the campus via 22nd Avenue and E. 15th Street would not be affected and no changes to existing city streets would be required.

The project would provide a dedicated loading zone on E. 15th Street, which is the project's secondary street side frontage. E. 15th Street is a local access street that does not have bus service. The overall block of E. 15th Street is 650 feet long, which can accommodate 26 queued vehicles. E. 15th Street is approximately 44 feet wide; assuming 8 feet for parking on each side of the street, the remaining width for vehicle travel lanes is 28, which exceeds City fire department standards for a 20-foot two-way minimum width.

The project's student drop-off and pick-up plan would require one-way vehicle traffic on E. 15th Street from 22nd Avenue, prohibit drop-off and pick-up from 23rd Avenue, prohibit double parking, and designate staff to assist with operations, among others. Vehicle delay for drivers at the egress intersection, E. 15th Street at 23rd Avenue, is forecast to be on average 15 seconds or less per vehicle (LOS "B").

As the project is not incompatible with the existing Neighborhood Commercial and Mixed Housing Residential Type Zone and related Land Use Designations, there are no off-site road geometric design alterations, and vehicle queuing issues associated with pick-up and drop-off would be addressed by project programs, the project would result in a less-than-significant impact.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCAs intended to reduce transportation hazards and roadway hazards during construction.

SCA Transportation-4, Construction Activity in the Public Right-of-Way

a) Obstruction Permit Required: 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Department of Transportation

Monitoring/Inspection: Department of Transportation

b) Traffic Control Plan Required: 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. The project applicant shall implement the approved Plan during construction.

Initial Approval: Department of Transportation Monitoring/Inspection: Department of Transportation

c) Repair of City Streets: 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.

When Required: Prior to building permit final

Initial Approval: N/A

Monitoring/Inspection: Department of Transportation

With implementation of SCAs Transportation-4, the potential for the project to result in roadway hazards would be reduced to levels of less than significant.

Emergency Access

LUTE EIR Conclusions

The LUTE EIR did not specifically address issues related to emergency access.

Project Analysis

Emergency response requires a balance between emergency response time and evacuation needs, and other community concerns such as urban design and traffic calming. To address emergency and fire access needs, the project's site improvements would be required to be designed in accordance with all applicable CDE and the City of Oakland Fire Department design standards for emergency. Since adequate emergency access would be required per the local fire code and the site plans reviewed by the local fire officials as part of the design review, the project is not anticipated to result in inadequate emergency vehicle access. With implementation of SCAs Transportation-6, potential impacts to roadway emergency access during construction would be addressed through the construction traffic control plan. Potential impacts to roadway emergency access during operational periods would be addressed in the pick-up and drop-off procedures. Each of these plans would be reviewed and approved by appropriate City departments. Therefore, the project has a less than significant impact and no mitigation measures would be required.

Other Non-CEQA Requirements and Improvement Measures Pursuant to SCAs

The project is also subject to the following City of Oakland SCA that does not pertain to CEQA thresholds. The applicant has submitted the subsequent plans based on a Transportation Impact Review prepared for the applicant by Parisi Transportation Consulting, which includes improvement measures and project-specific recommendations that address non-CEQA transportation-related effects pertaining to vehicle access and circulation, bicycle access and pedestrian access.

SCA Transportation-5, Transportation Improvements (applies to all projects for which a Transportation Impact Review was prepared during the project review process that contained recommended transportation improvements): The project applicant shall implement the recommended on- and off-site transportationrelated improvements contained within the Transportation Impact Review for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, transportation demand management measures, and transit, pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction.

When Required: Prior to building permit final or as otherwise specified Initial Approval: Bureau of Building; Department of Transportation Monitoring/Inspection: Bureau of Building

Project Recommendations in Furtherance of SCAs

Pursuant to and in furtherance of SCA Transportation-5, the Transportation Impact Review prepared for the applicants identified transportation improvement measures or project-specific recommendations to be implemented to address non-CEQA topics related to vehicle access and parking, pedestrian access, and bicycle access, and to implement City goals and policies. Note that the specifics of these implementing measures are preliminary at this point and could be revised through coordination with the City as part of the normal permitting process.

Vehicle Access and Parking

- <u>Improvement Measure TR-5.1: Develop and Implement Drop-Off and Pick-Up Procedures.</u> To minimize potential disturbance impacting surrounding roadways and to maintain safe and effective operations, the project shall develop and implement drop-off and pick-up procedures to be reviewed and approved by City staff prior to school opening. These procedures would address typical school day, minimum school day, and special event scenarios. These procedures should include:
 - Provide clearly marked white curb and signage to designate a drop-off and pickup zone on the south side of East 15th Street directly adjacent to the project site.
 - Require drivers to pull up to the front of the designated area and to not leave the vehicle while conducting drop-off or pick-up.
 - Prohibit double parking and waiting in the travel lanes on East 15th Street. Prohibit student loading on 23rd Avenue.
 - Implement an arrival and departure assistant program that allows for students or staff to serve as valets and actively manage and enforce proper loading and unloading procedures. Assistants can also encourage appropriate driving behavior and ensure pedestrian and cyclist safety at the intersection.
 - Communicate drop-off and pick-up procedures to staff, students, and parents using welcome packets, school announcements, and newsletters.
- <u>Improvement Measure TR-5.2: Off-Site Parking.</u> The project sponsor shall install signs outside the off-street parking lot indicating its reserved use for the school. Within the parking lot, the project sponsor shall install signs indicating reserved parking for school staff and guests.
- <u>Improvement Measure TR-5.3: On-Street Parking and Loading.</u> The project sponsor shall work with the City of Oakland to designate the 200 feet of school frontage on East 15th Street as a white curb loading zone. The project sponsor shall install signs indicating:
 - "No Parking Student Loading Only" zones during the morning drop-off and afternoon pick-up period, and
 - "Short-term school visitor parking and deliveries only" zones outside non-student loading hours.
- <u>Improvement Measure TR-5.4: Implement Special Event Parking Management Strategies.</u> For all special events with 150 or more attendees, the project sponsor shall implement a parking management plan with the following strategies:
 - Provide a special event trip reduction newsletter to clearly communicate special event travel options that include carpooling, taking transit, walking, and biking, special carpool parking, and any arranged offsite parking options.
 - Direct households that are driving to park two or more blocks away from the project to reduce instances of cruising for parking at the school frontage.
 - Integrate group bicycle rides to campus and other programmatic content as part of special events.

Pedestrian Access

- <u>Improvement Measure TR-5.5: Pedestrian Safety Enhancements to East 15th Street.</u> The project shall construct improvements at the East side crosswalk of the intersection of 22nd Avenue and East 15th Street including the northeast and southeast corners, consistent with the Oakland Pedestrian Master Plan, subject to review by the City of Oakland Department of Transportation as part of the City's Off Site Infrastructure (PX) Permit process. These improvements include:
 - Upgrade non-ADA compliant curb at the northeast and southeast corners of the intersection to be ADA compliant and install a high-visibility yellow school crosswalk on the east crosswalk.

- Add edge line markings on East 15th Street for street narrowing and parking definition. Restrict onstreet parking within 20 feet of intersection and marked crosswalks.
- Install pedestrian safety zones extending from the curb at the northeast and southeast corners. The purpose of these painted bulb-outs is to reduce the speed of turning vehicles and reduce the pedestrian exposure to vehicle traffic while crossing East 15th Street.
- Install intersection hardening treatments consisting of low-profile wheel stops and flexible vertical delineators on the center double yellow line on 22nd Avenue approaching East 15th Street from the north and south, similar to those one block to the north at 22nd Avenue and Foothill Boulevard.

<u>Avenue and the BRT stop at 24th Avenue.</u> The project sponsor shall update signal timing cards as needed to optimize the pedestrian Walk phase timing when parallel traffic on International Boulevard has the green phase; this may be achieved by setting phases to 'rest in walk', lengthening the pedestrian walk phase, increasing the Walk phase frequency by shortening the signal cycle (to and from the BRT platform), or by other means at the following crossings:

- 23rd Avenue at International Boulevard (east crosswalk)
- 24th Avenue at International Boulevard (east and south crosswalks)

Bicycle Access

<u>Improvement Measure TR-5.7: Install Sufficient On-Site Bicycle Parking</u>. The project shall install a minimum of 22 long-term and 18 short-term bicycle parking spaces in accordance with the City Municipal Code §17.117.100.

Utilities and Service Systems

			ship to LUTE EIR Findings	Project Conclusions		
Would the Project:	LUTE EIR Findings	Equal or Less Severe	New or Substantial Increase in Severity	Applicable SCAs or Mitigation Measures	<u>Level of</u> Significance	
a) Exceed water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	LTS			N/A	LTS	
b) Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	LTS	•		N/A	LTS	
c) Require or resulted in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	LTS			SCA Utilities-1, Underground Utilities SCA Hydrology-2, Site Design Measures to Reduce Stormwater Runoff SCA Hydrology-3, Source Control Measures to Limit Stormwater Pollution		
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impaired the attainment of solid waste reduction goals? Would the project comply with federal, state and local management and reduction statutes and regulations related to solid waste?	LTS			SCA Utilities-2, Construction and Demolition Waste Reduction and Recycling SCA Utilities-3, Recycling Collection and Storage Space	LTS with SCAs	

Utilities and Service Systems

LUTE EIR Conclusions

The LUTE EIR found that Oakland's growth represents a portion of the growth anticipated within the East Bay Municipal Utility District's (EBMUD) water and sewer service area, and the Alameda County Waste Management Authority's solid waste service area. Oakland's plans to add jobs and housing pursuant to the LUTE was

considered in the context of the plans for other communities within these service areas. Impacts of the LUTE were considered potentially significant on a cumulative basis if the population and employment forecasts pursuant to the LUTE were greater than EBMUD's or Alameda County's projected capacity. Based on the analysis contained in the LUTE EIR, this was not the case, and cumulative utility and service system impacts were not considered significant. However, the LUTE EIR did indicate that water conservation and solid waste recycling are essential if projected cumulative service demands are to be met. The following impacts were individually determined to be less than significant, based on the analysis contained in the LUTE EIR:

- Development consistent with the LUTE would increase the demand for water in Oakland
- Development consistent with the LUTE would increase flows to the wastewater treatment plant
- Development consistent with the LUTE would require drainage improvements within already developed flatland neighborhoods

Project Analysis - Water Supply

Based on generalized estimates for the water demands by land use types across all of the EBMUD service area, EMBUD's 2040 Water Demand Study estimates that "schools" generate an average water demand of 703 gallons per day per acre (gpd/acre). ²⁷ Conservatively applying this demand factor across the entire approximately 0.607 acre project site (including the separate parking lot) results in an estimated water demand for the project of 427 gpd. This is a conservative (high) estimate, in that the project would have very limited outdoor landscape and would have very little demand for irrigation water supply.

Project Analysis - Wastewater Collection, Treatment and Disposal

Presuming the estimate for the project's water demand above, and estimating that between 70 percent and up to 90 percent of this water demand may result in wastewater (sinks, drinking fountains, toilets and showers), the project may generate between 300 and 385 gpd average dry weather flow of wastewater. Wet weather demand creates additional inflow and infiltration of the system from stormwater and wet soils, and peak sanitary sewer flows can be greater than dry weather flows.

It is not anticipated that the project would exceed the wastewater treatment capacity of the EBMUD Main wastewater treatment plant (WWTP), would not exceed the discharge requirements imposed at the WWTP, and would not adversely affect the system-wide conveyance and treatment capacity dedicated to the City of Oakland.

Project Analysis - Storm Drainage

As indicated in the Hydrology section of this CEQA Analysis, the project site is nearly all rooftops or pavement. The total amount of post-project impervious surface of the back lot would be reduced by approximately 56% compared to existing (pre-project) impervious surface of the lot, and the project would not create or contribute substantial additional runoff that could exceed the capacity of the stormwater drainage system. The project would add a perimeter of vegetated landscaping around the back lot of the site and the artificial turf field would be pervious.

SCA Hydrology-2, Site Design Measures to Reduce Stormwater Runoff, and SCA Hydrology-3, Source Control Measures to Limit Stormwater Pollution apply to the project. See the Hydrology and Water Quality section of this CEQA Analysis.

East Bay Municipal Utility District (EBMUD), 2040 Demand Study for the Water Supply Management Program 2040, February 2009

Project Analysis - Construction of New Utility Infrastructure

The existing building is provided with existing infrastructure systems (water, sewer, stormdrain, electricity and natural gas). Existing utility services will be repurposed for domestic water, sewer and storm drain. A new fire service line is anticipated for fire sprinklers. A PGE electrical transformer is anticipated and will be located in the rear of the building, as shown on the site plan.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA intended to address the extension of new utility infrastructure.

SCA Utilities-1, Underground Utilities (applies to all construction projects): 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, streetlight 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

Project Analysis - Solid Waste

Construction of the project is not anticipated to result in substantial construction waste, as it primarily involves the repurposing of an existing building for school use. Renovations and remodeling of the building would generate some construction waste and debris, but not comparable to demolition or new construction. All construction-generated waste would be removed from the project site and disposed of.

During school operations, the project would generate solid waste typical of a school, including kitchen waste from the on-site servery, paper waste from classrooms and offices, and other typical household-type waste streams. CalRecycle provides an estimate of the solid waste generation rates created by different land use types, indicating that a school can be estimated to generate between approximately 0.6 to 1 pounds of waste per person per day.²⁸ Using these waste generation rates, the project (at 350 students and approximately 40 staff) may generate approximately 390 pounds of waste per day.

With an average output of 3,500 tons per day at the Davis Street Transfer Station, the project's incremental contribution to total waste managed at the Transfer Station represents a very small fraction of the transfer station's average daily outflow. At the Altamont landfill, which has a permitted maximum disposal capacity of 7,000 tons per day, the project's contribution to landfill capacity is de minimus. The project's impact on the capacity of local solid waste infrastructure would be less than significant.

Standard Conditions of Approval

The project would be subject to the following City of Oakland SCA intended to address cumulative solid waste disposal and recycling citywide.

SCA Utilities-2, Construction and Demolition Waste Reduction and Recycling (applies to all construction projects): The project applicant shall comply with the City of Oakland Construction and Demolition Waste

From: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates as sourced to: Guide to Solid Waste and Recycling Plans for Development Projects (Santa Barbara County Public Works Department, citing SWANA Tech. Bull. 85-6; Recovery Sciences, 1987; and Matrix Mgmt. Group, "Best Management Practices Analysis for Solid 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 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.

When Required: Prior to approval of construction-related permit Initial Approval: Public Works Department, Environmental Services Division Monitoring/Inspection: Public Works Department, Environmental Services Division

SCA Utilities-3, Recycling Collection and Storage Space (applies to commercial alterations that increase floor area by more than 30%): 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 non-residential 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

With implementation of these SCAs, the impacts of the project related to cumulative solid waste generation and disposal would be further reduced, consistent with City ordinances and requirements.

Mandatory Findings of Significance

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

Degrading the Quality of the Environment

As fully discussed in the Biology section of this CEQA Analysis, the project is located in an area already subjected to a long history of development, is currently covered by a building and paved areas. The vast majority of natural vegetation in the project vicinity has been converted to urban uses. The lack of undeveloped areas in the vicinity makes it highly unlikely that the project would have any direct adverse effects on any special status species. There are no creeks or other potentially jurisdictional drainages located on or adjacent to the project site. The area is heavily urbanized and supports no riparian habitat, wetlands or other sensitive natural communities. The adjacent heavily traveled city streets provide major impediments to wildlife movement. The project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

As fully discussed in the Cultural Resources section of this CEQA Analysis, the existing building is eligible for listing on the California Register of Historical Resources, and therefore is considered an historic resource pursuant to CEQA. The existing structure would be renovated to retain important exterior examples of the architectural style it is an example of, and the interior would be renovated under a Rehabilitation Plan to

minimize the adverse effects of changes necessary to the project. The project has limited potential to result in an inadvertent discovery of currently unknown buried archaeological resources or tribal cultural resources. SCAs applicable to the project require implementation of appropriate protocols in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities. With implementation of these SCAs, the project would not eliminate important examples of the major periods of California pre-history.

Cumulative Effects

As indicated in this CEQA Analysis, the project (inclusive of required SCAs) would not result in any individually significant impacts on the environment. This CEQA Analysis also demonstrates that many of the project's limited environmental effects would also address larger-scale cumulative issues:

- The project individual effects on regional air quality would be less than those threshold levels that have been designed specifically to protect air quality on a regional, or cumulative basis
- The project would comply with all checklist questions from the City's Equity and Climate Action Plan, which were adopted to address each project's individual contributions to global climate change
- The project's VMT has been found to be more than 15 percent lower than citywide or regional average VMT rates

The project is also required to implement numerous SCAs that are intended to address impacts that may be individually limited, but potentially cumulatively considerable. These SCAs have been derived from broader, citywide polices and regulations including those of the Oakland Planning and Municipal Codes, the Stormwater Water Management and Discharge Control Ordinance, California Building Code and Uniform Fire Code, and the 2030 Equity and Climate Action Plan, among others. Many of these SCAs mitigate the environmental effects of individual projects, and when also uniformly applied to other cumulative development, would effectively reduce cumulative impacts as well. Examples of these SCA that are applicable to the project and that also address broader cumulative concerns include, but are not limited to:

- SCA Cultural-2, Archaeological and Paleontological Resources Discovery during Construction
- SCA Energy-1, Green Building Requirements Small Projects
- SCA Geology-1, Construction-Related Permits
- SCA Hazards-2: Hazardous Building Materials and Site Contamination
- SCA Noise-2, Construction Noise
- SCA Transportation-1, Transportation Impact Fee
- SCA Transportation-5, Transportation and Parking Demand Management
- SCA Utilities-2, Construction and Demolition Waste Reduction and Recycling Requirement

These SCAs and recommended project-specific measures pursuant to these SCAs would be adopted as requirements of the project if it is approved by the City, and are designed to and would substantially mitigate the project's environmental effects, including the project's potential contribution to cumulative effects on air quality, biological and cultural resources, hazardous materials, construction noise, demands on public services and utilities, and transportation.

Adverse Effects on Human Beings

Potential adverse effects of the project on other human beings are fully addressed in the Air Quality and Noise sections of this CEQA Analysis, as summarized below:

- Operation of the project would not cause measurable health risk impacts. The project includes no stationary sources of TAC emissions, and the project would not generate, handle or use products that substantially emit toxic air contaminants. Construction activities would result in sources of toxic air contaminants that could pose a potential health risk to nearby sensitive receptors. With appropriate handling of asbestos in existing structures pursuant to City SCAs, impacts would be reduced to less than significant levels.
- Residences are located to the northwest adjacent to the proposed recreational area 61 to 67 dBA Leq at
 the nearest residential property line, which would exceed the 55 dBA limit by 6 to 12 dBA. Pursuant to
 SCA Noise-5, an 8-foot-tall noise barrier would be installed along the northwest residential property line
 to shield adjacent residential land-uses from outdoor area noise, which would be reduced to less than
 significant levels.

With implementation of all applicable SCAs, the project would not result in have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Report Preparers and References

Lead Agency

City of Oakland, Bureau of Planning 250 Frank H. Ogawa Plaza, Suite 2114 Oakland, CA 94612 Mike Rivera, Planner III Neil Gray, Planner IV

Report Preparers

Lamphier-Gregory, Lead EIR Consultant 4100 Redwood Road, STE 20A #601 Oakland, California 94619

> Rebecca Auld, Vice President and Project Manager Jenna Sunderlin, Environmental Planner

Illingworth & Rodkin, Inc. – Emissions Analysis

James Reyff, Principal

Page & Turnbull - Historical Resources

Stacy Kozakavich, Cultural Resources Planner / Archaeologist

Illingworth & Rodkin, Inc. - Noise and Vibration

Michael Thill, Principal

Parisi Transportation Consulting - Transportation

David Parisi, Principal Andrew Lee, PE, TE

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ATTACHMENT A: STANDARD CONDITIONS OF APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

STANDARD CONDITIONS OF APPROVAL AND MITIGATION MONITORING AND REPORTING PROGRAM

This Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCA MMRP) is based on the CEQA Analysis prepared for the 1453 23rd Avenue Charter School project.

This SCA MMRP 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 SCA MMRP lists mitigation measures ("MM") recommended in the EIR and identifies mitigation monitoring requirements, as well as the City's Standard Conditions of Approval ("SCA") identified in the EIR as measures that would minimize potential adverse effects that could result from implementation of the project, to ensure the conditions are implemented and monitored. The SCA number that corresponds to the City's master SCA list is provided at the end of the SCA title — i.e., SCA AIR-1: Dust Controls - Construction Related (#20).

All MMs and SCAs identified in the CEQA Analysis, which is consistent with the measures and conditions presented in the LUTE EIR, are included herein. To the extent that there is any inconsistency between the SCA and MM, the more restrictive conditions shall govern; to the extent any MM and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

The first column identifies the SCA and MM applicable to that topic in the CEQA Analysis.

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 sponsor is responsible for compliance with any recommendations in approved technical reports, all applicable mitigation measures adopted and with all conditions of approval 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 Planning and Zoning Division. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

	Mitigation Implementation/Monitoring			
Chandard Conditions of America (Mitigation Massures	When	Initial	Monitoring/	
Standard Conditions of Approval/Mitigation Measures	Required	Approval	Inspection	
Aesthetics, Shadow and Wind		,		
SCA AESTHETICS-1: Trash and Blight Removal (#16).	Ongoing	N/A	Bureau of	
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 multifamily residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.			Building	
SCA AESTHETICS-2: Graffiti Control (#17).	Ongoing	N/A	Bureau of	
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:			Building	
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 graffitiattracting 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).				
v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.				
b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include:				
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.				
ii. Covering with new paint to match the color of the surrounding surface.				
iii. Replacing with new surfacing (with City permits if required).				
SCA AESTHETICS-3: Landscape Plan (#18).				
a. Landscape Plan Required	Prior to approval		11	N/A
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 Planting Guidelines and with any applicable streetscape plan.	of construction- related permit	Planning		

	Mitigation I	mplementation,	'Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
b. Landscape Installation	-		-
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.	Prior to building permit final	Bureau of Planning	Bureau of Building
c. Landscape Maintenance	Ongoing	N/A	Bureau of
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 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.	Oligonia	IVA	Building
SCA AESTHETICS-4: Lighting (#19).	Prior to building	N/A	Bureau of
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.	permit final		Building
Air Quality			
SCA AIR-1: Dust Controls- Construction Related (#20).	During	N/A	Bureau of
The project applicant shall implement all of the following applicable dust control measures during construction of the project:	construction		Building
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 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. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.			

	Mitigation I	mplementation/N	Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
[Note that additional "enhanced controls" are not applicable to the project as the construction site is less than 4 acres and involves less than 10,000 cubic yards of soil transport.]			
SCA AIR-2: Criteria Air Pollutant Controls- Construction-Related (#21).	During	N/A	Bureau of
The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:	construction		Building
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.			
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").			
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.			
d. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and propane or natural gas generators cannot meet the electrical demand.			
e. Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.			
f. All equipment to be used on the construction site and 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.			
[Note that additional "enhanced controls" are not applicable to the project as the project size is below applicable emissions screening levels.]			
SCA AIR-3: Asbestos in Structures (#26). 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	Prior to approval of construction- related permit	Applicable regulatory agency with jurisdiction	Applicable regulatory agency with jurisdiction

	Mitigation Implementation/Monitoring		
	When	Initial	Monitoring/
Standard Conditions of Approval/Mitigation Measures	Required	Approval	Inspection
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.			
SCA AIR-4: Exposure to Air Pollution (Toxic Air Contaminants) (#23).			
a) Health Risk Reduction Measures	Prior to approval	Bureau of	Bureau of
The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants.	of construction- related permit	Planning	Building
The project applicant shall choose one of the following methods:			
i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures 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. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.			
- or –			
ii. The project applicant shall incorporate the following health risk reduction measures into the project. 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:			
• Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.			
Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).			
Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.			
The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks			

	Mitigation Implementation/Monitoring		
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
concentrate to deliver goods.			
\bullet Sensitive receptors shall be located on the upper floors of buildings, if feasible.			
• Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (Pinus nigra var. maritima), Cypress (X Cupressocyparis leylandii), Hybrid poplar (Populus deltoids X trichocarpa), and Redwood (Sequoia sempervirens).			
• Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.			
• Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.			
• Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:			
o Installing electrical hook-ups for diesel trucks at loading docks.			
o Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards.			
o Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels.			
o Prohibiting trucks from idling for more than two minutes.			
o Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.			
b) Maintenance of Health Risk Reduction Measures	Ongoing	N/A	Bureau of Building
The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.			
Biological Resources			
SCA BIO-1: Tree Permit (#30).			
a. Tree Permit required.	Prior to approval	Permit approval	Bureau of
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.	of construction- related permit	by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building	Building

	Mitigation Ir	mplementation/I	Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
b. Tree Protection during construction.	During	Public Works	Bureau of
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:	construction	Department, Tree Division	Building
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 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.			
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, filing, 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.			
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.			
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.			
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.			
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.			

	Mitigation Implementation/Monitoring		
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
Cultural Resources			
SCA CULTURAL-1: Construction Management Plan (#13). Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department, Department of Transportation, and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project. To further implement SCA CULTURAL-1, the following site-specific recommendations will be implemented: Cultural Resource Management Measure 1.1: Rehabilitation Treatment Plan: A detailed conditions analysis and rehabilitation plan for retained exterior and interior character-defining features at the Palace Theatre building, including but not limited to the exterior plaster and terracotta decorative elements, exterior floor tile, interior cased beam ceilings, interior auditorium false façade elements, interior staircase and railing,	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Building
and interior tiled drinking fountains, should be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for Historic Architecture. The plan should include procedures for removal, storage, rehabilitation, and installation of historic elements which are proposed to be relocated within the building, including a contingency plan if there are changes to the project, ownership, and/or schedule mid-stream. The storage plan should specify where removed and retained elements will be held for the duration of project activities prior to reinstallation, and how they will be transported and secured during storage. The rehabilitation plan should additionally describe measures for the protection of historic materials where alterations to the building, such as non-original windows, interface with character-defining historic features such as original window and storefront openings. This rehabilitation plan should include narrative descriptions of proposed activities, significance diagrams, plans, elevations, and section drawings, as needed. The rehabilitation plan should be consistent with the standards outlined in the following documents:			

	Mitigation In	nplementation,	/Monitoring
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The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, with specific reference to the Secretary of the Interior's Standards for Rehabilitation.			
The City of Oakland's 1994 Historic Preservation Element of the Oakland General Plan.			
The rehabilitation plan should be submitted for review and approval by the Director of the Planning & Building Department or their designee, prior to issuance of any construction-related site permit.			
Cultural Resource Management Measure 1.2: Historic American Building Survey (HABS)-Type Documentation: The project sponsor should retain a professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to prepare written and photographic documentation of the Palace Theatre building. The documentation should be prepared based on the National Park Service's Historic American Building Survey (HABS) Guidelines, and should include the following:			
1. Drawings: Efforts should be made to locate original construction and renovation drawings dating to the building's period of significance. If located, these drawings should be photographed or scanned at high resolution, reproduced, and included in the dataset. If construction drawings or plans cannot be located, as-built drawings should be produced. The as-built drawings should be reviewed by a professional who meets the Secretary of the Interior's Professional Qualification Standards for Architecture or Historic Architecture and be reviewed by the professional retained to prepare the written history.			
2. Photographs: Standard large-format or digital photography should be used. If large-format photography is undertaken, it should follow the HABS/HAER/HALS Photography Guidelines (November 2011; updated June 2015). If digital photography is used, it should follow the National Park Service's National Register Photo Policy Factsheet (June 2013), including ink and paper combinations for printing photographs that have a permanency rating of approximately 115 years. Digital photographs should be saved in uncompressed TIF file format. The size of each image should be 1600x1200 pixels at 300 pixels per inch or larger, color format, and printed in black and white. The file name for each electronic image should correspond with the index of photographs and photograph label. Photograph views for the dataset should include:			
Exterior contextual views.			
Oblique views of the exterior of the building;			
Orthogonal views of each side of the building, where possible;			
• Interior views;			
Detail views of exterior and interior character-defining features.			
All views should be referenced on a photographic key. This photograph key should be on a map of the property and should show the photograph number with an arrow indicating the direction of the view. Historical photographs should also be collected, reproduced, and			

	Mitigation In	nplementation,	/Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
included in the dataset.			
3. Interior and Exterior 3D Photographic Models: New or existing digital models based on 3D photography should be included in the documentation package. The interior model should provide the capability for user-guided access to all character-defining interior spaces.			
4. Written History: A historical report should be prepared for the building, summarizing the history of the building, property description, and historical significance. Documentation should adhere to National Park Service standards for "outline form" HABS documentation.			
The documentation should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site.			
Copies of the drawings, photographs, and report should be given to the Oakland Planning Department and Oakland Cultural Heritage Survey (OCHS), and offered to publicly accessible repositories such as the Oakland Public Library's Oakland History Center and the Bancroft Library at the University of California, Berkeley. Repositories may specify their preference for print and/or digital formats. This measure would create a collection of reference materials that would be available to the public and inform future research.			
Cultural Resources Management Mitigation Measure 1.3: Commemoration and Public Interpretation. The Project Sponsor should prepare a permanent exhibit/display, in coordination with an experienced interpretation/exhibit designer, of the history of the Palace Theatre, including but not limited to historic and current condition photographs, interpretive text, and drawings. Content should focus on the original and renovated interior appearance, the Reid Brothers architectural firm, and the original use of the building as a venue for motion pictures and live performances. The interpretive display should be placed in a suitable publicly accessible space(s) at the project site. As the altered auditorium streetscape elements and relocated stage ceiling would serve more as salvaged interpretive elements rather than as preserved original features, the process of removal, alteration, and reinstallation of these features should be clearly described in on-site interpretive materials.			
Design sketches, exhibit text, and narrative descriptions should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History, and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site. Planning & Building Department staff should inspect the installed interpretive display to confirm its adherence to mitigation measure requirements prior to issuance of a Certificate of Occupancy.			
Cultural Resource Management Measure 1.4: Salvage: In consultation with a professional who meets the Secretary of the of the Interior's Professional Qualifications Standards for Architectural History, the			

	Mitigation I	mplementation/	Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
project sponsor should prepare a Salvage Plan which identifies elements of interior character-defining features not proposed for retention and reuse on site, and which may be salvaged for use in public interpretation. Appropriate venues for interpretation may include but would not necessarily be limited to off-site displays which interpret the history of the 23rd Avenue Commercial District ASI, the history of Oakland's early motion picture theaters, or the work of the Reid Bros. architectural firm. Materials that may be salvaged from the auditorium, balcony, or lobbies for interpretive use may include, but are not limited to: theater seats, iron railings, terracotta roof tiles, and wood or plaster decorative features. The Salvage Plan should describe the procedures to be undertaken by the project sponsor for advertising the availability of salvaged materials for use at appropriate off-site display venues and for removal and transfer of elements to other entities. Planning & Building Department staff should review the Salvage Plan prior to issuance of any construction permits for the site.			
SCA CULTURAL-2: Archaeological and Paleontological Resources — Discovery During Construction (#32). 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 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. 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	During construction	N/A	Bureau of Building
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 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			

	Mitigation I	mplementation,	/Monitoring
	When	Initial	Monitoring/
Standard Conditions of Approval/Mitigation Measures	Required	Approval	Inspection
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.			
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.			
SCA CULTURAL-3: Human Remains — Discovery During Construction (#34). 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 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.	During construction	N/A	Bureau of Building
Energy			
SCA ENERGY-1: Green Building Requirements – Small Projects (#85).			
a. Compliance with Green Building Requirements During Plan-Check	Prior to approval	Bureau of	N/A
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) for projects using the StopWaste.Org Small Commercial Checklist.	of construction- related permit	Building	
i. The following information shall be submitted to the City for review and approval with the application for a building permit:			
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.			
 Permit plans that show, in general notes, detailed design drawings, and specifications as necessary compliance with the items listed in subsection (b) below. 			

	Mitigation Ir	mplementation/I	Monitoring
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
the following:			
CALGreen mandatory measures.			
All applicable green building measures identified on the checklist approved during the review of a Planning and Zoning permit, or submittal of a Request for Revision Plan-check application that shows the previously approved points that will be eliminated or substituted.		N/A	Bureau of
b) Compliance with Green Building Requirements during Construction: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction. The following information shall be submitted to the City for review and approval:	ents of construction n. The	Building	
i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.			
ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.			
Geology, Soils and Geohazards			
SCA GEOLOGY-1: Construction-Related Permit(s) (#36). 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	Bureau of Building
SCA GEOLOGY-2: Seismic Hazards Zone – Landslide/Liquefaction (#39). 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. The geotechnical report shall contain 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.	Prior to approval of construction-related permit	Bureau of Building	Bureau of Building

	Mitigation Implementation/Monit		
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
GREENHOUSE GAS EMISSIONS / GLOBAL CLIMATE CHANG	E		
SCA GHG-1: Project Compliance with the Equitable Climate Action Plan (ECAP) Consistency Checklist (#41). 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.			
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.	Prior to approval of construction-related permit	Bureau of Planning	Bureau of Planning
b. For physical ECAP Consistency Checklist measures to be incorporated into the design of the project, the measures shall be implemented during construction.	During construction	Bureau of Planning	Bureau of Building
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 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.	Ongoing	N/A	Bureau of Planning
Hazards and Hazardous Materials			
SCA HAZARDS-1: Hazardous Building Materials and Site Contamination (#44)			
a. Hazardous Building Materials Assessment 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 asbestoscontaining 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.	Prior to approval of demolition, grading, or building permits	Bureau of Building	Bureau of Building
b. Environmental Site Assessment Required 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	Prior to approval of construction- related permit. Initial Approval: Applicable regulatory agency with jurisdiction	Applicable regulatory agency with jurisdiction	Applicable regulatory agency with jurisdiction

	Mitigation Ir	mplementation/	Monitoring
	When	Initial	Monitoring/
Standard Conditions of Approval/Mitigation Measures	Required	Approval	Inspection
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.	Monitoring/Inspec tion: Applicable regulatory agency with jurisdiction		
c. Health and Safety Plan Required	Prior to approval	Bureau of	Bureau of
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.	of construction- related permit	Building	Building
d. Best Management Practices (BMPs) Required for Contaminated Sites			
[Item d text omitted because it is not applicable to the project, which is not on a contaminated site.]			
SCA HAZARDS-2: Hazardous Materials Related to Construction (#43). 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:	During construction	N/A	Bureau of Building
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;			
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			
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 Effective December 16, 2020 Page 37 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.			

	Mitigation Implementation/Monitoring		
	When	Initial	Monitoring/
Standard Conditions of Approval/Mitigation Measures	Required	Approval	Inspection
Hydrology and Water Quality			
SCA HYDROLOGY-1: Erosion and Sedimentation Control Measures for Construction (#48).	During construction	N/A	Bureau of Building
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.			
SCA HYDROLOGY-2: Site Design Measures to Reduce Stormwater Runoff (#52).	Ongoing	N/A	N/A
Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is Effective December 16, 2020 Page 43 encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:			
a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas;			
b. Utilize permeable paving in place of impervious paving where appropriate;			
c. Cluster structures;			
d. Direct roof runoff to vegetated areas;			
e. Preserve quality open space; and			
f. Establish vegetated buffer areas.			
SCA HYDROLOGY-3: Source Control Measures to Limit Stormwater Pollution (#53) Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:	Ongoing	N/A	N/A
a. Stencil storm drain inlets "No Dumping – Drains to Bay;"			
b. Minimize the use of pesticides and fertilizers;			
c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;			
d. Cover trash, food waste, and compactor enclosures; and			
e. Plumb the following discharges to the sanitary sewer system, subject to City approval:			
f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;			

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g. Dumpster drips from covered trash, food waste, and compactor enclosures;			
h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;			
i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and			
j. Fire sprinkler teat water, if discharge to on-site vegetated areas is not feasible.			
Noise and Vibration			
SCA NOISE-1: Construction Days/Hours (#62).	During 	N/A	Bureau of
The project applicant shall comply with the following restrictions concerning construction days and hours:	construction		Building
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.			
SCA NOISE-2: Construction Noise (#63). The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to,	During construction	N/A	Bureau of Building

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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.			
SCA NOISE-3: Extreme Construction Noise (#64).			
[SCA Noise-3 is strictly applicable to all construction projects, but would only be triggered if extreme noise-generating (90 dBA or above) construction activities, such as pile driving, are subsequently proposed]			
a. Construction Noise Management Plan Required	Prior to approval of construction-	Bureau of Building	Bureau of Building
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:	related permit		
i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;			
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;			
iii. Utilize noise control blankets on the building structure as the building			

	Mitigation I	mplementation,	'Monitoring
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is erected to reduce noise emission from the site;			
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			
v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.			
b. Public Notification Required			
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.	During construction	Bureau of Building	Bureau of Building
SCA NOISE-4: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities (#70). The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 2263 E. 15 th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.	Prior to construction	Bureau of Building	Bureau of Building
To further implement SCA NOISE-4, the following site-specific recommendations shall be implemented:			
Noise Improvement 4.1: Vibration Reduction. The following construction methods are recommended pursuant to SCA Noise-4 to reduce vibration levels due to the project's construction activities to less than 0.3 in/sec PPV threshold at nearby buildings:			
a) Avoid using heavy construction equipment such as vibratory rollers, hoe rams, large bulldozers, and tampers within 20 feet of nearby structures.			
b) Avoid dropping heavy objects or materials within 20 feet of nearby structures.			
c) Place operating equipment on the construction site as far as possible from vibration-sensitive receptors.			
d) Use smaller equipment to minimize vibration levels below the limits.			
e) Select demolition methods not involving impact tools.			

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SCA NOISE-5: Operational Noise (#68). 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.	Ongoing	N/A	Bureau of Building
To further implement SCA NOISE-5, the following site-specific recommendations shall be implemented:			
Noise Improvement 5.1: Operational Noise Reduction. The following improvement shall be constructed as a part of the project to ensure operational noise levels would remain within Oakland performance standards:			
a) Construct a solid noise barrier along the northwest residential property line to shield adjacent residential land-uses from outdoor area noise. This noise barrier shall be a minimum of 8 feet tall except in the 10 feet adjacent to the property line with E. 15th Street, which shall be a minimum of 6 feet tall.			
Public Services and Recreation			
SCA SERVICES-1: Capital Improvements Impact Fee (#73). 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	N/A
Transportation and Circulation			
SCA TRANSPORTATION-1: Transportation Impact Fee (#79). 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).	Prior to issuance of building permit	Bureau of Building	N/A
SCA TRANSPORTATION-2: Bicycle Parking (#76). 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.	Prior to approval of construction- related permit	Bureau of Planning	Bureau of Building
SCA TRANSPORTATION-3: Transportation and Parking Demand Management (#78).			
a. Transportation and Parking Demand Management (TDM) Plan Required	Prior to approval of planning application	Bureau of Planning	N/A
Requirement: The project applicant shall submit a Transportation and Parking Demand		i iailiillig	
Management (TDM) Plan for review and approval by the City.			
i. The goals of the TDM Plan shall be the following:			

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Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable.			
Achieve the following project vehicle trip reductions (VTR):			
o Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR			
o Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR			
• Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.			
• Enhance the City's transportation system, consistent with City policies and programs.			
ii. The TDM Plan should include the following:			
Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable.			
Proposed TDM strategies to achieve VTR goals (see below).			
iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer- Based Trip Reduction Program.			
iv. Mandatory TDM strategies must be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project's VTR.			
The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.			
b. TDM Implementation – Physical Improvements			
Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.	Prior to building permit final	Bureau of Building	Bureau of Building
c. TDM Implementation – Operational Strategies			
[Item c text omitted because it is not applicable to the project, which does not generate 100 or more net new peak hour trips]	Ongoing	Department of Transportation	Department of Transportation
To further implement SCA TRANSPORTATION-3, the following site- specific recommendations shall be implemented. Note that the specifics of these implementing measures are preliminary at this point and could be revised through coordination with the City as part of the normal			

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permitting process.			Поросия
<u>TDM Improvement Measure 3.1 - Bus Shelters</u> . The project shall consult			
with AC Transit and the City to identify feasibility of installing bus shelters for the following bus flag stops:			
• Stop 51284, Route 62: 23rd Ave northbound at International Blvd			
• Stop 57505, Route 62: 23rd Ave southbound at International Blvd			
• Stop 54554, Route 62: 23rd Ave northbound at 16th St			
• Stop 54448, Route 40: Foothill Blvd eastbound at 23rd Ave			
If these stops have 25 or more passenger boardings per day and construction of the bus shelters is feasible, the project will contribute its fair share cost responsibility toward new bus shelters.			
TDM Improvement Measure 3.2 – Intersection Improvements (curb extensions of bulb-outs; installation of safety improvements identified in the Pedestrian Master Plan; paving lane striping or restriping and signs). The project shall contribute its fair share cost responsibility for improvements at the 22nd Ave & East 15th St Intersection (Improvement Measure TR-5, see below):			
Install high visibility yellow-striped crosswalks with signage and advanced yield markings (Short-Term Countermeasure).			
Install pedestrian safety zones extending from the curb (Short-Term Countermeasure).			
Add edge line markings on East 15th Street for street narrowing and parking definition. Restrict on-street parking within 20-feet of intersection and marked crosswalks (Short-Term Countermeasure).			
Install curb extensions on each corner (Long-Term Countermeasure).			
The project sponsor shall work with the City to convert the marked crosswalks to yellow school crosswalks at 23rd Avenue and East 15th Street and 23rd Avenue and International Boulevard.			
The project sponsor shall work with the City to add yield markings on 23rd Avenue at East 15th Street.			
TDM Improvement Measure 3.3 – Pedestrian Crossing Improvements, Pedestrian-Supportive Signal Changes. The project sponsor shall work with the City to optimize the pedestrian Walk phase timing when parallel traffic on International Boulevard has the green phase; this may be achieved by setting phases to 'rest in walk', lengthening the pedestrian walk phase, increasing the Walk phase frequency by shortening the signal cycle (to and from the BRT platform), or by other means at the following crossings (Improvement Measure TR-5.6, see below):			
23rd Avenue at International Boulevard (east crosswalk)			
24th Avenue at International Boulevard (east and south crosswalks)			
TDM Improvement Measure 3.4 – Relocating Bus Stops to Far Side. The project shall consult with AC Transit and the City to determine if the following near side bus stops should be relocated to the far side:			

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Stop 57505, Route 62: 23rd Ave southbound approach to International Blvd			
• Stop 54554, Route 62: 23rd Ave northbound approach to 16th St/Foothill Blvd			
• Stop 54448, Route 40: Foothill Blvd eastbound approach to 23rd Ave			
If the transit stop relocations are found to be feasible, then the project sponsor will contribute its fair share cost responsibility toward the transit stop relocation.			
Additional Recommended TDM Measures			
Additional TDM measures are recommended to help achieve the required reduction in vehicle trips and other goals of the TDM Plan as required pursuant to SCA TRANSPORTATION-3, including the following:			
TDM Program Coordinator:			
The TDM Program Coordinator would be responsible for implementation, monitoring, and reporting of the TDM Plan. The TDM Coordinator would facilitate site inspections by City staff to verify that the standards specified as conditions of approval are met. This person(s) could be a school employee or a third-party provider that runs the program.			
The TDM Program Coordinator would be responsible for managing T-7 Implement Commute Trip Reduction Marketing, T-9 Implement Subsidized or Discounted Transit Program, and T-41 Implement a School Pool Program.			
T-7 Implement Commute Trip Reduction Marketing			
The project sponsor would implement a marketing strategy to promote a commute trip reduction (CTR) program. Information sharing and marketing promote and educate students and staff about their travel choices to the project location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT and GHG emissions.			
T-9 Implement Subsidized or Discounted Transit Program			
The project sponsor would provide subsidized or discounted, or free transit passes for 100 students. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT and thus a reduction in GHG emissions.			
T-10 Provide End-of-Trip Bicycle Facilities			
The project sponsor would install and maintain end-of-trip facilities for employee use. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions. This measure is consistent with project SCA Transportation-2, Bicycle Parking.			
T-18 Provide Pedestrian Network Improvement			
This measure would increase the sidewalk coverage to improve			

	Mitigation Implementation/Monitori		
Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
pedestrian access, which may include crossing safety improvements. Providing sidewalks and an enhanced pedestrian network would encourage people to walk instead of drive. This mode shift would result in a reduction in VMT and GHG emissions.			
T-41 Implement a School Pool Program (CAPCOA 2010 TRT-10)			
The project sponsor would create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School pool helps match parents to transport students to private schools, or to schools where students cannot walk or bike but do not meet the requirements for bussing. A school pool program can help reduce onsite air pollutant emissions at the school by reducing private vehicle trips, especially if the pool vehicle is zero emissions.			
SCA TRANSPORTATION-4: <i>Construction Activity in the Public Right-of-Way</i> (#75).			
a. Obstruction Permit Required	Prior to approval	Department of	Department of
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 and sidewalks.	of construction- related permit	Transportation	Transportation
b. Traffic Control Plan Required	Prior to approval	Department of	Department of
In the event of obstructions to vehicle or bicycle travel lanes, 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 detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall implement the approved Plan during construction.	of construction- related permit	Transportation	Transportation
c. Repair of City Streets	Prior to building	11/7	Department of
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.	permit final		Transportation
SCA TRANSPORTATION-5: Transportation Improvements (#77). The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Review for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, transportation demand management measures, and transit, pedestrian, and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for	Prior to building permit final or as otherwise specified	Bureau of Building; Department of Transportation	Bureau of Building

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Standard Conditions of Approval/Mitigation Measures	When Required	Initial Approval	Monitoring/ Inspection
improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction.			
To further implement SCA TRANSPORTATION-5, the following transportation improvement measures or project-specific recommendations shall be implemented. Note that the specifics of these implementing measures are preliminary at this point and could be revised through coordination with the City as part of the normal permitting process.			
Improvement Measure TR-5.1: Develop and Implement Drop-Off and Pick-Up Procedures. To minimize potential disturbance impacting surrounding roadways and to maintain safe and effective operations, the project shall develop and implement drop-off and pick-up procedures to be reviewed and approved by City staff prior to school opening. These procedures would address typical school day, minimum school day, and special event scenarios. These procedures should include:			
Provide clearly marked white curb and signage to designate a drop- off and pickup zone on the south side of East 15th Street directly adjacent to the project site.			
Require drivers to pull up to the front of the designated area and to not leave the vehicle while conducting drop-off or pick-up.			
Prohibit double parking and waiting in the travel lanes on East 15th Street. Prohibit student loading on 23rd Avenue.			
• Implement an arrival and departure assistant program that allows for students or staff to serve as valets and actively manage and enforce proper loading and unloading procedures. Assistants can also encourage appropriate driving behavior and ensure pedestrian and cyclist safety at the intersection.			
Communicate drop-off and pick-up procedures to staff, students, and parents using welcome packets, school announcements, and newsletters.			
Improvement Measure TR-5.2: Off-Site Parking. The project sponsor shall install signs outside the off-street parking lot indicating its reserved use for the school. Within the parking lot, the project sponsor shall install signs indicating reserved parking for school staff and guests.			
Improvement Measure TR-5.3: On-Street Parking and Loading. The project sponsor shall work with the City of Oakland to designate the 200 feet of school frontage on East 15th Street as a white curb loading			

	Mitigation In	nplementation,	/Monitoring
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zone. The project sponsor shall install signs indicating:			
"No Parking Student Loading Only" zones during the morning drop-off and afternoon pick-up period, and			
"Short-term school visitor parking and deliveries only" zones outside non-student loading hours.			
Improvement Measure TR-5.4: Implement Special Event Parking Management Strategies. For all special events with 150 or more attendees, the project sponsor shall implement a parking management plan with the following strategies:			
Provide a special event trip reduction newsletter to clearly communicate special event travel options that include carpooling, taking transit, walking, and biking, special carpool parking, and any arranged off-site parking options.			
Direct households that are driving to park two or more blocks away from the project to reduce instances of cruising for parking at the school frontage.			
•Integrate group bicycle rides to campus and other programmatic content as part of special events.			
Improvement Measure TR-5.5: Pedestrian Safety Enhancements to East 15th Street. The project shall construct improvements at the East side crosswalk of the intersection of 22nd Avenue and East 15th Street including the northeast and southeast corners, consistent with the Oakland Pedestrian Master Plan, subject to review by the City of Oakland Department of Transportation as part of the City's Off Site Infrastructure (PX) Permit process. These improvements include:			
Upgrade non-ADA compliant curb at the northeast and southeast corners of the intersection to be ADA compliant and install a high-visibility yellow school crosswalk on the east crosswalk.			
Add edge line markings on East 15th Street for street narrowing and parking definition. Restrict on-street parking within 20 feet of intersection and marked crosswalks.			
Install pedestrian safety zones extending from the curb at the northeast and southeast corners. The purpose of these painted bulbouts is to reduce the speed of turning vehicles and reduce the pedestrian exposure to vehicle traffic while crossing East 15th Street.			
Install intersection hardening treatments consisting of low-profile wheel stops and flexible vertical delineators on the center double yellow line on 22nd Avenue approaching East 15th Street from the north and south, similar to those one block to the north at 22nd Avenue and Foothill Boulevard.			
Improvement Measure TR-5.6: Optimize Signal Timing for Pedestrians on International Boulevard between 23rd Avenue and the BRT stop at 24th Avenue. The project sponsor shall update signal timing cards as needed to optimize the pedestrian Walk phase timing when parallel traffic on International Boulevard has the green phase; this may be achieved by setting phases to 'rest in walk', lengthening the pedestrian walk phase, increasing the Walk phase frequency by shortening the			

	Mitigation I	mplementation/	Monitoring
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signal cycle (to and from the BRT platform), or by other means at the following crossings:	'		
23rd Avenue at International Boulevard (east crosswalk)			
• 24th Avenue at International Boulevard (east and south crosswalks)			
Improvement Measure TR-5.7: Install Sufficient On-Site Bicycle Parking. The project shall install a minimum of 22 long-term and 18 short-term bicycle parking spaces in accordance with the City Municipal Code §17.117.100.			
Utilities and Service Systems			
SCA UTILITIES-1: Underground Utilities (#83). 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.	During construction	N/A	Bureau of Building
SCA UTILITIES-2: Construction and Demolition Waste Reduction and Recycling (#82). 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 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.	Prior to approval of construction-related permit	Public Works Department, Environmental Services Division	Public Works Department, Environmental Services Division
SCA UTILITIES-3: Recycling Collection and Storage Space (#84). 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 cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet.	Prior to approval of construction- related permit	Bureau of Planning	Bureau of Building

ATTACHMENT B: ASSESSMENT OF PROJECT CONSISTENCY WITH INFILL PROJECT PERFORMANCE STANDARDS PER CEQA GUIDELINES §15183.3 AND APPENDIX M

Infill Performance Standards, Per CEQA Guidelines Section 15183.3

California Environmental Quality Act (CEQA) Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M establish eligibility requirements for projects to qualify as infill projects. Table B-1, on the pages following, shows how the proposed project satisfies each of the applicable requirements.

	Table B-1 Project Infill Eligibility		
CEQ	A Eligibility Criteria	Eligible?/Notes for Proposed 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 75 percent of the site's perimeter. For the purpose of this subdivision, "adjoin" means the infill project is immediately adjacent to qualified urban uses, or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes The project site has been previously developed with commercial uses and adjoins existing urban uses.	
2.	Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:		
	2a. Performance Standards Related to Project Design. All projects must implement <u>all</u> of the following:		
	Renewable Energy. Non-Residential Projects. 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. Residential Projects. Residential projects are also encouraged to include such onsite	Not Applicable. The proposed project is reuse of an existing building.	
	renewable power generation. Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall	Not Applicable. The project site does not contain known contamination and no remediation is proposed or required.	

Table B-1 Project Infill Eligibility		
CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	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.	
	Residential Units Near High-Volume Roadways and Stationary Sources.	Not Applicable. The proposed project does not include residential
	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.	units.
	If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and 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.	
	2b. Additional Performance Standards by Project Type. In addition to implementing all the features described in criterion 2a above, the project must meet eligibility requirements provided below by project type.	

Table B-1 Project Infill Eligibility		
CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	Residential. A residential project must meet one of the following: A. Projects achieving below average regional per capita vehicle miles traveled. A residential project is eligible if it is located in a "low vehicle travel area" within the region; B. Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor. A residential project is eligible if it is located within ½ mile of an	Not Applicable. The proposed project does not include residential units.
	existing major transit stop or an existing stop along a high quality transit corridor; or C. Low – Income Housing. 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.	
	Commercial/Retail. A commercial/retail project must meet one of the following: A. Regional Location. A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a "low vehicle travel area"; or B. Proximity to Households. A project with no single-building floor-plate greater than 50,000 square feet located within ½ mile of 1,800 households is eligible.	Not Applicable. The proposed project is not a commercial/retail project.

Table B-1 Project Infill Eligibility		
CEQ	A Eligibility Criteria	Eligible?/Notes for Proposed Project
	Office Building. An office building project must meeting one of the following: A. Regional Location. Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; or B. Proximity to a Major Transit Stop. Office buildings, both commercial and public, within ½ mile of an existing major transit stop, or ¼ mile of an existing stop along a high quality transit corridor, are eligible.	Not Applicable. The proposed project is not an office building project.
	Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.	Not Applicable. The proposed project is not a transit station.
	Schools. 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 ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible. 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.	The proposed project is located within 0.10 miles from stops on two high-frequency transit routes (AC Transit Route 1T bus rapid transit and Route 40). The project would install a minimum of 22 long-term and 18 short-term bicycle parking spaces. Per Section 17213, the project site is not a hazardous waste site (current or former). Air quality has been analyzed and any necessary corrective actions have been identified to bring air emissions to non-hazardous levels.
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features in 2a above are eligible.	Not Applicable. The proposed project is not a small walkable community project.

	Table B-1 Project Infill Eligibility		
CEQ	A Eligibility Criteria	Eligible?/Notes for Proposed Project	
3.	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:	Yes The project is consistent with Plan Bay Area 2040 and the applicable land use designation and zoning of the General Plan Land Use and Transportation Element. (see detailed explanation below table)	
	(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;		
	<u>or</u>		
	(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])		

Explanation for Eligibility Criteria 3 - The adopted Plan Bay Area 2040 serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375.²⁹ 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. As stated in the LUTE, the area of 23rd Avenue and International Boulevard is considered a key "Growth and Change" location, for targeted community and economic development. The proposed project is consistent with the general land use designation, density, building intensity, and applicable policies specified in the LUTE and described further below.

The land use designation for the site is Neighborhood Center Mixed Use; this designation applies to areas suitable for smaller scale pedestrian-oriented, continuous street frontages that consist of a mix of housing, retail, offices, eating and drinking establishments, active open space, personal and business services and smaller scale educational, cultural or entertainment uses. The proposed mixed-use project would be consistent with this designation.

²⁹ Metropolitan Transportation Commission and Association of Bay Area Governments, adopted July 26 2017, Plan Bay Area 2040.

The project is zoned CN-3 (Neighborhood Center Commercial 3) and RM-2 (Mixed Housing Type Residential Zone- 2). With approval of the proposed merging of the lot with the building and adjacent lot with the proposed recreational area, the school site would have a CN-3 zoning. The CN-3 Zone allows mixed use neighborhood commercial centers that have a compact, vibrant pedestrian environment. Community Education Civic Activities are conditionally permitted activities in this zone. The proposed project would be consistent with this designation. The parking lot on E. 15th Street is in an RM-2 zone and would remain in that zoning designation. No change of use is proposed for that lot.

The permitted Floor Area Ratio (FAR) for a project in the CN-3 zone is 4.0. The project site is approximately 26,435 square feet, and therefore the maximum non-residential FAR allowed would be 105,740 square feet. The proposed project would provide a total non-residential square footage of 24, 048 for an FAR of 1.4, which is within the FAR allowance of 4.0 for the site. Therefore, the proposed project would comply with the amount of non-residential FAR allowed under the Planning Code.

The proposed project is not changing the height of the existing building and would comply with the General Plan LUTE height restrictions.

Consequently, in accordance with Section 15183.3 of the CEQA Guidelines, the proposed project is consistent with the General Plan LUTE.

ATTACHMENT C: CRITERIA FOR USE OF ADDENDUM, PER CEQA GUIDELINES §15164 AND §15162

CRITERIA FOR USE OF ADDENDUM, PER CEQA GUIDELINES SECTIONS 15164 AND 15162

Section 15164(a) of the California Environmental Quality Act (CEQA) Guidelines states that "a lead agency or responsible agency shall prepare an addendum to a previously certified EIR [Environmental Impact Report] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Section 15164(e) states that "a brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR."

As discussed throughout the attached CEQA Analysis, the proposed project would be consistent with the LUTE EIR analysis, findings, and conclusions and implementation of the proposed project would not substantially increase the severity of the significant impacts that were identified in the LUTE EIR, nor would it result in new significant impacts that were not identified in the LUTE EIR. The project would be required to implement mitigation measures and SCAs as applicable and detailed in Appendix A of the CEQA Analysis.

The proposed project is consistent with the LUTE and the land use designation and zoning at the site.

Conditions for Addendum. None of the following conditions for preparation of a subsequent EIR per Section 15162(a) apply to the proposed project:

- (1) Substantial changes are proposed in the project, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Project Consistency with Section 15162 of the CEQA Guidelines. Since the certification of the LUTE EIR, no changes have occurred in the circumstances under which the revised project would be implemented, that would change the severity of the proposed project's physical impacts as explained in the CEQA Checklist above, and no new information has emerged that would materially change the analyses or conclusions set forth in the LUTE EIR.

Furthermore, as demonstrated in the CEQA Analysis, the proposed project would not result in any new significant environmental impacts, result in any substantial increases in the significance of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the EIR, nor render any mitigation measures or alternatives found not to be feasible, feasible. The effects of the proposed project would be substantially the same as those reported for the LUTE EIR, as applicable to the proposed project and site.

ATTACHMENT D: EMISSIONS ASSESSMENT

BAY AREA TECHNOLOGY SCHOOL AIR QUALITY ASSESSMENT

Oakland, California

January 5, 2023

Prepared for:

Rebecca Auld Vice President Lamphier-Gregory 4100 Redwood Road STE 20A - #601 Oakland, CA 94619

Prepared by:

James Reyff and William Popenuck

Project # 22-110

INTRODUCTION

The purpose of this report is to address air quality impacts resulting from the construction and operation of the proposed Bay Area Technology School (BayTech) project at the former Palace Theater building located at 1445 23rd Avenue in Oakland, California. The air quality impacts would be associated with interior remodeling of the existing theater building and some other site improvements, and operation of the project. Air pollutants and GHG emissions associated with construction and operation of the project were predicted using appropriate models. In addition, the potential community risk impact to nearby sensitive receptors and the impact of existing toxic air contaminant (TAC) sources affecting the proposed sensitive receptors were evaluated. This analysis addresses those issues following the guidance provided by the Bay Area Air Quality Management District (BAAQMD).¹

PROJECT DESCRIPTION

The Project site totals approximately 0.6 acres, including the approximately 18,500 square foot (sf) former Palace Theater and parking area located at 1445 and 1453 23rd Avenue and a surface parking lot across the street at 2280 East 15th Street. The Project proposes to redevelop these parcels and to allow for the operation of a grade 6 through 12 charter middle/high school on the Project site. The Palace Theater building would remain and require extensive interior remodeling and some exterior remodeling, including the addition of a full-size two-story middle/high school gymnasium/multi-purpose area. In addition, the creation of a full level above the gymnasium would include classrooms and offices. The resulting floor plan would have a total square footage of approximately 24,048. The existing on-site parking lot adjacent to the building would be demolished to build an outdoor recreational use area for students. The existing parking lot across East 15th Street would be restored and utilized as a staff parking area with 19-27 spaces depending on if and how valet parking is utilized.

At full enrollment, the school is expected to have a student population of 350 students, with approximately 160 middle school students and 190 high school students, and 40 faculty and staff. School operational hours would be Monday through Friday from approximately 8:00 am - 6:00 pm, including afterschool activities.

SETTING

The project site is located in Alameda County, which is within the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone (O₃), respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NOx). These precursor pollutants react under certain meteorological conditions

¹ Bay Area Quality Management District, 2017. *California Environmental Quality Act Air Quality Guidelines*. May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa guidelines may2017-pdf.pdf?la=en

to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complicated scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. The most recent Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines were published in February of 2015.² Attachment 1 provides a detailed description of the OEHHA assessment methodology used in this analysis.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Therefore, new

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² OEHHA, 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. February.

and/or existing residential locations are assumed to include infants and small children. The closest sensitive receptors are the adjacent residences to the northwest and southwest of the project site. There are additional residences surrounding the site at further distances. This project would introduce new sensitive receptors (i.e., middle and high school students) to the area. The high school students, assumes ages 11 to 17, are considered sensitive receptors.

REGULATORY SETTING

Federal Regulations

The United States Environmental Protection Agency (EPA) sets nationwide ambient air quality standards and emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards.

In the past decade, the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of nitrogen oxides, or NO_X, and particulate matter (PM₁₀ and PM_{2.5}) and because the EPA has identified diesel particulate matter as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce PM and NO_X emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.³

In concert with the diesel engine emission standards, the EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of particulate matter in diesel-fueled engine exhaust. The current standards have reduced the amount of sulfur allowed by 97 percent for highway diesel fuel (from 500 parts per million by weight [ppmw] to 15 ppmw), and by 99 percent for off-highway diesel fuel (from about 3,000 ppmw to 15 ppmw). The low sulfur highway fuel (15 ppmw sulfur), also called ultra-low sulfur diesel (ULSD) is currently required for use by all vehicles in the U.S.

All of the above Federal diesel engine and diesel fuel requirements have been adopted by California, in some cases with modifications making the requirements more stringent or the implementation dates sooner.

State Regulations

The California Air Resources Board (CARB) has set statewide ambient air quality standards (CAAQS) and emission standards for on-road and off-road mobile sources that are more stringent than those adopted by the EPA. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use

³ USEPA, 2000. Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements. EPA420-F-00-057. December.

public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a regulation to reduce emissions of DPM and NO_X from on-road heavy-duty diesel fueled vehicles.⁴ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

CARB has also adopted and implemented regulations to reduce DPM and NO_X emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.). The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce DPM and NO_X exhaust emissions by requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates. Implementation of this regulation, in conjunction with the Federal off-road equipment engine emission limits for new vehicles, will significantly reduce emissions of DPM and NO_X.

To address the issue of diesel emissions in the state, CARB developed the *Risk Reduction Plan* to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles⁵. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, a significant component of the plan involves application of emission control strategies to existing diesel vehicles and equipment. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the Federal on-road and non-road diesel engine emission standards for new engines, as well as adoption of regulations for low sulfur fuel in California.

Bay Area Air Quality Management District (BAAQMD)

BAAQMD has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

BAAQMD is the lead agency in developing plans to address attainment and maintenance of the National Ambient Air Quality Standards and California Ambient Air Quality Standards. The District also has permit authority over most types of stationary equipment utilized for the proposed project. The BAAQMD is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

⁵ California Air Resources Board, 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. October.

⁴ Available online: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed: November 21, 2014.

BAAQMD's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to outdoor TACs in the Bay Area.⁶ The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust, which is a major contributor to airborne health risk in California. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program is being implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TAC, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses will be used to focus emission reduction measures in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.⁷ The BAAQMD has identified six communities as impacted: Concord, Richmond/San Pablo, Western Alameda County, San José, Redwood City/East Palo Alto, and Eastern San Francisco. The project site is within a CARE area and within a BAAQMD overburdened area as identified by CalEnviroScreen as the Project site is scored at the 74th percentile.8

The BAAQMD California Environmental Quality Act (CEQA) Air Quality Guidelines⁹ were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They also include assessment methodologies for air toxics, odors, and greenhouse gas emissions. Attachment 1 includes detailed community risk modeling methodology.

BAAQMD Rules and Regulations

The project is not anticipated to have combustion equipment that would require a permit from BAAQMD (e.g., emergency generator). Therefore, permits from the Air District are not necessary.

City of Oakland Standard Conditions of Approval

On November 3, 2008, the Oakland City Council formally adopted the Standard Conditions of Approval (SCA). The City of Oakland has adopted Standard Conditions of Approval (adopted

⁶ See BAAQMD: <u>https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program.</u>

⁷ See BAAQMD: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en.

⁸ OEHAA, CalEnviroScreen 4.0 Maps https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

⁹ Bay Area Air Quality Management District, 2017. CEQA Air Quality Guidelines. May.

2008, as revised), which are uniformly applied to projects under City of Oakland jurisdiction. The following air quality conditions apply to this project:

No. 20 - Dust Controls - Construction Related

Requirement: The project applicant shall implement all of the following applicable dust control measures during construction of the project:

- 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 demolition activities (if any) shall be suspended when average wind speeds exceed 20 miles per house (mph).
- f) All trucks and equipment, including tires, shall be washed off prior to leaving the site.
- g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel

Enhanced control will not be needed because the project does involve extensive site preparation nor extensive soil transport.

No. 21 - Criteria Air Pollutant Controls - Construction Related

<u>Requirement:</u> The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

- 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.
- 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").
- 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.

- 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.
- e) Low VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.
- 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.

Enhanced control measures will not be needed since the average daily emissions from construction activities will not exceed the CEQA thresholds for construction activity, currently 54 pounds per day of ROG, NOx, or PM2.5 or 82 pounds per day of PM10.

No. 22 - Diesel Particulate Matter Controls-Construction

Related

- a. Diesel Particulate Matter Reduction Measures
 - <u>Requirement:</u> 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) from construction emissions. The project applicant shall choose <u>one</u> of the following methods:
 - 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) and Office of Environmental Health and Hazard Assessment to determine the health risk to sensitive receptors exposed to DPM from project construction emissions. 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 acceptable levels, then DPM reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, DPM reduction measures shall be identified to reduce the health risk to acceptable levels as set forth under subsection b below. Identified DPM reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM reduction measures shall be implemented during construction.

-or-

ii. 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 this requirement shall constitute a material breach of contract.

No. 23 - Exposure to Air Pollution (Toxic Air Contaminants)

a. Health Risk Reduction Measures

<u>Requirement:</u> The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose <u>one</u> of the following methods:

i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures 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. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.

- or -

- ii. The project applicant shall incorporate the following health risk reduction measures into the project. 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:
 - Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 [insert MERV-16 for projects located in the West Oakland Specific Plan area] or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.
 - Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
 - Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.
 - The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods.
 - Sensitive receptors shall be located on the upper floors of buildings, if feasible.
 - Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus*

nigra var. maritima), Cypress (X Cupressocyparis leylandii), Hybrid poplar (Populus deltoids X trichocarpa), and Redwood (Sequoia sempervirens).

- Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.
- Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.
- Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:
 - o Installing electrical hook-ups for diesel trucks at loading docks.
 - o Requiring trucks to use Transportation Refrigeration Units (TRU) that
 - o meet Tier 4 emission standards.
 - o Requiring truck-intensive projects to use advanced exhaust
 - o technology (e.g., hybrid) or alternative fuels.
 - o Prohibiting trucks from idling for more than two minutes.
 - o Establishing truck routes to avoid sensitive receptors in the project. A
 - o truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.

b. Maintenance of Health Risk Reduction Measures

Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.

Note that Conditions 24 and 25 do not apply since stationary sources and truck loading docks or truck fleets are not sources of air pollution from the Project

No. 26 - Asbestos in Structures

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.

Note that Condition 27 does not apply since the Project will not disturb naturally occurring asbestos.

Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA and these significance thresholds were contained in the District's 2011 CEQA Air

Quality Guidelines. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The 2011 thresholds were challenged in court and were mostly upheld. In 2017, BAAQMD updated its CEQA Air Quality Guidelines and included revised significance thresholds. In 2022, BAAQMD revised its GHG thresholds, eliminating quantified emissions limits. The current BAAQMD thresholds were used in this analysis and are summarized in Table 1. Air quality impacts and community health risks are considered potentially significant if they exceed these thresholds.

Table 1. BAAQMD CEQA Significance Thresholds

Table I. BA	AAQMD CEQA Significand	ce inresnoius								
Criteria Air	Construction Thresholds	Operatio	nal Thresholds							
Pollutant	Average Daily Emissions	Average Daily	Annual Average							
1 onutant	(lbs./day)	Emissions (lbs./day)	Emissions (tons/year)							
ROG	54	54	10							
NO_X	54	54	10							
PM_{10}	82 (Exhaust)	82	15							
$PM_{2.5}$	54 (Exhaust)	54	10							
CO	Not Applicable	9.0 ppm (8-hour average	e) or 20.0 ppm (1-hour average)							
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices Single Sources Within 1,000-foot Zone of Influence 10 per one million Not Applicable Not Applicable Combined Sources (Cumulative from all source within 1000-foot zone of influence)									
Health Risks and Hazards										
Excess Cancer Risk										
Hazard Index	1.0		10.0							
Incremental annual PM _{2.5}	$0.3 \ \mu g/m^3$ $0.8 \ \mu g/m^3$									
	Greenhous	e Gas Emissions								
Land Use Projects – (Must Include A or B)	both residential and b. The project will not usage as determined and Section 15126. 2. Transportation a. Achieve a reduction the regional average Climate Change Sec Senate Bill 743 VM Governor's Office of Evaluating Transpo i. Residential p ii. Office projectiii. Retail project b. Achieve compliance recently adopted ve	include natural gas appliant nonresidential development result in any wasteful, ineful by the analysis required up 2(b) of the State CEQA Guin in project-generated vehicle consistent with the current oping Plan (currently 15 per IT target, reflecting the record Planning and Research's retation Impacts in CEQA: projects: 15 percent below the extest on the increase in existing with off-street electric vehrsion of CALGreen Tier 2.	ces or natural gas plumbing (in tt). ficient, or unnecessary energy nder CEQA Section 21100(b)(3) delines. le miles traveled (VMT) below twersion of the California reent) or meet a locally adopted emmendations provided in the Technical Advisory on the existing VMT per capita sisting VMT per employee							
CEQA Guidelines Section 15183.5(b).										

Note: ROG = reactive organic gases, NO_X = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (μm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5 μm or less. GHG = greenhouse gases.

Existing Sources of Air Pollutants and TACs.

Community health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors that are located within one quarter mile of a project site (i.e., influence area). These sources include rail lines, freeways or highways, busy surface streets that have an average daily traffic (ADT) volume that exceeds 10,000 vehicle, and stationary sources identified by BAAQMD.

The Union Pacific Railroad (UPRR) line is about 840 feet southwest of the project site. There are approximately 28 trains that pass near the site each day.¹⁰ The track serves both intercity passenger and freight trains.

Interstate 880 (I-880) lies about 1,000 feet southwest of the project site.

A review of the project traffic study identified several local roadways that have traffic volumes of about 10,000 average daily trips (ADT) per day or greater. These include:

- E. 12th Street,
- International Boulevard,
- Foothill Boulevard,
- 22nd Avenue, and
- 23rd Avenue.

Stationary sources were identified within the one quarter mile influence area initially using BAAQMD's Permitted Stationary Sources 2020 GIS website.¹¹ The presence of these sources and presence of other potential sources were confirmed by BAAQMD. Screening risk values and emissions rates were also provided by BAAQMD. Figure 1 shows the project site in relationship to stationary sources of air pollution identified by BAAQMD that are within ½ mile of the project site.

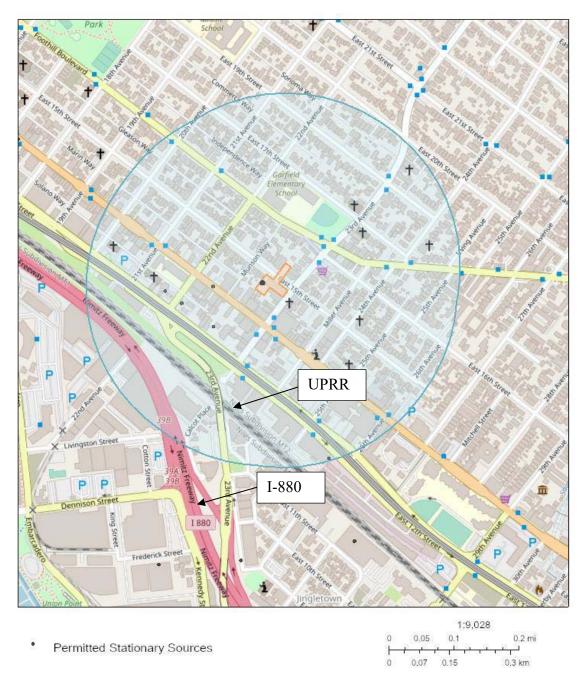
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¹⁰ Metropolitan Transportation Commission, 2006. *Bay Area Regional Rail Plan, Technical Memorandum 4a, Conditions, Configuration & Traffic on Existing System.* November 15.

¹¹ BAAOMD, Web:

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

Figure 1. Project Site and Air Pollution Sources within 1/4 Mile



Map data © OpenStreetMap contributors, CC-BY-SA

AIR QUALITY IMPACTS

Impact AIR-1:

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

The Bay Area is considered a non-attainment area for ground-level ozone and PM_{2.5} under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM₁₀ under the California Clean Air Act, but not the federal act. The area has attained both State and federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM₁₀, and PM_{2.5} and apply to both construction period and operational period impacts.

Emissions Modeling

The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction and operation of the site assuming full build-out of the project. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CalEEMod model output along with project inputs are included in *Attachment 2*.

Construction Period Emissions

The existing building would remain and require extensive interior remodeling and the creation of an additional level. The former theater space would be remodeled to remove the sloped seating area and mezzanine seating, flatten the floor, and create a full-size high school gymnasium spanning the height of two stories, which would also be used as a multi-purpose space for lunch and group assembly. A full floor would be added above the gymnasium to house classrooms and offices. In addition to the gymnasium and lobby, the proposed approximately 25,000 square feet of floor space would be renovated to include ten standard classrooms and one science room, plus office, break, meeting, restroom, and support spaces.

The remodeling and construction of an additional floor of the existing building, and redevelopment of the parking and outdoor use areas were modeled using CalEEMod.

Land Use Inputs

The proposed project land uses were entered into CalEEMod as described in Table 2.

Table 2. Summary of Project Land Use Inputs for Construction

Project Land Uses	Size	Units	Acreage
High School	350	Students	0.4

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. Construction duration and equipment usage were based on CalEEMod default information for projects of those types and sizes. CalEEMod default assumptions were included but only for demolition and building construction phases. There would be no site preparation or grading activities. CalEEMod estimates most construction activity that involves equipment usage would occur over 115 workdays. Since the Project construction schedule is 9 months, the duration of activity in CalEEMod was extended to 198 days.

The City's Standard Conditions of Approval No. 20 and 21 require construction projects to implement construction dust control measures and measures to reduce criteria air pollutant emissions. The Project would not involve extensive site preparation or soil transport; therefore, enhanced measures under No. 20 would not be required. Condition No. 21 requires

Summary of Computed Construction Period Emissions

Average daily emissions were computed by dividing the total construction emissions by the number of construction workdays. Table 3 shows average daily construction emissions of ROG, NOx, PM₁₀ exhaust, and PM_{2.5} exhaust during construction of the project. As indicated in Table 3, predicted project emissions would not exceed the BAAQMD significance thresholds. Since emissions are below the BAAQMD-recommended thresholds, enhanced controls identified in the City's Standard Conditions of Approval No. 21 are not required.

 Table 3.
 Project Construction Period Emissions (Uncontrolled and Controlled)

Scenario	ROG	NOx	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Uncontrolled Construction Emissions	0.31 tons	0.64 tons	0.03 tons	0.03 tons
Average Daily Uncontrolled Emissions (pounds/day) ¹	6 lbs/day	6 lbs/day	0.2 lbs/day	0.2 lbs/day
BAAQMD Thresholds (pounds per day)	54 lbs./day	54 lbs./day	82 lbs./day	<i>54</i> lbs./day
Exceed Threshold?	No	No	No	No

¹Assumes 123 workdays.

There are not thresholds for fugitive dust generated by construction that could lead to nuisance and health impacts. Construction activities 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 could deposit debris on local streets, which could be an additional source of airborne dust. In accordance with the City's Conditions of Approval (No. 20), the project would be required to implement the BAAQMD best management practices to reduce these emissions.

Operational Period Emissions

Land Uses

The project land uses were input to CalEEMod as described above for the construction period modeling.

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed in the model, the higher the emission rates utilized by CalEEMod. This analysis assumed that the project would be fully built out and operating in 2024.

Trip Generation Rates

CalEEMod allows the user to enter specific vehicle trip generation rates. Therefore, the project-specific trip generation rates were calculated from the data provided by the traffic consultant and input into the model.¹² The project would generate 361 daily automobile trips. The daily trip generation was calculated using the size of the project (i.e. number of school students). The adjusted daily trip rate would be 1.04 daily weekday trips per attending student. The Saturday and Sunday trip rates for school land uses are essentially 0. The trip lengths were adjusted based on the vehicle miles travelled that was computed for the project. The combination of students and staff are predicted to generate 8.0 miles per capita. Since there would be 350 students and 40 staff, this is expected to generate 3,120 daily miles, or 8.64 miles per trip.

Energy

CalEEMod defaults for energy use were used, which include the 2019 Title 24 Building Standards.

CalEEMod has a default emission factor of 641.3 pounds of CO₂ per megawatt of electricity produced, which is based on PG&E's 2008 emissions rate. PG&E published in 2020 emissions rates 160 pounds CO₂ per megawatt of electricity delivered in the year 2020.¹³

Other Inputs

Default model assumptions for emissions associated with solid waste generation and water/wastewater use were applied to the project.

¹² Trip generation rates included alog with CalEEMod modeling output in Attachment 2.

¹³ PG&E, 2022. *PG&E Climate Strategy Report*. June. Web: https://www.pge.com/pge_global/common/pdfs/about-pge/environment/what-we-are-doing/pge-climate-goals/PGE-Climate-Strategy-Report.pdf

Summary of Computed Operational Period Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimating assuming 260 days of operation¹⁴. Table 4 shows average daily construction emissions of ROG, NOx, total PM₁₀, and total PM_{2.5} during operation of the project. The operational period emissions would not exceed the BAAQMD significance thresholds.

Table 4. Project Operational Period Emissions

Scenario	ROG	NOx	PM ₁₀	PM _{2.5}
2024 Annual Project Operational Emissions (tons/year)	0.35 tons	0.23 tons	0.35 tons	0.10 tons
BAAQMD Thresholds (tons /year)	10 tons	10 tons	15 tons	10 tons
Exceed Threshold?	No	No	No	No
2024 Daily Project Operational Emissions (pounds/day) ¹	2.7 lbs.	1.8 lbs.	2.7 lbs.	0.8 lbs.
BAAQMD Thresholds (pounds/day)	<i>54</i> lbs.	<i>54</i> lbs.	82 lbs.	<i>54</i> lbs.
Exceed Threshold?	No	No	No	No

Notes: ¹ Assumes 5-day per week operation (260 days/year).

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project impacts related to increased community risk can occur either by introducing a new source of TACs with the potential to adversely affect existing sensitive receptors in the project vicinity or by significantly exacerbating existing cumulative TAC impacts. This project would introduce new sources of TACs during construction (i.e., on-site construction and truck hauling emissions). During operation, the project would not have sources of localized TAC emissions. While the project would generate traffic (361 daily trips), these would be mostly automobile trips that have low rates of TAC emissions and would not lead to significant health risk impacts.

Community Risk Methodology for Construction

Construction activities include some demolition and mostly renovation work. The primary source of TAC emissions from construction work is large construction equipment typically used for groundwork (e.g., grading and excavation). This construction project would not have those types of phases. Because the Project involves mostly renovation work, construction equipment that emits diesel particulate matter (a TAC) would not be used extensively. Therefore, increase health risks are expected to be minor.

Operational Community Health Risk Impacts – New Project Students

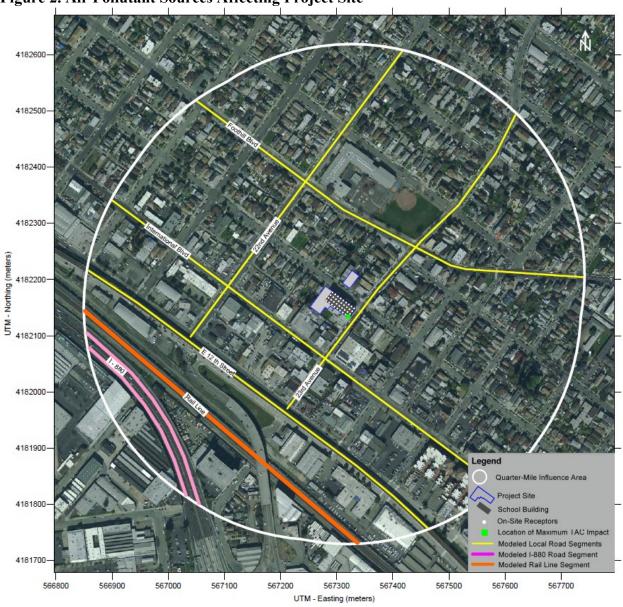
To comply with the City's Condition of Approval 23, Exposure to Air Pollution (Toxic Air Contaminants), a health risk assessment was prepared to address exposure of new sensitive receptors to nearby sources of air pollution. The City's condition of approval requires that the analysis demonstrate that health risks are at or below acceptable levels, and if not, identify and evaluate measures to reduce risks to acceptable levels.

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¹⁴ CalEEMod predicts annual emissions, assuming 365-day operation; however, traffic is assumed to occur only 5 days per week throughout the year. Therefore, this assessment assumed 260 annual days of operation. Fewer operating days would have lower annual emissions than reported.

Health risk impacts to new students attending the Project school were evaluated by considering sources of TAC or PM_{2.5} emissions within a quarter mile of the project site. Within the one-quarter mile influence area, there is the UPRR line, I-880, several roadways with traffic volumes over 10,000 ADT, and five stationary sources permitted by BAAQMD identified on the *Permitted Stationary Sources 2020* GIS website. A public records request was made where BAAQMD confirmed the location of stationary sources within one-quarter mile from the school project site.¹⁵





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¹⁵ Email correspondence with Matthew Hanson, CEQA Team, Environmental Planner II, BAAQMD, August 16, 2022.

Union Pacific Railroad (UPRR)

The Union Pacific Railroad line is about 840 feet southwest of the project site. Trains traveling on these lines generate TAC and PM_{2.5} emissions from diesel locomotives. Due to the close proximity of the rail line to the proposed project, potential community risks to future students from DPM emissions from diesel locomotive engines were evaluated.

The rail line serves both passenger and freight trains. Amtrak's Capitol Corridor and Coast Starlight passenger trains use this rail line. Based on Amtrak's schedule, the Amtrak Capitol Corridor, which provides service between Sacramento/Auburn and San Jose, has 12 weekday trains and 14 weekend trains on these rail lines. The Coast Starlight operates between Seattle and Los Angeles, with 2 daily trains. In addition to the passenger trains, there are up to 12 freight trains that use the rail lines on a daily basis. All trains are assumed to use diesel-powered locomotives.

DPM and PM_{2.5} emissions from trains on the rail line were calculated using EPA emission factors for locomotives¹⁷ and CARB adjustment factors to account for fuels used in California.¹⁸ For passenger trains it was assumed that these trains use 3,200 hp diesel locomotives and would continue to do so in the future. Each passenger train was assumed to use one locomotive and would be traveling at an average speed of 40 mph in the vicinity of the project site. Emissions from freight trains were calculated assuming they would use two locomotives with 2,300 hp engines (total of 4,600 hp) and would be traveling at about 40 mph.

Since the exposure period for calculating cancer risks to school children is 7 years, passenger and freight train average DPM and PM_{2.5} emissions for 2024 were conservatively assumed to represent emissions over the entire exposure period. DPM emissions from diesel-fueled locomotives will be reduced over time due to regulatory requirements for reduced particulate matter emissions from diesel locomotives.

Modeling of locomotive emissions was conducted using the AERMOD dispersion model. Locomotive emissions from train travel within about one-quarter mile of the project site were modeled as a single line source comprised of a series of adjacent volume sources along the centerline of the rail lines near the project site. Concentrations were calculated at receptor locations placed within the proposed project school building. Receptor heights of 1.5 meters (5 feet), representative of breathing heights for school students were used in the modeling. Figure 2 shows the railroad line segment used for the modeling and receptor locations at the project site where concentrations were calculated.

Using the modeled onsite concentrations, increased cancer risks, non-cancer health effects, and PM_{2.5} concentrations were calculated. Table 5 lists the rail line risks and hazards at the location of the on-site student MEI. The rail emission rates and rail line health risk calculations used in the project impact analysis are shown in *Attachment 3*.

¹⁸ CARB, 2006. Offroad Modeling, Change Technical Memo, Changes to the Locomotive Inventory. July.

¹⁶ Metropolitan Transportation Commission, 2006. *Bay Area Regional Rail Plan, Technical Memorandum 4a, Conditions, Configuration & Traffic on Existing System.* November 15.

¹⁷ U.S. EPA, 2009. Emission Factors for Locomotives (EPA-420-F-09-025).

Local Roadway Sources

A review of the project traffic study identified several local roadways that have traffic volumes of about 10,000 average daily trips (ADT) per day or greater or were close to the project site to be a TAC source concern. Traffic ADT estimates were computed by assuming the ADT was ten times the average peak-hour volume. These include:

- E. 12th Street with ADT=14,306,
- International Boulevard with ADT=10,189,
- Foothill Boulevard with ADT=8,758,
- 22nd Avenue with ADT=10,015, and
- 23rd Avenue with ADT=6,511.

This analysis involved the development of DPM, organic TACs, and PM_{2.5} emissions for traffic on these roadways using the Caltrans (CT) version of the EMFAC2017 emissions model, known as CT-EMFAC2017. CT-EMFAC2017 provides emission factors for mobile source criteria pollutants and TACs, including DPM.¹⁹ Emission processes modeled include running exhaust for DPM, PM_{2.5} and total organic compounds (e.g., TOG), running evaporative losses for TOG, and tire and brake wear and fugitive road dust for PM_{2.5}. In evaluating PM_{2.5} impacts all PM_{2.5} emissions from all vehicles were used, rather than just the PM_{2.5} fraction from diesel powered vehicles, because all vehicle types (i.e., gasoline and diesel powered) produce PM_{2.5}. Additionally, PM_{2.5} emissions from vehicle tire and brake wear from re-entrained roadway dust were included in these emissions. DPM emissions are projected to decrease in the future and are reflected in the CT-EMFAC2017 emissions data. Inputs to the model include region (i.e., Alameda County), type of road (i.e., major/collector), truck percentage for non-state highways in Alameda County (4.1 percent),²⁰ traffic mix assigned by EMFAC2017 for the county, year of analysis (2024 – project operational year), and season (annual).

The average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model, which were then applied to the trip volumes to obtain estimated hourly traffic volumes and emissions for the roadways. For all hours of the day, average speeds of 30 mph for E. 12th Street, 25 mph for International Boulevard, and 20 mph for Foothill Boulevard, 22nd Street, and 23rd Street were assumed for all vehicles, which were 5 mph slower than the posted speed limit signs for the roadways to account for commute congestion and the amount of access in the area.

Operational traffic roadway travel emissions were modeled with the AERMOD model using line-volume sources (a series of adjacent volume sources along the roadway) to represent traffic

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¹⁹ The version CT-EMFAC2017 was used in the analysis because Caltrans has not yet release a CT-EMFAC version with the updated EMFAC2021 emissions that would provide TAC emission rates.

²⁰ Bay Area Air Quality Management District, 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May. Web: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf?la=en

²¹ The Burden output from EMFAC2007, a previous version of CARB's EMFAC model, was used for this since the current web-based version of EMFAC2017 does not include Burden type output with hour by hour traffic volume information.

emissions on roadway segments within about one-quarter mile of the project site. Figure 2 shows the project roadway segments modeled and on-site student receptor locations that were used in the modeling. The modeled on-site concentrations increased cancer risks, non-cancer health effects, and PM_{2.5} concentrations were calculated. Table 5 lists the project roadway risks and hazards at the location of the on-site student MEI. The emission rates and roadway calculations used in the project impact analysis are shown in *Attachment 3*.

Interstate 880

Interstate 880 lies about 1,000 feet southwest of the project site. In the project area, I-880 has a traffic volume of 201,760 ADT, as reported by the California Department of Transportation (Caltrans).²² A review of the Caltrans truck traffic information indicates that about 9.6 percent of the traffic is truck traffic, of which 6.6 percent are considered heavy duty trucks and 3.0 percent are medium duty trucks.²³

DPM, organic TACs, and PM_{2.5} emissions for traffic on I-880 were computed using CT-EMFAC2017 2024 emission factors the traffic mix developed from Caltrans data. DPM, organic TACs, and PM_{2.5} emissions for traffic on I-880 were computed using the CARB EMFAC2017 emission factor model and the traffic mix developed from Caltrans data.

Average hourly traffic distributions for Alameda County roadways were developed using the EMFAC model,²⁴ which were then applied to the average daily traffic volumes to obtain estimated hourly traffic volumes and emissions for I-880. For all hours of the day, other than during peak a.m. and p.m. periods, an average speed of 65 mph was assumed for all vehicles. Based on data from the Alameda County Transportation Commission 2018 Level of Service Monitoring report, traffic speeds during the peak a.m. and p.m. periods were identified. For 2 hours during the peak a.m. period, an average speed of 45 mph was used for both eastbound and westbound traffic. For the peak p.m. period, average speeds of 15 and 55 mph were assumed for eastbound and westbound traffic, respectively.

Dispersion modeling of TAC and PM_{2.5} emissions was conducted using the U.S. EPA AERMOD model. Eastbound and westbound traffic on I-880 within about one-quarter mile of the project site was evaluated with the model. Vehicle traffic on the I-880 was modeled as a series of adjacent volume sources along a line (line volume sources), with line segments used for each travel direction as shown in Figure 2. The modeling used a five-year data set (2013-2017) of hourly meteorological data from Oakland International Airport prepared by CARB for use with the AERMOD model. Other inputs to the model included road geometry and elevations, volume source information, hourly traffic emissions, and onsite receptor locations. Roadway elevations were based on USGS National Elevation Data (NED) with a 10-meter resolution. Using the modeled onsite concentrations, increased cancer risks, non-cancer health effects, and PM_{2.5} concentrations were calculated. Table 5 lists the I-880 risks and hazards at the location of the on-

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²² California Department of Transportation. 2022. 2020 Traffic Volumes on California State Highways

²³ California Department of Transportation. 2022. 2020 Annual Average Daily Truck Traffic on the California State Highway System.

²⁴ The Burden output from EMFAC2007, CARB's previous version of the EMFAC model, was used for this since the current web-based version of EMFAC2011 does not include Burden type output with hour by hour traffic volume information.

site student MEI. The emission rates and I-880 health risk calculations used in the project impact analysis are shown in *Attachment 3*.

BAAQMD Permitted Stationary Sources

Stationary sources were identified within the one quarter mile influence area initially using BAAQMD's Permitted Stationary Sources 2020 GIS website.²⁵ The presence of these sources and presence of other potential sources were confirmed by BAAQMD. Screening risk values and emissions rates were also provided by BAAQMD. Figure 1 shows the project site in relationship to stationary sources of air pollution identified by BAAQMD that are within ½ mile of the project site. Stationary sources in the project vicinity include two gasoline dispensing facility and several auto body shots that have negligible emissions but may include a paint spray booth that is permitted by the District.

The screening level risks and hazards for the stationary sources were adjusted for distance using CARB's Gasoline Service Station Risk Assessment Tool and BAAQMD's Distance Adjustment Multiplier Tool for Generic Equipment. Note that no age-sensitivity factors were included in the screening analysis, so risks would be similar or lower if adjustments were included. Community risk impacts from the stationary sources upon the proposed school receptors are reported in Table 5.

Summary of Community Risks at the Project Site

The increased cancer risk calculations were based on applying the BAAQMD recommended age sensitivity factors to the TAC concentrations, as described in *Attachment 1*. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Students at the proposed school were assumed to be children grades 6 through 12. The child (ages 2 through 16 years old) cancer risk parameters were used to calculate the increased cancer risk for these students.

Maximum increased cancer risks were calculated for the students at the project site using the maximum modeled TAC concentrations. A 7-year exposure period was used in calculating cancer risks assuming the students would include children and were assumed to be in the school for 10 hours per day for 250 days per year. Receptors with 6-meter grid spacing were placed in the proposed school building.

The maximum modeled annual PM_{2.5} concentration was calculated based on combined exhaust and fugitive concentrations. The maximum computed HI values was based on the ratio of the maximum DPM concentration modeled and the chronic inhalation refence exposure level of 5 $\mu g/m^3$.

Community risk impacts from the TAC sources upon the project site are reported in Table 5. *Attachment 3* includes the data and calculations used to develop these risk levels for each source. The risks from the TAC sources are compared against the BAAQMD single-source threshold.

²⁵ BAAQMD, *Stationary Source Screening Map*, 2022. Web: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3

The risks from all the sources are then combined and compared against the BAAQMD cumulative-source threshold. The maximum risk occurs in the southeast corner of the school building at the 1st floor level. As shown in Table 5, the increased cancer risk, annual PM_{2.5} concentration, and HI from all sources at the project site are below the single-source and cumulative-source thresholds.

Health risk reduction measures identified in the City's Standard Condition of Approval No. 23 are not required since this health risk assessment found that the health risks for students using the Project are below acceptable levels.

 Table 5.
 Cumulative Community Risk Impacts Upon the Onsite Sensitive Receptors

Source	Maximum Cancer Risk (per million)	PM _{2.5} concentration (μg/m ³)	Hazard Index
Rail Line	0.59	< 0.01	< 0.01
Combined Highway and Roadway Impacts	1.51	0.10	< 0.01
East Bay Gas & Food (Facility ID #112492_1, Gas Dispensing Facility) Project Distance at 640 feet	0.05	0.00	0.01
Wong's Valero (Facility ID #110546_1, Gas Dispensing Facility) Project Distance at 480 feet	0.51	0.00	0.02
Several auto body shops (Facility ID #13344, 8994, 20856)	0.00	0.00	0.00
Combination of All Sources*	2.66	< 0.11	< 0.05
BAAQMD Single-Source Threshold	10	0.3	1.0
Exceed Threshold?	No	No	No
BAAQMD Cumulative Source Threshold	100	0.8	10.0
Exceed Threshold?	No	No	No

^{*} Total from all sources independent of where the maximum impacts occur.

Supporting Documentation

Attachment 1 is the methodology used to compute community risk impacts, including the methods to compute increased cancer risk from exposure to project emissions.

Attachment 2 includes the CalEEMod output for project construction and operational criteria air pollutant. Also included are any modeling assumptions.

Attachment 3 is the health risk assessment for the school site. This includes (1) description of roadway and rail sources, (2) the summary of the dispersion modeling and the cancer risk calculations and (3) list of stationary sources and information. The AERMOD dispersion modeling files for this assessment, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 1: Health Risk Calculation Methodology

A health risk assessment (HRA) for exposure to Toxic Air Contaminates (TACs) requires the application of a risk characterization model to the results from the air dispersion model to estimate potential health risk at each sensitive receptor location. The State of California Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (CARB) develop recommended methods for conducting health risk assessments. The most recent OEHHA risk assessment guidelines were published in February of 2015. These guidelines incorporate substantial changes designed to provide for enhanced protection of children, as required by State law, compared to previous published risk assessment guidelines. CARB has provided additional guidance on implementing OEHHA's recommended methods. This HRA used the 2015 OEHHA risk assessment guidelines and CARB guidance. The BAAQMD has adopted recommended procedures for applying the newest OEHHA guidelines as part of Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants. Exposure parameters from the OEHHA guidelines and the recent BAAQMD HRA Guidelines were used in this evaluation.

Cancer Risk

Potential increased cancer risk from inhalation of TACs is calculated based on the TAC concentration over the period of exposure, inhalation dose, the TAC cancer potency factor, and an age sensitivity factor to reflect the greater sensitivity of infants and children to cancer causing TACs. The inhalation dose depends on a person's breathing rate, exposure time and frequency and duration of exposure. These parameters vary depending on the age, or age range, of the persons being exposed and whether the exposure is considered to occur at a residential location or other sensitive receptor location.

The current OEHHA guidance recommends that cancer risk be calculated by age groups to account for different breathing rates and sensitivity to TACs. Specifically, they recommend evaluating risks for the third trimester of pregnancy to age zero, ages zero to less than two (infant exposure), ages two to less than 16 (child exposure), and ages 16 to 70 (adult exposure). Age sensitivity factors (ASFs) associated with the different types of exposure are an ASF of 10 for the third trimester and infant exposures, an ASF of 3 for a child exposure, and an ASF of 1 for an adult exposure. Also associated with each exposure type are different breathing rates, expressed as liters per kilogram of body weight per day (L/kg-day) or liters per kilogram of body weight per 8-hour period for the case of worker or school child exposures. As recommended by the BAAQMD for residential exposures, 95th percentile breathing rates are used for the third trimester and infant exposures, and 80th percentile breathing rates for child and adult exposures. For children at schools and daycare facilities, BAAQMD recommends using the 95th percentile 8-hour breathing rates. Additionally, CARB and the BAAQMD recommend the use of a

²⁶ OEHHA, 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Office of Environmental Health Hazard Assessment. February.

²⁷ CARB, 2015. Risk Management Guidance for Stationary Sources of Air Toxics. July 23.

²⁸ BAAQMD, 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines. December 2016.

residential exposure duration of 30 years for sources with long-term emissions (e.g., roadways). For workers, assumed to be adults, a 25-year exposure period is recommended by the BAAQMD. For school children a 9-year exposure period is recommended by the BAAQMD.

As a default, BAAQMD cancer risk estimates for children at school sites are calculated based on a 9-year exposure duration, such as for a K-8 school. However, this exposure duration can be refined based on the specific school under evaluation (i.e. 6 years for a K-5 elementary school, 4 years for a 9-12 high school, or 3 years for a 6-8 middle school). For any analyses using an alternative to the 9-year default duration for school children, the breathing rate assumptions must also be adjusted in accordance with the ages of the children in the school.

Under previous OEHHA and BAAQMD HRA guidance, residential receptors are assumed to be at their home 24 hours a day, or 100 percent of the time. In the 2015 Risk Assessment Guidance, OEHHA includes adjustments to exposure duration to account for the fraction of time at home (FAH), which can be less than 100 percent of the time, based on updated population and activity statistics. The FAH factors are age-specific and are: 0.85 for third trimester of pregnancy to less than 2 years old, 0.72 for ages 2 to less than 16 years, and 0.73 for ages 16 to 70 years. Use of the FAH factors is allowed by the BAAQMD if there are no schools in the project vicinity have a cancer risk of one in a million or greater assuming 100 percent exposure (FAH = 1.0).

Functionally, cancer risk is calculated using the following parameters and formulas:

```
Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 10^6 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:
```

 $C_{air} = concentration in air (\mu g/m^3)$

DBR = daily breathing rate (L/kg body weight-day)

8HrBR = 8-hour breathing rate (L/kg body weight-8 hours)

A = Inhalation absorption factor

EF = Exposure frequency (days/year)

 10^{-6} = Conversion factor

^{*} An 8-hour breathing rate (8HrBR) is used for worker and school child exposures.

The health risk parameters used in this evaluation are summarized as follows:

	Exposure Type →	Infa	nt	Child	Adult
Parameter	Age Range →	3 rd	0<2	2 < 16	16 - 30
		Trimester			
DPM Cancer Potency Factor (1	ng/kg-day) ⁻¹	1.10E+00	1.10E+00	1.10E+00	1.10E+00
Daily Breathing Rate (L/kg-da	y) 80 th Percentile Rate	273	758	572	261
Daily Breathing Rate (L/kg-da	y) 95 th Percentile Rate	361	1,090	745	335
8-hour Breathing Rate (L/kg-8	hours) 95 th Percentile Rate	-	1,200	520	240
Inhalation Absorption Factor		1	1	1	1
Averaging Time (years)		70	70	70	70
Exposure Duration (years)		0.25	2	14	14*
Exposure Frequency (days/yea	r)	350	350	350	350*
Age Sensitivity Factor		10	10	3	1
Fraction of Time at Home (FA	H)	0.85-1.0	0.85-1.0	0.72-1.0	0.73*

^{*} For worker exposures (adult) the exposure duration and frequency are 25 years 250 days/year and FAH is not applicable.

Non-Cancer Hazards

Non-cancer health risk is usually determined by comparing the predicted level of exposure to a chemical to the level of exposure that is not expected to cause any adverse effects (reference exposure level), even to the most susceptible people. Potential non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). OEHHA has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The total HI is calculated as the sum of the HIs for each TAC evaluated and the total HI is compared to the BAAQMD significance thresholds to determine whether a significant non-cancer health impact from a project would occur.

Typically, for residential projects located near roadways with substantial TAC emissions, the primary TAC of concern with non-cancer health effects is diesel particulate matter (DPM). For DPM, the chronic inhalation REL is 5 micrograms per cubic meter (μg/m³).

Annual PM_{2.5} Concentrations

While not a TAC, fine particulate matter (PM_{2.5}) has been identified by the BAAQMD as a pollutant with potential non-cancer health effects that should be included when evaluating potential community health impacts under the California Environmental Quality Act (CEQA). The thresholds of significance for PM_{2.5} (project level and cumulative) are in terms of an increase in the annual average concentration. When considering PM_{2.5} impacts, the contribution from all sources of PM_{2.5} emissions should be included. For projects with potential impacts from nearby local roadways, the PM_{2.5} impacts should include those from vehicle exhaust emissions, PM_{2.5} generated from vehicle tire and brake wear, and fugitive emissions from re-suspended dust on the roads.

Attachment 2: CalEEMod Inputs and Outputs

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	350.00	Student	0.40	46,431.34	0

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 63

 Climate Zone
 5
 Operational Year
 2024

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 160
 CH4 Intensity
 0.033
 N2O Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - PG&E 2020 rate: https://www.pge.com/pge_global/common/pdfs/about-pge/environment/what-we-are-doing/pge-climate-goals/PGE-Climate-Strategy-Land Use - Use Project screage (0.37 acrtes)

Construction Phase - Rennovation only: demo & building construction - extend to 9mo (198 days) *1.7

Demolition - Conservatively assumed 18,000 sf of demo

Vehicle Trips - Rate = 1.94 trip/student - 47% = 1.02. VMT = 390 students/staff*8.0mi = 3,120vmt or 8.64mi/trip

Construction Off-road Equipment Mitigation - Best available controlo technology

Table Name	Column Name	Default Value	New Value		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00		
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim		
tblConstructionPhase	NumDays	5.00	8.00		
tblConstructionPhase	NumDays	100.00	170.00		
tblConstructionPhase	NumDays	10.00	17.00		
tblConstructionPhase	PhaseEndDate	8/18/2023	8/11/2023		
tblConstructionPhase	PhaseEndDate	8/4/2023	11/7/2023		
tblConstructionPhase	PhaseEndDate	3/14/2023	3/23/2023		
tblConstructionPhase	PhaseStartDate	8/12/2023	8/2/2023		
tblConstructionPhase	PhaseStartDate	3/18/2023	3/15/2023		
tblLandUse	LotAcreage	1.07	0.40		
tblProjectCharacteristics	CO2IntensityFactor	203.98	160		
tblVehicleTrips	CC_TL	7.30	8.64		
tblVehicleTrips	CNW_TL	7.30	8.64		
tblVehicleTrips	CW_TL	9.50	8.64		
tblVehicleTrips	DV_TP	19.00	0.00		
tblVehicleTrips	PB_TP	6.00	0.00		
tblVehicleTrips	PR_TP	75.00	100.00		
tblVehicleTrips	WD_TR	2.03	1.02		

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2023	0.3076	0.6383	0.7236	1.3600e-003	0.0283	0.0302	0.0585	6.6100e- 003	0.0279	0.0345	0.0000	121.6849	121.6849	0.0298	2.6600e- 003	123.2217
Maximum	0.3076	0.6383	0.7236	1.3600e-003	0.0283	0.0302	0.0585	6.6100e- 003	0.0279	0.0345	0.0000	121.6849	121.6849	0.0298	2.6600e- 003	123.2217

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												МТ	-/yr		
2023	0.2701	0.4619	0.8019	1.3600e-003	0.0283	2.0500e- 003	0.0303	6.6100e- 003	2.0300e- 003	8.6500e-003	0.0000	121.6847	121.6847	0.0298	2.6600e- 003	123.2215
Maximum	0.2701	0.4619	0.8019	1.3600e-003	0.0283	2.0500e- 003	0.0303	6.6100e- 003	2.0300e- 003	8.6500e-003	0.0000	121.6847	121.6847	0.0298	2.6600e- 003	123.2215

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	12.19	27.63	-10.82	0.00	0.00	93.21	48.15	0.00	92.72	74.94	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2023	5-31-2023	0.2672	0.1887
2	6-1-2023	8-31-2023	0.4675	0.3894
3	9-1-2023	9-30-2023	0.0802	0.0552
		Highest	0.4675	0.3894

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Area	0.2059	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003
Energy	4.0900e- 003	0.0372	0.0312	2.2000e-004		2.8200e- 003	2.8200e-003		2.8200e- 003	2.8200e-003	0.0000	55.1627	55.1627	3.8100e- 003	1.1100e-003	
Mobile	0.1394	0.1899	1.4100	3.2400e-003	0.3440	2.3800e- 003	0.3464	0.0919	2.2200e- 003	0.0941	0.0000	299.1821	299.1821	0.0172	0.0148	304.0066
Waste						0.0000	0.0000		0.0000	0.0000	12.9671	0.0000	12.9671	0.7663	0.0000	32.1254
Water						0.0000	0.0000		0.0000	0.0000	0.4891	1.6125	2.1016	0.0506	1.2300e-003	3.7313
Total	0.3493	0.2271	1.4444	3.4600e-003	0.3440	5.2100e- 003	0.3492	0.0919	5.0500e- 003	0.0970	13.4562	355.9635	369.4197	0.8379	0.0171	395.4586

Mitigated Operational

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category					ton	s/yr							МТ	/уг		
Area	0.2059	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003
Energy	4.0900e- 003	0.0372	0.0312	2.2000e-004		2.8200e- 003	2.8200e-003		2.8200e- 003	2.8200e-003	0.0000	55.1627	55.1627	3.8100e- 003	1.1100e-003	55.5887
Mobile	0.1394	0.1899	1.4100	3.2400e-003	0.3440	2.3800e- 003	0.3464	0.0919	2.2200e- 003	0.0941	0.0000	299.1821	299.1821	0.0172	0.0148	304.0066
Waste						0.0000	0.0000		0.0000	0.0000	12.9671	0.0000	12.9671	0.7663	0.0000	32.1254
Water						0.0000	0.0000		0.0000	0.0000	0.4891	1.6125	2.1016	0.0506	1.2300e-003	3.7313
Total	0.3493	0.2271	1.4444	3.4600e-003	0.3440	5.2100e- 003	0.3492	0.0919	5.0500e- 003	0.0970	13.4562	355.9635	369.4197	0.8379	0.0171	395.4586

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1		Demolition		3/23/2023	5		add 7 days
2	Building Construction	Building Construction		11/7/2023	5		add 70 days
3	Architectural Coating	Architectural Coating	8/2/2023	8/11/2023	5	8	add 3 days

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 69,647; Non-Residential Outdoor: 23,216; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	4.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	20.00	8.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	82.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					8.8600e- 003		8.8600e-003	003		1.3400e-003		0.0000	0.0000	0.0000	0.0000	0.0000

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Off-Road	5.4900e-	0.0491	0.0628	1.0000e-004			2.4000e-003			2.2900e-003	0.0000	8.8554	8.8554	1.6100e-	0.0000	8.8957
	003					003			003					003		
Total	5.4900e-	0.0491	0.0628	1.0000e-004	8.8600e-	2.4000e-	0.0113	1.3400e-	2.2900e-	3.6300e-003	0.0000	8.8554				
	003	0.0.0.	0.0020	1.00000	0.0000e-	003	0.0113	003	003	3.0300e-003	0.0000	0.0004	8.8554	1.6100e- 003	0.0000	8.8957

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Hauling	8.0000e- 005	5.3900e-003	1.2200e-003	2.0000e-005	6.9000e- 004	5.0000e- 005	7.4000e-004	1.9000e- 004	4.0000e- 005	2.4000e-004	0.0000	2.3891	2.3891	5.0000e- 005	3.8000e- 004	2.5028
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.5000e-004	1.8900e-003	1.0000e-005	6.7000e- 004	0.0000	6.8000e-004	1.8000e- 004	0.0000	1.8000e-004	0.0000	0.5233	0.5233	2.0000e- 005	1.0000e- 005	0.5281
Total	3.0000e- 004	5.5400e-003	3.1100e-003	3.0000e-005	1.3600e- 003	5.0000e- 005	1.4200e-003	3.7000e- 004	4.0000e- 005	4.2000e-004	0.0000	2.9124	2.9124	7.0000e- 005	3.9000e- 004	3.0309

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
Fugitive Dust					8.8600e- 003	0.0000	8.8600e-003	1.3400e- 003	0.0000	1.3400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0100e- 003	0.0386	0.0675	1.0000e-004		1.5000e- 004	1.5000e-004		1.5000e- 004	1.5000e-004	0.0000	8.8554	8.8554	1.6100e- 003	0.0000	8.8957
Total	2.0100e- 003	0.0386	0.0675	1.0000e-004	8.8600e- 003	1.5000e- 004	9.0100e-003	1.3400e- 003	1.5000e- 004	1.4900e-003	0.0000	8.8554	8.8554	1.6100e- 003	0.0000	8.8957

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Hauling	8.0000e- 005	5.3900e-003	1.2200e-003	2.0000e-005	6.9000e- 004	5.0000e- 005	7.4000e-004	1.9000e- 004	4.0000e- 005	2.4000e-004	0.0000	2.3891	2.3891	5.0000e- 005	3.8000e- 004	2.5028
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.5000e-004	1.8900e-003	1.0000e-005	6.7000e- 004	0.0000	6.8000e-004	1.8000e- 004	0.0000	1.8000e-004	0.0000	0.5233	0.5233	2.0000e- 005	1.0000e- 005	0.5281
Total	3.0000e- 004	5.5400e-003	3.1100e-003	3.0000e-005	1.3600e- 003	5.0000e- 005	1.4200e-003	3.7000e- 004	4.0000e- 005	4.2000e-004	0.0000	2.9124	2.9124	7.0000e- 005	3.9000e- 004	3.0309

3.3 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT	/yr			
Off-Road	0.0537	0.5456	0.6033	9.7000e-004		0.0272	0.0272		0.0250	0.0250	0.0000	85.1772	85.1772	0.0276	0.0000	85.8659

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Total	0.0537	0.5456	0.6033	9.7000e-004	0.0272	0.0272	0.0250	0.0250	0.0000	85.1772	85.1772	0.0276	0.0000	85.8659

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9000e- 004	0.0297	8.9900e-003	1.4000e-004	4.4700e- 003	1.8000e- 004	4.6500e-003		1.7000e- 004	1.4600e-003	0.0000	13.1541	13.1541	1.8000e- 004	1.9700e- 003	13.7455
Worker	4.4500e- 003	3.0500e-003	0.0378	1.1000e-004	0.0134	7.0000e- 005	0.0135	3.5800e- 003	6.0000e- 005	3.6400e-003	0.0000	10.4660	10.4660	3.1000e- 004	2.9000e- 004	10.5614
Total	5.1400e- 003	0.0328	0.0468	2.5000e-004	0.0179	2.5000e- 004	0.0182	4.8700e- 003	2.3000e- 004	5.1000e-003	0.0000	23.6201	23.6201	4.9000e- 004	2.2600e- 003	24.3070

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0203	0.3807	0.6768	9.7000e-004		1.5800e- 003	1.5800e-003		1.5800e- 003	1.5800e-003	0.0000	85.1771	85.1771	0.0276	0.0000	85.8658
Total	0.0203	0.3807	0.6768	9.7000e-004		1.5800e- 003	1.5800e-003		1.5800e- 003	1.5800e-003	0.0000	85.1771	85.1771	0.0276	0.0000	85.8658

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category		tons/yr										MT/yr							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Vendor	6.9000e- 004	0.0297	8.9900e-003	1.4000e-004	4.4700e- 003	1.8000e- 004	4.6500e-003		1.7000e- 004	1.4600e-003	0.0000	13.1541	13.1541	1.8000e- 004	1.9700e- 003	13.7455			
Worker	4.4500e- 003	3.0500e-003	0.0378	1.1000e-004	0.0134	7.0000e- 005	0.0135	3.5800e- 003	6.0000e- 005	3.6400e-003	0.0000	10.4660	10.4660	3.1000e- 004	2.9000e- 004	10.5614			
Total	5.1400e- 003	0.0328	0.0468	2.5000e-004	0.0179	2.5000e- 004	0.0182	4.8700e- 003	2.3000e- 004	5.1000e-003	0.0000	23.6201	23.6201	4.9000e- 004	2.2600e- 003	24.3070			

3.4 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	-/yr		
Archit. Coating	0.2421					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.7000e- 004	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e- 004	2.8000e-004		2.8000e- 004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e- 005	0.0000	1.0228
Total	0.2429	5.2100e-003	7.2400e-003	1.0000e-005		2.8000e- 004	2.8000e-004		2.8000e- 004	2.8000e-004	0.0000	1.0213	1.0213	6.0000e- 005	0.0000	1.0228

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Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e-005	3.6000e-004	0.0000	1.3000e- 004	0.0000	1.3000e-004	3.0000e- 005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0994
Total	4.0000e- 005	3.0000e-005	3.6000e-004	0.0000	1.3000e- 004	0.0000	1.3000e-004	3.0000e- 005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0994

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Archit. Coating	0.2421					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2000e- 004	4.2400e-003	7.3300e-003	1.0000e-005		2.0000e- 005	2.0000e-005		2.0000e- 005	2.0000e-005	0.0000	1.0213	1.0213	6.0000e- 005	0.0000	1.0228
Total	0.2423	4.2400e-003	7.3300e-003	1.0000e-005		2.0000e- 005	2.0000e-005		2.0000e- 005	2.0000e-005	0.0000	1.0213	1.0213	6.0000e- 005	0.0000	1.0228

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e-005	3.6000e-004	0.0000	1.3000e- 004	0.0000	1.3000e-004	3.0000e- 005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0994
Total	4.0000e- 005	3.0000e-005	3.6000e-004	0.0000	1.3000e- 004	0.0000	1.3000e-004	3.0000e- 005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0994

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Willigated	0.1394	0.1899	1.4100	3.2400e-003		2.3800e- 003	0.3464	0.0919	2.2200e- 003	0.0941	0.0000	299.1821	299.1821	0.0172	0.0148	304.0066

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							,		.,							
Unmitigated	:: n	1304 : 0 1800	1 4100	3 2400-003	0.3440	2 3800-	0.3464	0.0010	: 2 22000-	0.0941	0.0000	: 200 1821	: 200 1821	0.0172	0.0148	304 0066
	. 0.															
									003							
						. 003										

4.2 Trip Summary Information

	Ave	erage Daily Trip Rat	e	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	357.00	203.00	87.50	932,481	932,481
Total	357.00	203.00	87.50	932,481	932,481

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	8.64	8.64	8.64	77.80	17.20	5.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.569946	0.056495	0.180011	0.112201	0.020944	0.005169	0.013608	0.012941	0.000792	0.000570	0.024535	0.000337	0.002451

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	-/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.7258	14.7258	3.0400e- 003	3.7000e-004	14.9114
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	14.7258	14.7258	3.0400e- 003	3.7000e-004	14.9114
NaturalGas Mitigated	4.0900e- 003	0.0372	0.0312	2.2000e-004		2.8200e- 003	2.8200e-003		2.8200e- 003	2.8200e-003	0.0000	40.4369	40.4369	7.8000e- 004	7.4000e-004	40.6772
NaturalGas Unmitigated	4.0900e- 003	0.0372	0.0312	2.2000e-004		2.8200e- 003	2.8200e-003		2.8200e- 003	2.8200e-003	0.0000	40.4369	40.4369	7.8000e- 004	7.4000e-004	40.6772

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
High School	757759	4.0900e- 003	0.0372	0.0312	2.2000e- 004		2.8200e-003	2.8200e- 003		2.8200e- 003	2.8200e-003	0.0000	40.4369	40.4369	7.8000e- 004	7.4000e- 004	40.6772
Total		4.0900e- 003	0.0372	0.0312	2.2000e- 004		2.8200e-003	2.8200e- 003		2.8200e- 003	2.8200e-003	0.0000	40.4369	40.4369	7.8000e- 004	7.4000e- 004	40.6772

Mitigated

	NaturalGas Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
High School	757759	4.0900e- 003	0.0372	0.0312	2.2000e- 004		2.8200e-003	003		003	2.8200e-003		40.4369	40.4369	7.8000e- 004	7.4000e- 004	40.6772

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Total	4.0900e-	0.0372	0.0312	2.2000e-	2.8200e-003	2.8200e-	2.8200e-	2.8200e-003	0.0000	40.4369	40.4369	7.8000e-	7.4000e-	40.6772
	003			004		003	003					004	004	
												i '		1

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
High School	202905	14.7258	3.0400e-003	3.7000e-004	14.9114
Total		14.7258	3.0400e-003	3.7000e-004	14.9114

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		M	Г/уг	
High School	202905	14.7258	3.0400e-003	3.7000e-004	14.9114
Total		14.7258	3.0400e-003	3.7000e-004	14.9114

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Mitigated		3.0000e-005	3.2100e-003			1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	003	2.0000e- 005		6.6600e- 003
Unmitigated	0.2059	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003		2.0000e- 005		6.6600e- 003

6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/уг		
Architectural Coating	0.0242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1813					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e- 004	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003
Total	0.2059	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003

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Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	-/yr		
Architectural Coating	0.0242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1813					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping		3.0000e-005				1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005		6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003
Total	0.2059	3.0000e-005	3.2100e-003	0.0000		1.0000e- 005	1.0000e-005		1.0000e- 005	1.0000e-005	0.0000	6.2500e- 003	6.2500e- 003	2.0000e- 005	0.0000	6.6600e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		M	Г/уг	
Mitigated	2.1016	0.0506	1.2300e-003	3.7313
Unmitigated	2.1016	0.0506	1.2300e-003	3.7313

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	⁻ /yr	
High School	1.54174 / 3.96446	2.1016	0.0506	1.2300e-003	3.7313
Total		2.1016	0.0506	1.2300e-003	3.7313

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	[⊤] /yr	
High School	1.54174 / 3.96446	2.1016	0.0506	1.2300e-003	3.7313
Total		2.1016	0.0506	1.2300e-003	3.7313

8.0 Waste Detail

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Category/Year

	Total CO2	CH4	N2O	CO2e
		М	T/yr	
	12.9671	0.7663	0.0000	32.1254
Unmitigated		0.7663	0.0000	32.1254

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/уг	
High School	63.88	12.9671	0.7663	0.0000	32.1254
Total		12.9671	0.7663	0.0000	32.1254

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	/уг	
High School	63.88	12.9671	0.7663	0.0000	32.1254
Total		12.9671	0.7663	0.0000	32.1254

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Heat Input/Year

Boiler Rating

Heat Input/Day

Equipment Type

User Defined Equipment		
Equipment Type	Number	

11.0 Vegetation

Table 1: Proposed Project Trip Generation

			Daily	AM Peal	k Hour Tri	p Rate	PM Peal	PM Peak Hour Trip Rate			
Land Use		Unit	Trip Rate	Average Rate	% In	% Out	Average Rate	% In	% Out		
High School (525)		Students	1.94	0.51	68%	32%	0.32	32%	68%		
			Daily	AM Pe	ak Hour	Trips	PM Peak Hour Trips				
	Qty	Unit	Trips	Total	ln	Out	Total	ln	Out		
Proposed Project											
Gross Trip Generation	350	Students	679	179	121	57	112	36	76		
Vehicle Trip Reduction	(47%)	(318)	(84)	(57)	(27)	(53)	(17)	(36)		
Net Vehicle Trip Generation	350	Students	361	95	64	30	59	19	40		

Source: Institute of Transportation Engineers, Trip Generation Manual, 11th edition, 2021.

City of Oakland, Transportation Impact Review Guidelines for Land Use Development Projects.

Table 2: Proposed Project Daily VMT

School Population	Sum Trip Lengths [miles]	# Students or Staff	Average Trip Length [miles]	Trip Generation Rate	Vehicle Mode Share Adjustment	Student / Staff Daily VMT [miles]		
Students	2,443	350	7.0	1.94	0.531	7.2		
Staff	580	40	14.5	1.94	0.531	14.9		
Total	otal 3,023		3,023		7.75	1.94	0.531	8.0
VMT Threshold for Signi					13.5			

Source: Alameda County Transportation Commission, SB 743 and VMT tool resources. Parisi Transportation Consulting, 2022.

ITE Trip Generation Manual, 11th Edition.

Attachment 3: Health Risk Calculations for Nearby Sources

- -UPRR
- -I-880
- -Local Roadways
- -BAAQMD Permitted Sources

Attachment 3

Notes:

Rail Line Emissions and Health Risk Calculations

Palace Theater Charter School - Oakland, CA DPM Modeling - Rail Line Information and DPM and PM2.5 Emission Rates Diesel-Powered Passenger and Freight Trains

												DPM Emission	Rates	
										Train			Link	Link
			Link	Link	Link	Link	Link	Release	No.	Travel	Average Daily	Average Daily	Emission	Emission
		Modeled	Width	Width	Length	Length	Length	Height	Trains	Speed	Emission Rate	Emission Rate	Rate	Rate
Year	Description	No. Lines	(ft)	(m)	(ft)	(miles)	(m)	(m)	per Day	(mph)	(g/mi/day)	(g/day)	(g/s)	(lb/hr)
2024	Passenger Trains								15	40	59.4	23.5	2.72E-04	2.16E-03
	Freight Trains								12	40	47.4	18.7	2.17E-04	1.72E-03
	Total	1	35	10.7	2,090	0.40	637	5.0	27	-	106.8	42.3	4.89E-04	3.88E-03

Emission based on Emission Factors for Locomotives, USEPA 2009 (EPA-420-F-09-025)

Average emissions for 2024 assumed to conservatively represent emissions over the entire 2024-2053 exposure period.

Fuel correction factors from Offroad Modeling Change Technical memo, Changes to the Locomotive Inventory, CARB July 2006.

Passenger trains assumed to operate for 24 hours per day

Freight trains assumed to operate for 24 hours per day

Passenger Trains	Capitol	Amtrak	
	Corridor	Starlight	Total
Passenger trains - weekday =	12	2	14
Passenger trains - weekend =	14	2	16
Passenger trains - Sat only =	0	0	0
Total Trains =	26	4	30
Annual average daily trains =	13	2	15
Locomotive horsepower =	3200	3200	-
Locomotives per train =	1	1	-
Locomotive engine load =	1	1	-
Freight trains per day =			
Freight trains per day =	12	7 days/wee	k
Locomotive horsepower =	2300		
Locomotives per train =	2		
Total horsepower =	4600		
Locomotive engine load =	0.5		

Locomotive DPM Emission Factors (g/hp-hr)

Train Type	2024
Passenger	0.0721
Freight	0.0817

CARB Fuel Adj Factor 2010 2011+ Passenger 0.717 0.709 0.840 Freight 0.851

Palace Theater Charter School, Oakland, CA - Operation Impacts Maximum DPM Cancer Risk and PM2.5 Calculations From Rail Operation Impacts at School Site - 1st Floor Level (1.5 m receptor height)

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: $C_{air} = concentration in air (\mu g/m^3)$

SCAF = School Child Adjustment Factor (unitless) for source operation

and exposures different than 8 hours/day

 $= (24/SHR) \times (7days/SDay) \times (SCHR/8 hrs)$

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 =	10	10
SHR =	24	24
SDay =	7	7
A =	1	1
EF =	250	250
AT =	70	70
SCAF =	1.25	1.25

^{* 95}th percentile 8-hr breathing rates for moderate intensity activities

Construction Cancer Risk by Year - Maximum Preschool Impact Receptor Location

			Child -	Exposure Infor	mation	Child	l	
	Exposure				Age*	Cancer	Max	imum
Exposure	Duration		DPM Conc (ug/m3)		Sensitivity	Risk	Hazard	Total
Year	(years)	Age	Year	Annual	Factor	(per million)	Index	PM2.5
1 - 7	7	11 - 17	2024	0.0040	3	0.59	0.0008	0.0040
Total Increased	Cancer Risk					0.59		

^{*} Children assumed to be in 6th - 12th grade

I-880 Emissions

Alameda (SF) - 2024 - Annua-I-880 Trucksl.EF File Name:

CT-EMFAC2017 Version: 1.0.2.27401

Run Date: 9/28/2022 2:06 Alameda (SF) Area: Analysis Year: 2024

Season: Annual

Truck 1 0.03 0.473 0.527 Truck 2 0.066 0.958 0.029 Non-Truck 0.904 0.015 0.958	Vehicle Category	VMT Fraction Across Category	Diesel VMT Fraction Within Category	Gas VMT Fraction Within Category
	Truck 1		0,	2 3
Non-Truck 0.904 0.015 0.958	Truck 2	0.066	0.958	0.029
	Non-Truck	0.904	0.015	0.958

Road Type: Freeway

Silt Loading Factor: CARB 0.015 g/m2 CARB

Precipitation Correction: P = 61 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph
PM2.5	0.009151	0.006069	0.004186	0.003049	0.002371	0.001983	0.001791	0.001745	0.001815	0.001987	0.002255	0.002624	0.003102
TOG	0.192448	0.126817	0.084503	0.059426	0.044965	0.035904	0.030062	0.026394	0.024311	0.023511	0.023887	0.025548	0.02873
Diesel PM	0.001624	0.001331	0.001039	0.000845	0.000743	0.000717	0.000755	0.000852	0.001005	0.001213	0.001475	0.001786	0.00214
DEOG	0.022599	0.015919	0.008616	0.004697	0.003394	0.002721	0.00226	0.001956	0.001782	0.001721	0.001767	0.001901	0.002105

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name Emission Factor TOG 1.379003

Fleet Average Tire Wear Factors (grams/veh-mile) Pollutant Name Emission Factor

PM2.5 0.002347

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name Emission Factor 0.017831

Fleet Average Road Dust Factors (grams/veh-mile)

Pollutant Name Emission Factor PM2.5 0.010272

=====END=======

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_EB880	Eastbound I-880	SE-NW	4	320	0.20	20.6	67.7	3.4	variable	100,880
DPM_WB880	Westbound I-880	NW-SE	4	371	0.23	20.6	67.7	3.4	variable	100,880
										201,760

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	65	55	45	15
Emissions per Vehicle (g/VMT)	0.00179	0.00148	0.00101	0.001039

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_EB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	3859	3.81E-04	9	6.09%	6146	3.41E-04	17	5.21%	5253	3.01E-04
2	2.23%	2251	2.22E-04	10	7.16%	7218	7.12E-04	18	2.83%	2859	1.64E-04
3	2.62%	2644	2.61E-04	11	6.41%	6468	6.38E-04	19	2.44%	2466	2.43E-04
4	3.97%	4002	3.95E-04	12	6.94%	7004	6.91E-04	20	1.13%	1144	1.13E-04
5	2.37%	2394	2.36E-04	13	6.27%	6325	6.24E-04	21	3.08%	3109	3.07E-04
6	3.83%	3859	3.81E-04	14	6.20%	6254	6.17E-04	22	4.04%	4074	4.02E-04
7	6.27%	6325	6.24E-04	15	5.21%	5253	5.18E-04	23	2.37%	2394	2.36E-04
8	4.89%	4931	2.74E-04	16	3.54%	3574	3.52E-04	24	1.06%	1072	1.06E-04
								Total		100,880	

2024 Hourly Traffic Volumes Per Direction and DPM Emissions - DPM_WB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile
1	3.83%	3859	4.41E-04	9	6.09%	6146	3.95E-04	17	5.21%	5253	4.96E-04
2	2.23%	2251	2.57E-04	10	7.16%	7218	8.25E-04	18	2.83%	2859	2.70E-04
3	2.62%	2644	3.02E-04	11	6.41%	6468	7.39E-04	19	2.44%	2466	2.82E-04
4	3.97%	4002	4.57E-04	12	6.94%	7004	8.00E-04	20	1.13%	1144	1.31E-04
5	2.37%	2394	2.74E-04	13	6.27%	6325	7.23E-04	21	3.08%	3109	3.55E-04
6	3.83%	3859	4.41E-04	14	6.20%	6254	7.14E-04	22	4.04%	4074	4.65E-04
7	6.27%	6325	7.23E-04	15	5.21%	5253	6.00E-04	23	2.37%	2394	2.74E-04
8	4.89%	4931	3.17E-04	16	3.54%	3574	4.08E-04	24	1.06%	1072	1.22E-04
								Total		100,880	

Analysis Year = 2024

7 11101 7 515 1 501		
	2020 Caltrans	2024
Vehicle	Vehicles	Vehicles
Туре	(veh/day)	(veh/day)
Truck 1 (MDT)	5,848	6,082
Truck 2 (HDT)	12,776	13,287
Non-Truck	175,376	182,391
All	194,000	201,760

Traffic Data Year = 2020

2020 Caltrans Truck AADT (% trucks) and		Total	Trucks by Axle				
2020 Caltrans Traffic Volumes	AADT Total	Truck	2	3	4	5	
I-880 A Oakland, Jct RTE 77 (truck %)	194,000	18,624	5,848	2,365	726	9,684	
I-880 A Oakland, 23rd Ave (AADT)			31.40%	12.70%	3.90%	52.00%	

Percent of Total Vehicles

9.60% 3.01% 1.22% 0.37% 4.99%

Traffic Increase per Year (%) = 1.00%

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_EB880	Eastbound I-880	SE-NW	4	320	0.20	20.6	68	1.3	variable	100,880
PM25_WB880	Westbound I-880	NW-SE	4	371	0.23	20.6	68	1.3	variable	100,880
									Total	201,760

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	65	55	45	15
Emissions per Vehicle (g/VMT)	0.00262	0.00226	0.00182	0.00419

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_EB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	1230	1.78E-04	9	7.09%	7148	7.16E-04	17	7.33%	7390	1.71E-03
2	0.45%	458	6.63E-05	10	4.47%	4507	6.53E-04	18	8.03%	8097	1.87E-03
3	0.46%	468	6.78E-05	11	4.72%	4758	6.90E-04	19	5.61%	5663	8.21E-04
4	0.38%	386	5.59E-05	12	5.92%	5973	8.66E-04	20	4.20%	4233	6.13E-04
5	0.55%	559	8.10E-05	13	6.15%	6207	8.99E-04	21	3.25%	3275	4.75E-04
6	1.00%	1008	1.46E-04	14	6.04%	6095	8.83E-04	22	3.31%	3341	4.84E-04
7	3.85%	3887	5.63E-04	15	6.96%	7021	1.02E-03	23	2.45%	2468	3.58E-04
8	7.68%	7751	7.77E-04	16	7.03%	7095	1.03E-03	24	1.85%	1864	2.70E-04
								Total		100,880	

2024 Hourly Traffic Volumes Per Direction and PM2.5 Emissions - PM25_WB880

	% Per				% Per	_			% Per		
Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile
1	1.22%	1230	2.06E-04	9	7.09%	7148	8.30E-04	17	7.33%	7390	1.07E-03
2	0.45%	458	7.68E-05	10	4.47%	4507	7.57E-04	18	8.03%	8097	1.17E-03
3	0.46%	468	7.86E-05	11	4.72%	4758	7.99E-04	19	5.61%	5663	9.51E-04
4	0.38%	386	6.48E-05	12	5.92%	5973	1.00E-03	20	4.20%	4233	7.11E-04
5	0.55%	559	9.38E-05	13	6.15%	6207	1.04E-03	21	3.25%	3275	5.50E-04
6	1.00%	1008	1.69E-04	14	6.04%	6095	1.02E-03	22	3.31%	3341	5.61E-04
7	3.85%	3887	6.52E-04	15	6.96%	7021	1.18E-03	23	2.45%	2468	4.14E-04
8	7.68%	7751	9.00E-04	16	7.03%	7095	1.19E-03	24	1.85%	1864	3.13E-04
								Total		100,880	

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_EB880	Eastbound I-880	SE-NW	4	320	0.20	20.6	68	1.3	variable	100,880
TEXH_WB880	Westbound I-880	NW-SE	4	371	0.23	20.6	68	1.3	variable	100,880
									Total	201,760

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	65	55	45	15
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.02555	0.02389	0.02431	0.08450
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00190	0.00177	0.001782	0.00862
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.02365	0.02212	0.02253	0.07589

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_EB880

	% Per				% Per	_			% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	1230	1.61E-03	9	7.09%	7148	8.89E-03	17	7.33%	7390	3.10E-02
2	0.45%	458	5.98E-04	10	4.47%	4507	5.89E-03	18	8.03%	8097	3.39E-02
3	0.46%	468	6.11E-04	11	4.72%	4758	6.21E-03	19	5.61%	5663	7.40E-03
4	0.38%	386	5.04E-04	12	5.92%	5973	7.80E-03	20	4.20%	4233	5.53E-03
5	0.55%	559	7.30E-04	13	6.15%	6207	8.11E-03	21	3.25%	3275	4.28E-03
6	1.00%	1008	1.32E-03	14	6.04%	6095	7.96E-03	22	3.31%	3341	4.36E-03
7	3.85%	3887	5.08E-03	15	6.96%	7021	9.17E-03	23	2.45%	2468	3.22E-03
8	7.68%	7751	9.64E-03	16	7.03%	7095	9.27E-03	24	1.85%	1864	2.43E-03
								Total		100,880	

2024 Hourly Traffic Volumes Per Direction and TOG Exhaust Emissions - TEXH_WB880

			Direction d				.XII_1110000				
	% Per				% Per				% Per		
Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile
1	1.22%	1230	1.86E-03	9	7.09%	7148	1.03E-02	17	7.33%	7390	1.05E-02
2	0.45%	458	6.92E-04	10	4.47%	4507	6.82E-03	18	8.03%	8097	1.15E-02
3	0.46%	468	7.08E-04	11	4.72%	4758	7.20E-03	19	5.61%	5663	8.57E-03
4	0.38%	386	5.84E-04	12	5.92%	5973	9.04E-03	20	4.20%	4233	6.40E-03
5	0.55%	559	8.45E-04	13	6.15%	6207	9.39E-03	21	3.25%	3275	4.95E-03
6	1.00%	1008	1.53E-03	14	6.04%	6095	9.22E-03	22	3.31%	3341	5.05E-03
7	3.85%	3887	5.88E-03	15	6.96%	7021	1.06E-02	23	2.45%	2468	3.73E-03
8	7.68%	7751	1.12E-02	16	7.03%	7095	1.07E-02	24	1.85%	1864	2.82E-03
								Total	-	100.880	

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_EB880	Eastbound I-880	SE-NW	4	320	0.20	20.6	68	1.3	variable	100,880
TEVAP_WB880	Westbound I-880	NW-SE	4	371	0.23	20.6	68	1.3	variable	100,880
									Total	201,760

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	65	55	45	15
Emissions per Vehicle per Hour (g/hour)	1.37900	1.37900	1.379	1.3790
Emissions per Vehicle per Mile (g/VMT)	0.02122	0.02507	0.03064	0.09193

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_EB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	1230	1.44E-03	9	7.09%	7148	1.21E-02	17	7.33%	7390	3.75E-02
2	0.45%	458	5.36E-04	10	4.47%	4507	5.28E-03	18	8.03%	8097	4.11E-02
3	0.46%	468	5.49E-04	11	4.72%	4758	5.57E-03	19	5.61%	5663	6.63E-03
4	0.38%	386	4.52E-04	12	5.92%	5973	7.00E-03	20	4.20%	4233	4.96E-03
5	0.55%	559	6.55E-04	13	6.15%	6207	7.27E-03	21	3.25%	3275	3.84E-03
6	1.00%	1008	1.18E-03	14	6.04%	6095	7.14E-03	22	3.31%	3341	3.91E-03
7	3.85%	3887	4.55E-03	15	6.96%	7021	8.23E-03	23	2.45%	2468	2.89E-03
8	7.68%	7751	1.31E-02	16	7.03%	7095	8.31E-03	24	1.85%	1864	2.18E-03
								Total		100,880	

2024 Hourly Traffic Volumes Per Direction and TOG Evaporative Emissions - TEVAP_WB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile
1	1.22%	1230	1.67E-03	9	7.09%	7148	1.40E-02	17	7.33%	7390	1.19E-02
2	0.45%	458	6.21E-04	10	4.47%	4507	6.12E-03	18	8.03%	8097	1.30E-02
3	0.46%	468	6.35E-04	11	4.72%	4758	6.46E-03	19	5.61%	5663	7.69E-03
4	0.38%	386	5.24E-04	12	5.92%	5973	8.11E-03	20	4.20%	4233	5.74E-03
5	0.55%	559	7.59E-04	13	6.15%	6207	8.42E-03	21	3.25%	3275	4.45E-03
6	1.00%	1008	1.37E-03	14	6.04%	6095	8.27E-03	22	3.31%	3341	4.53E-03
7	3.85%	3887	5.28E-03	15	6.96%	7021	9.53E-03	23	2.45%	2468	3.35E-03
8	7.68%	7751	1.52E-02	16	7.03%	7095	9.63E-03	24	1.85%	1864	2.53E-03
								Total		100,880	

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_EB880	Eastbound I-880	SE-NW	4	320	0.20	20.6	68	1.3	variable	100,880
FUG_WB880	Westbound I-880	NW-SE	4	371	0.23	20.6	68	1.3	variable	100,880
									Total	201,760

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	65	55	45	15
Tire Wear - Emissions per Vehicle (g/VMT)	0.00235	0.00235	0.00235	0.00235
Brake Wear - Emissions per Vehicle (g/VMT)	0.01783	0.01783	0.01783	0.01783
Road Dust - Emissions per Vehicle (g/VMT)	0.01027	0.01027	0.01027	0.01027
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03045	0.03045	0.03045	0.03045

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_EB880

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	1230	2.07E-03	9	7.09%	7148	1.20E-02	17	7.33%	7390	1.24E-02
2	0.45%	458	7.70E-04	10	4.47%	4507	7.58E-03	18	8.03%	8097	1.36E-02
3	0.46%	468	7.87E-04	11	4.72%	4758	8.00E-03	19	5.61%	5663	9.52E-03
4	0.38%	386	6.49E-04	12	5.92%	5973	1.00E-02	20	4.20%	4233	7.12E-03
5	0.55%	559	9.40E-04	13	6.15%	6207	1.04E-02	21	3.25%	3275	5.51E-03
6	1.00%	1008	1.70E-03	14	6.04%	6095	1.02E-02	22	3.31%	3341	5.62E-03
7	3.85%	3887	6.54E-03	15	6.96%	7021	1.18E-02	23	2.45%	2468	4.15E-03
8	7.68%	7751	1.30E-02	16	7.03%	7095	1.19E-02	24	1.85%	1864	3.14E-03
								Total		100,880	

2024 Hourly Traffic Volumes Per Direction and Fugitive PM2.5 Emissions - FUG_WB880

OL-T HOUTH					0/ D-::				0/ 0		
	% Per				% Per				% Per		
Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile	Hour	Hour	VPH	g/mile
1	1.22%	1230	2.40E-03	9	7.09%	7148	1.39E-02	17	7.33%	7390	1.44E-02
2	0.45%	458	8.92E-04	10	4.47%	4507	8.78E-03	18	8.03%	8097	1.58E-02
3	0.46%	468	9.12E-04	11	4.72%	4758	9.27E-03	19	5.61%	5663	1.10E-02
4	0.38%	386	7.52E-04	12	5.92%	5973	1.16E-02	20	4.20%	4233	8.25E-03
5	0.55%	559	1.09E-03	13	6.15%	6207	1.21E-02	21	3.25%	3275	6.38E-03
6	1.00%	1008	1.96E-03	14	6.04%	6095	1.19E-02	22	3.31%	3341	6.51E-03
7	3.85%	3887	7.57E-03	15	6.96%	7021	1.37E-02	23	2.45%	2468	4.81E-03
8	7.68%	7751	1.51E-02	16	7.03%	7095	1.38E-02	24	1.85%	1864	3.63E-03
	-	-	_	-				Total		100.880	

Local Roads Emissions

File Name: Alameda (SF) - 2024 - Annua-BAAQMD Trucks w-DEOG.EF

CT-EMFAC2017 Version: 1.0.2.27401

 Run Date:
 9/8/2022 17:46

 Area:
 Alameda (SF)

 Analysis Year:
 2024

 Season:
 Annual

Vehicle Category	VMT Fraction Across	Diesel VMT Fraction Within	Gas VMT Fraction Within
	Category	Category	Category
Truck 1	0.011	0.473	0.527
Truck 2	0.03	0.958	0.029
Non-Truck	0.959	0.015	0.958

Road Type: Major/Collector

Silt Loading Factor: CARB 0.032 g/m2

Precipitation Correction: CARB P = 61 days N = 365 days

Fleet Average Running Exhaust Emission Factors (grams/veh-mile)

		(8	,										
Pollutant Name	<= 5 mph	10 mph	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph
PM2.5	0.008765	0.005682	0.003856	0.002762	0.002101	0.001705	0.00148	0.001376	0.001362	0.001425	0.00156	0.001769	0.002063
TOG	0.185287	0.121095	0.08174	0.058222	0.044169	0.035315	0.029643	0.026105	0.024117	0.023376	0.023782	0.025427	0.028568
Diesel PM	0.000833	0.000684	0.000533	0.000432	0.000378	0.000363	0.000378	0.000422	0.000493	0.000591	0.000715	0.000862	0.001034
DEOG	0.010965	0.007759	0.004183	0.002259	0.001629	0.001307	0.001086	0.000939	0.000853	0.00082	0.000837	0.000897	0.000994

Fleet Average Running Loss Emission Factors (grams/veh-hour)

Pollutant Name Emission Factor TOG 1.370353

Fleet Average Tire Wear Factors (grams/veh-mile)
Pollutant Name Emission Factor
PM2.5 0.002161

Fleet Average Brake Wear Factors (grams/veh-mile)

Pollutant Name Emission Factor PM2.5 0.016744

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East 12th Street - Traffic

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_E12TH	East 12th Street	NW-SE	4	759	0.47	14.6	48.0	3.4	30	14,592

Emission Factors - DPM

Emission ructors Drivi				
Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.00036			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_E12TH

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	558	2.65E-05	9	6.09%	889	4.23E-05	17	5.21%	760	3.61E-05
2	2.23%	326	1.55E-05	10	7.16%	1044	4.96E-05	18	2.83%	414	1.97E-05
3	2.62%	383	1.82E-05	11	6.41%	936	4.45E-05	19	2.44%	357	1.70E-05
4	3.97%	579	2.75E-05	12	6.94%	1013	4.82E-05	20	1.13%	165	7.86E-06
5	2.37%	346	1.65E-05	13	6.27%	915	4.35E-05	21	3.08%	450	2.14E-05
6	3.83%	558	2.65E-05	14	6.20%	905	4.30E-05	22	4.04%	589	2.80E-05
7	6.27%	915	4.35E-05	15	5.21%	760	3.61E-05	23	2.37%	346	1.65E-05
8	4.89%	713	3.39E-05	16	3.54%	517	2.46E-05	24	1.06%	155	7.37E-06
								Total		14,592	

Analysis Year = 2024

Vehicle Type	2022 Vehicles (veh/day)	2024 Vehicles (veh/day)
Truck 1 (MDT)	157	161
Truck 2 (HDT)	429	438
Non-Truck	13,719	13,994
All	14,306	14,592

 Increase From 2022
 1.02

 Vehicles/Direction
 7,296

 Avg Vehicles/Hour/Direction
 304

Traffic Data Year = 2022

Proejct Traffic Consultant		Total
	AADT Total	Truck
E. 12th Street	14,306	587

Percent of Total Vehicles

4.10%

Traffic Increase per Year (%) = 1.00%

East 12th Street - Traffic

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_E12TH	East 12th Street	NW-SE	4	759	0.47	14.6	48	1.3	30	14,592

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle (g/VMT)	0.001705			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_E12TH

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	178	3.97E-05	9	7.09%	1034	2.31E-04	17	7.33%	1069	2.39E-04
2	0.45%	66	1.48E-05	10	4.47%	652	1.46E-04	18	8.03%	1171	2.61E-04
3	0.46%	68	1.51E-05	11	4.72%	688	1.54E-04	19	5.61%	819	1.83E-04
4	0.38%	56	1.25E-05	12	5.92%	864	1.93E-04	20	4.20%	612	1.37E-04
5	0.55%	81	1.80E-05	13	6.15%	898	2.00E-04	21	3.25%	474	1.06E-04
6	1.00%	146	3.26E-05	14	6.04%	882	1.97E-04	22	3.31%	483	1.08E-04
7	3.85%	562	1.26E-04	15	6.96%	1016	2.27E-04	23	2.45%	357	7.97E-05
8	7.68%	1121	2.50E-04	16	7.03%	1026	2.29E-04	24	1.85%	270	6.02E-05
			-			-	_	Total		14,592	

Palace Theater Charter School Oakland,CA East 12th Street - Traffic

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_E12TH	East 12th Street	NW-SE	4	759	0.47	14.6	48	1.3	30	14,592

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	30			
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.03532			
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00131			
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.03401			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_E12TH

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	178	7.92E-04	9	7.09%	1034	4.60E-03	17	7.33%	1069	4.76E-03
2	0.45%	66	2.95E-04	10	4.47%	652	2.90E-03	18	8.03%	1171	5.21E-03
3	0.46%	68	3.02E-04	11	4.72%	688	3.06E-03	19	5.61%	819	3.65E-03
4	0.38%	56	2.49E-04	12	5.92%	864	3.85E-03	20	4.20%	612	2.73E-03
5	0.55%	81	3.60E-04	13	6.15%	898	4.00E-03	21	3.25%	474	2.11E-03
6	1.00%	146	6.49E-04	14	6.04%	882	3.93E-03	22	3.31%	483	2.15E-03
7	3.85%	562	2.50E-03	15	6.96%	1016	4.52E-03	23	2.45%	357	1.59E-03
8	7.68%	1121	4.99E-03	16	7.03%	1026	4.57E-03	24	1.85%	270	1.20E-03
								Total		14,592	

Palace Theater Charter School Oakland,CA East 12th Street - Traffic

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_E12TH	East 12th Street	NW-SE	4	759	0.47	14.6	48	1.3	30	14,592

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Emissions per Vehicle per Hour (g/hour)	1.37035			
Emissions per Vehicle per Mile (g/VMT)	0.04568			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP_E12TH

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	178	1.06E-03	9	7.09%	1034	6.18E-03	17	7.33%	1069	6.39E-03
2	0.45%	66	3.96E-04	10	4.47%	652	3.90E-03	18	8.03%	1171	7.00E-03
3	0.46%	68	4.05E-04	11	4.72%	688	4.12E-03	19	5.61%	819	4.90E-03
4	0.38%	56	3.34E-04	12	5.92%	864	5.17E-03	20	4.20%	612	3.66E-03
5	0.55%	81	4.84E-04	13	6.15%	898	5.37E-03	21	3.25%	474	2.83E-03
6	1.00%	146	8.72E-04	14	6.04%	882	5.27E-03	22	3.31%	483	2.89E-03
7	3.85%	562	3.36E-03	15	6.96%	1016	6.07E-03	23	2.45%	357	2.13E-03
8	7.68%	1121	6.71E-03	16	7.03%	1026	6.14E-03	24	1.85%	270	1.61E-03
								Total		14,592	

Palace Theater Charter School Oakland,CA East 12th Street - Traffic

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_E12TH	East 12th Street	NW-SE	4	759	0.47	14.6	48	1.3	30	14,592

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	30			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00216			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01674			
Road Dust - Emissions per Vehicle (g/VMT)	0.01604			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03495			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_E12TH

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	178	8.14E-04	9	7.09%	1034	4.73E-03	17	7.33%	1069	4.89E-03
2	0.45%	66	3.03E-04	10	4.47%	652	2.98E-03	18	8.03%	1171	5.36E-03
3	0.46%	68	3.10E-04	11	4.72%	688	3.15E-03	19	5.61%	819	3.75E-03
4	0.38%	56	2.55E-04	12	5.92%	864	3.95E-03	20	4.20%	612	2.80E-03
5	0.55%	81	3.70E-04	13	6.15%	898	4.11E-03	21	3.25%	474	2.17E-03
6	1.00%	146	6.67E-04	14	6.04%	882	4.03E-03	22	3.31%	483	2.21E-03
7	3.85%	562	2.57E-03	15	6.96%	1016	4.65E-03	23	2.45%	357	1.63E-03
8	7.68%	1121	5.13E-03	16	7.03%	1026	4.70E-03	24	1.85%	270	1.23E-03
								Total		14,592	

International Blvd - Traffic

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_INTL	International Blvd	NW-SE	2	853	0.53	7.3	24.0	3.4	25	10,393

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.00038			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_INTL

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	398	2.21E-05	9	6.09%	633	3.52E-05	17	5.21%	541	3.01E-05
2	2.23%	232	1.29E-05	10	7.16%	744	4.14E-05	18	2.83%	295	1.64E-05
3	2.62%	272	1.52E-05	11	6.41%	666	3.71E-05	19	2.44%	254	1.41E-05
4	3.97%	412	2.30E-05	12	6.94%	722	4.02E-05	20	1.13%	118	6.56E-06
5	2.37%	247	1.37E-05	13	6.27%	652	3.63E-05	21	3.08%	320	1.78E-05
6	3.83%	398	2.21E-05	14	6.20%	644	3.59E-05	22	4.04%	420	2.34E-05
7	6.27%	652	3.63E-05	15	5.21%	541	3.01E-05	23	2.37%	247	1.37E-05
8	4.89%	508	2.83E-05	16	3.54%	368	2.05E-05	24	1.06%	110	6.15E-06
			•			•		Total		10,393	

Analysis Year = 2024

	2022	2024
Vehicle	Vehicles	Vehicles
Туре	(veh/day)	(veh/day)
Truck 1 (MDT)	112	114
Truck 2 (HDT)	306	312
Non-Truck	9,771	9,967
All	10,189	10,393

Traffic Data Year = 2022

Proejct Traffic Consultant		Total
	AADT Total	Truck
International Blvd	10,189	418

Percent of Total Vehicles

4.10%

Traffic Increase per Year (%) = 1.00%

International Blvd - Traffic

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_INTL	International Blvd	NW-SE	2	853	0.53	7.3	24	1.3	25	10,393

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle (g/VMT)	0.002101			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25 INTL

2024 HOUIT		iuilles allu	FIVIZ.3 LIIII	331U113 - F1							
	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	127	3.92E-05	9	7.09%	736	2.28E-04	17	7.33%	761	2.36E-04
2	0.45%	47	1.46E-05	10	4.47%	464	1.44E-04	18	8.03%	834	2.58E-04
3	0.46%	48	1.49E-05	11	4.72%	490	1.52E-04	19	5.61%	583	1.80E-04
4	0.38%	40	1.23E-05	12	5.92%	615	1.90E-04	20	4.20%	436	1.35E-04
5	0.55%	58	1.78E-05	13	6.15%	639	1.98E-04	21	3.25%	337	1.04E-04
6	1.00%	104	3.21E-05	14	6.04%	628	1.94E-04	22	3.31%	344	1.06E-04
7	3.85%	400	1.24E-04	15	6.96%	723	2.24E-04	23	2.45%	254	7.86E-05
8	7.68%	798	2.47E-04	16	7.03%	731	2.26E-04	24	1.85%	192	5.94E-05
								Total		10.393	

Palace Theater Charter School Oakland,CA International Blvd - Traffic

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_INTL	International Blvd	NW-SE	2	853	0.53	7.3	24	1.3	25	10,393

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	25			
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.04417			
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00163			
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.04254			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_INTL

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	127	7.94E-04	9	7.09%	736	4.61E-03	17	7.33%	761	4.77E-03
2	0.45%	47	2.95E-04	10	4.47%	464	2.91E-03	18	8.03%	834	5.23E-03
3	0.46%	48	3.02E-04	11	4.72%	490	3.07E-03	19	5.61%	583	3.65E-03
4	0.38%	40	2.49E-04	12	5.92%	615	3.85E-03	20	4.20%	436	2.73E-03
5	0.55%	58	3.61E-04	13	6.15%	639	4.01E-03	21	3.25%	337	2.11E-03
6	1.00%	104	6.51E-04	14	6.04%	628	3.93E-03	22	3.31%	344	2.16E-03
7	3.85%	400	2.51E-03	15	6.96%	723	4.53E-03	23	2.45%	254	1.59E-03
8	7.68%	798	5.00E-03	16	7.03%	731	4.58E-03	24	1.85%	192	1.20E-03
								Total		10,393	

International Blvd - Traffic

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_INTL	International Blvd	NW-SE	2	853	0.53	7.3	24	1.3	25	10,393

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Emissions per Vehicle per Hour (g/hour)	1.37035			
Emissions per Vehicle per Mile (g/VMT)	0.05481			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP INTL

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	127	1.02E-03	9	7.09%	736	5.94E-03	17	7.33%	761	6.15E-03
2	0.45%	47	3.81E-04	10	4.47%	464	3.75E-03	18	8.03%	834	6.73E-03
3	0.46%	48	3.89E-04	11	4.72%	490	3.96E-03	19	5.61%	583	4.71E-03
4	0.38%	40	3.21E-04	12	5.92%	615	4.97E-03	20	4.20%	436	3.52E-03
5	0.55%	58	4.65E-04	13	6.15%	639	5.16E-03	21	3.25%	337	2.72E-03
6	1.00%	104	8.38E-04	14	6.04%	628	5.07E-03	22	3.31%	344	2.78E-03
7	3.85%	400	3.23E-03	15	6.96%	723	5.84E-03	23	2.45%	254	2.05E-03
8	7.68%	798	6.45E-03	16	7.03%	731	5.90E-03	24	1.85%	192	1.55E-03
						·		Total	· · · · · ·	10,393	•

Palace Theater Charter School Oakland,CA International Blvd - Traffic Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_INTL	International Blvd	NW-SE	2	853	0.53	7.3	24	1.3	25	10,393

Emission Factors - Fugitive PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	25			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00216			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01674			
Road Dust - Emissions per Vehicle (g/VMT)	0.01604			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03495			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_INTL

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	127	6.52E-04	9	7.09%	736	3.79E-03	17	7.33%	761	3.92E-03
2	0.45%	47	2.43E-04	10	4.47%	464	2.39E-03	18	8.03%	834	4.29E-03
3	0.46%	48	2.48E-04	11	4.72%	490	2.52E-03	19	5.61%	583	3.00E-03
4	0.38%	40	2.05E-04	12	5.92%	615	3.17E-03	20	4.20%	436	2.24E-03
5	0.55%	58	2.96E-04	13	6.15%	639	3.29E-03	21	3.25%	337	1.74E-03
6	1.00%	104	5.35E-04	14	6.04%	628	3.23E-03	22	3.31%	344	1.77E-03
7	3.85%	400	2.06E-03	15	6.96%	723	3.72E-03	23	2.45%	254	1.31E-03
8	7.68%	798	4.11E-03	16	7.03%	731	3.76E-03	24	1.85%	192	9.88E-04
								Total		10,393	

Foothill Blvd - Traffic

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_FOOT	Foothill Blvd	NW-SE	2	776	0.48	7.3	24.0	3.4	20	8,933

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00043			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_FOOT

2024 Hours	,	· · · · · · · · · · · · · · · · · · ·		0.0							
	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	342	1.98E-05	9	6.09%	544	3.15E-05	17	5.21%	465	2.69E-05
2	2.23%	199	1.15E-05	10	7.16%	639	3.70E-05	18	2.83%	253	1.47E-05
3	2.62%	234	1.36E-05	11	6.41%	573	3.32E-05	19	2.44%	218	1.26E-05
4	3.97%	354	2.05E-05	12	6.94%	620	3.59E-05	20	1.13%	101	5.86E-06
5	2.37%	212	1.23E-05	13	6.27%	560	3.24E-05	21	3.08%	275	1.59E-05
6	3.83%	342	1.98E-05	14	6.20%	554	3.21E-05	22	4.04%	361	2.09E-05
7	6.27%	560	3.24E-05	15	5.21%	465	2.69E-05	23	2.37%	212	1.23E-05
8	4.89%	437	2.53E-05	16	3.54%	316	1.83E-05	24	1.06%	95	5.50E-06
	-							Total		8,933	

Analysis Year = 2024

Vehicle Type	2022 Vehicles (veh/day)	2024 Vehicles (veh/day)
Truck 1 (MDT)	96	98
Truck 2 (HDT)	263	268
Non-Truck	8,399	8,567
All	8,758	8,933

 Increase From 2022
 1.02

 Vehicles/Direction
 4,467

 Avg Vehicles/Hour/Direction
 186

Traffic Data Year = 2022

Proejct Traffic Consultant		Total
	AADT Total	Truck
Foothill Blvd	8,758	359

Percent of Total Vehicles

4.10%

Traffic Increase per Year (%) = 1.00%

Palace Theater Charter School Oakland,CA Foothill Blvd - Traffic

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_FOOT	Foothill Blvd	NW-SE	2	776	0.48	7.3	24	1.3	20	8,933

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.002762			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_FOOT

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	109	4.03E-05	9	7.09%	633	2.34E-04	17	7.33%	654	2.42E-04
2	0.45%	41	1.50E-05	10	4.47%	399	1.48E-04	18	8.03%	717	2.65E-04
3	0.46%	41	1.53E-05	11	4.72%	421	1.56E-04	19	5.61%	501	1.86E-04
4	0.38%	34	1.26E-05	12	5.92%	529	1.96E-04	20	4.20%	375	1.39E-04
5	0.55%	49	1.83E-05	13	6.15%	550	2.03E-04	21	3.25%	290	1.07E-04
6	1.00%	89	3.30E-05	14	6.04%	540	2.00E-04	22	3.31%	296	1.09E-04
7	3.85%	344	1.27E-04	15	6.96%	622	2.30E-04	23	2.45%	219	8.09E-05
8	7.68%	686	2.54E-04	16	7.03%	628	2.33E-04	24	1.85%	165	6.11E-05
			-			-	_	Total		8,933	

Foothill Blvd - Traffic

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_FOOT	Foothill Blvd	NW-SE	2	776	0.48	7.3	24	1.3	20	8,933

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20			
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.05822			
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00226			
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.05596			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_FOOT

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	109	8.16E-04	9	7.09%	633	4.75E-03	17	7.33%	654	4.91E-03
2	0.45%	41	3.04E-04	10	4.47%	399	2.99E-03	18	8.03%	717	5.38E-03
3	0.46%	41	3.11E-04	11	4.72%	421	3.16E-03	19	5.61%	501	3.76E-03
4	0.38%	34	2.56E-04	12	5.92%	529	3.97E-03	20	4.20%	375	2.81E-03
5	0.55%	49	3.71E-04	13	6.15%	550	4.12E-03	21	3.25%	290	2.17E-03
6	1.00%	89	6.69E-04	14	6.04%	540	4.05E-03	22	3.31%	296	2.22E-03
7	3.85%	344	2.58E-03	15	6.96%	622	4.66E-03	23	2.45%	219	1.64E-03
8	7.68%	686	5.15E-03	16	7.03%	628	4.71E-03	24	1.85%	165	1.24E-03
								Total		8,933	

Palace Theater Charter School Oakland,CA Foothill Blvd - Traffic

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_FOOT	Foothill Blvd	NW-SE	2	776	0.48	7.3	24	1.3	20	8,933

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle per Hour (g/hour)	1.37035			
Emissions per Vehicle per Mile (g/VMT)	0.06852			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP FOOT

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	109	1.00E-03	9	7.09%	633	5.81E-03	17	7.33%	654	6.01E-03
2	0.45%	41	3.72E-04	10	4.47%	399	3.66E-03	18	8.03%	717	6.58E-03
3	0.46%	41	3.81E-04	11	4.72%	421	3.87E-03	19	5.61%	501	4.60E-03
4	0.38%	34	3.14E-04	12	5.92%	529	4.86E-03	20	4.20%	375	3.44E-03
5	0.55%	49	4.54E-04	13	6.15%	550	5.05E-03	21	3.25%	290	2.66E-03
6	1.00%	89	8.20E-04	14	6.04%	540	4.96E-03	22	3.31%	296	2.72E-03
7	3.85%	344	3.16E-03	15	6.96%	622	5.71E-03	23	2.45%	219	2.01E-03
8	7.68%	686	6.30E-03	16	7.03%	628	5.77E-03	24	1.85%	165	1.52E-03
								Total		8,933	

Palace Theater Charter School Oakland,CA Foothill Blvd - Traffic

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_FOOT	Foothill Blvd	NW-SE	2	776	0.48	7.3	24	1.3	20	8,933

Emission Factors - Fugitive PM2.5

Emission ractors - ragitive riviz.5				
Speed Category	1	2	3	4
Travel Speed (mph)	20			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00216			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01674			
Road Dust - Emissions per Vehicle (g/VMT)	0.01604			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03495			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_FOOT

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	109	5.10E-04	9	7.09%	633	2.96E-03	17	7.33%	654	3.06E-03
2	0.45%	41	1.90E-04	10	4.47%	399	1.87E-03	18	8.03%	717	3.36E-03
3	0.46%	41	1.94E-04	11	4.72%	421	1.97E-03	19	5.61%	501	2.35E-03
4	0.38%	34	1.60E-04	12	5.92%	529	2.48E-03	20	4.20%	375	1.76E-03
5	0.55%	49	2.32E-04	13	6.15%	550	2.57E-03	21	3.25%	290	1.36E-03
6	1.00%	89	4.18E-04	14	6.04%	540	2.53E-03	22	3.31%	296	1.39E-03
7	3.85%	344	1.61E-03	15	6.96%	622	2.91E-03	23	2.45%	219	1.02E-03
8	7.68%	686	3.21E-03	16	7.03%	628	2.94E-03	24	1.85%	165	7.73E-04
								Total		8,933	

22nd Avenue - Traffic

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_22ND	22nd Avenue	NW-SE	4	665	0.41	14.6	48.0	3.4	20	10,215

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00043			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_22ND

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	391	1.94E-05	9	6.09%	622	3.08E-05	17	5.21%	532	2.64E-05
2	2.23%	228	1.13E-05	10	7.16%	731	3.62E-05	18	2.83%	289	1.43E-05
3	2.62%	268	1.33E-05	11	6.41%	655	3.25E-05	19	2.44%	250	1.24E-05
4	3.97%	405	2.01E-05	12	6.94%	709	3.51E-05	20	1.13%	116	5.74E-06
5	2.37%	242	1.20E-05	13	6.27%	640	3.17E-05	21	3.08%	315	1.56E-05
6	3.83%	391	1.94E-05	14	6.20%	633	3.14E-05	22	4.04%	413	2.04E-05
7	6.27%	640	3.17E-05	15	5.21%	532	2.64E-05	23	2.37%	242	1.20E-05
8	4.89%	499	2.47E-05	16	3.54%	362	1.79E-05	24	1.06%	109	5.38E-06
	-							Total		10,215	

Analysis Year = 2024

	2022	2024
Vehicle	Vehicles	Vehicles
Туре	(veh/day)	(veh/day)
Truck 1 (MDT)	110	112
Truck 2 (HDT)	300	306
Non-Truck	9,604	9,796
All	10,015	10,215

 Increase From 2022
 1.02

 Vehicles/Direction
 5,108

 Avg Vehicles/Hour/Direction
 213

Traffic Data Year = 2022

Proejct Traffic Consultant		Total
	AADT Total	Truck
22nd Avenue	10,015	411

Percent of Total Vehicles

4.10%

Traffic Increase per Year (%) = 1.00%

22nd Avenue - Traffic

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_22ND	22nd Avenue	NW-SE	4	665	0.41	14.6	48	1.3	20	10,215

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.002762			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_22ND

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	125	3.94E-05	9	7.09%	724	2.29E-04	17	7.33%	748	2.37E-04
2	0.45%	46	1.47E-05	10	4.47%	456	1.45E-04	18	8.03%	820	2.60E-04
3	0.46%	47	1.50E-05	11	4.72%	482	1.53E-04	19	5.61%	573	1.82E-04
4	0.38%	39	1.24E-05	12	5.92%	605	1.92E-04	20	4.20%	429	1.36E-04
5	0.55%	57	1.79E-05	13	6.15%	629	1.99E-04	21	3.25%	332	1.05E-04
6	1.00%	102	3.23E-05	14	6.04%	617	1.96E-04	22	3.31%	338	1.07E-04
7	3.85%	394	1.25E-04	15	6.96%	711	2.25E-04	23	2.45%	250	7.92E-05
8	7.68%	785	2.49E-04	16	7.03%	718	2.28E-04	24	1.85%	189	5.98E-05
		-	_	_		-	-	Total		10,215	

22nd Avenue - Traffic

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_22ND	22nd Avenue	NW-SE	4	665	0.41	14.6	48	1.3	20	10,215

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20			
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.05822			
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00226			
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.05596			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_22ND

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	125	7.99E-04	9	7.09%	724	4.65E-03	17	7.33%	748	4.80E-03
2	0.45%	46	2.97E-04	10	4.47%	456	2.93E-03	18	8.03%	820	5.26E-03
3	0.46%	47	3.04E-04	11	4.72%	482	3.09E-03	19	5.61%	573	3.68E-03
4	0.38%	39	2.51E-04	12	5.92%	605	3.88E-03	20	4.20%	429	2.75E-03
5	0.55%	57	3.63E-04	13	6.15%	629	4.03E-03	21	3.25%	332	2.13E-03
6	1.00%	102	6.55E-04	14	6.04%	617	3.96E-03	22	3.31%	338	2.17E-03
7	3.85%	394	2.53E-03	15	6.96%	711	4.56E-03	23	2.45%	250	1.60E-03
8	7.68%	785	5.04E-03	16	7.03%	718	4.61E-03	24	1.85%	189	1.21E-03
								Total		10,215	

22nd Avenue - Traffic

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_22ND	22nd Avenue	NW-SE	4	665	0.41	14.6	48	1.3	20	10,215

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle per Hour (g/hour)	1.37035			
Emissions per Vehicle per Mile (g/VMT)	0.06852			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP 22ND

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	125	9.79E-04	9	7.09%	724	5.69E-03	17	7.33%	748	5.88E-03
2	0.45%	46	3.64E-04	10	4.47%	456	3.59E-03	18	8.03%	820	6.44E-03
3	0.46%	47	3.73E-04	11	4.72%	482	3.79E-03	19	5.61%	573	4.51E-03
4	0.38%	39	3.07E-04	12	5.92%	605	4.75E-03	20	4.20%	429	3.37E-03
5	0.55%	57	4.45E-04	13	6.15%	629	4.94E-03	21	3.25%	332	2.61E-03
6	1.00%	102	8.02E-04	14	6.04%	617	4.85E-03	22	3.31%	338	2.66E-03
7	3.85%	394	3.09E-03	15	6.96%	711	5.59E-03	23	2.45%	250	1.96E-03
8	7.68%	785	6.17E-03	16	7.03%	718	5.65E-03	24	1.85%	189	1.48E-03
								Total		10,215	

22nd Avenue - Traffic

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_22ND	22nd Avenue	NW-SE	4	665	0.41	14.6	48	1.3	20	10,215

Emission Factors - Fugitive PM2.5

Emission ractors ragitive rivizis				
Speed Category	1	2	3	4
Travel Speed (mph)	20			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00216			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01674			
Road Dust - Emissions per Vehicle (g/VMT)	0.01604			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03495			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_22ND

	% Per				% Per	_			% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	125	4.99E-04	9	7.09%	724	2.90E-03	17	7.33%	748	3.00E-03
2	0.45%	46	1.86E-04	10	4.47%	456	1.83E-03	18	8.03%	820	3.29E-03
3	0.46%	47	1.90E-04	11	4.72%	482	1.93E-03	19	5.61%	573	2.30E-03
4	0.38%	39	1.57E-04	12	5.92%	605	2.42E-03	20	4.20%	429	1.72E-03
5	0.55%	57	2.27E-04	13	6.15%	629	2.52E-03	21	3.25%	332	1.33E-03
6	1.00%	102	4.09E-04	14	6.04%	617	2.47E-03	22	3.31%	338	1.36E-03
7	3.85%	394	1.58E-03	15	6.96%	711	2.85E-03	23	2.45%	250	1.00E-03
8	7.68%	785	3.15E-03	16	7.03%	718	2.88E-03	24	1.85%	189	7.57E-04
		•					•	Total		10,215	

23rd Avenue - Traffic

DPM Modeling - Roadway Links, Traffic Volumes, and DPM Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
DPM_23RD	23rd Avenue	NW-SE	2	632	0.39	7.3	24.0	3.4	20	6,641

Emission Factors - DPM

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.00043			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and DPM Emissions - DPM_23RD

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	3.83%	254	1.20E-05	9	6.09%	405	1.91E-05	17	5.21%	346	1.63E-05
2	2.23%	148	6.98E-06	10	7.16%	475	2.24E-05	18	2.83%	188	8.87E-06
3	2.62%	174	8.20E-06	11	6.41%	426	2.01E-05	19	2.44%	162	7.65E-06
4	3.97%	263	1.24E-05	12	6.94%	461	2.17E-05	20	1.13%	75	3.55E-06
5	2.37%	158	7.43E-06	13	6.27%	416	1.96E-05	21	3.08%	205	9.64E-06
6	3.83%	254	1.20E-05	14	6.20%	412	1.94E-05	22	4.04%	268	1.26E-05
7	6.27%	416	1.96E-05	15	5.21%	346	1.63E-05	23	2.37%	158	7.43E-06
8	4.89%	325	1.53E-05	16	3.54%	235	1.11E-05	24	1.06%	71	3.33E-06
								Total		6,641	

Analysis Year = 2024

2022	2024
Vehicles	Vehicles
(veh/day)	(veh/day)
72	73
195	199
6,244	6,369
6,511	6,641
	Vehicles (veh/day) 72 195 6,244

Increase From 2022 1.02 **Vehicles/Direction** 3,321

Avg Vehicles/Hour/Direction 138

Traffic Data Year = 2022

Proejct Traffic Consultant		Total
	AADT Total	Truck
23rd Avenue	6,511	267

Percent of Total Vehicles

Traffic Increase per Year (%) = 1.00%

4.10%

23rd Avenue - Traffic

PM2.5 Modeling - Roadway Links, Traffic Volumes, and PM2.5 Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
PM25_23RD	23rd Avenue	NW-SE	2	632	0.39	7.3	24	1.3	20	6,641

Emission Factors - PM2.5

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle (g/VMT)	0.002762			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and PM2.5 Emissions - PM25_23RD

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	81	2.44E-05	9	7.09%	471	1.42E-04	17	7.33%	487	1.47E-04
2	0.45%	30	9.08E-06	10	4.47%	297	8.94E-05	18	8.03%	533	1.61E-04
3	0.46%	31	9.29E-06	11	4.72%	313	9.44E-05	19	5.61%	373	1.12E-04
4	0.38%	25	7.65E-06	12	5.92%	393	1.18E-04	20	4.20%	279	8.39E-05
5	0.55%	37	1.11E-05	13	6.15%	409	1.23E-04	21	3.25%	216	6.50E-05
6	1.00%	66	2.00E-05	14	6.04%	401	1.21E-04	22	3.31%	220	6.63E-05
7	3.85%	256	7.71E-05	15	6.96%	462	1.39E-04	23	2.45%	162	4.89E-05
8	7.68%	510	1.54E-04	16	7.03%	467	1.41E-04	24	1.85%	123	3.70E-05
	-		-			-		Total		6,641	

23rd Avenue - Traffic

TOG Exhaust Modeling - Roadway Links, Traffic Volumes, and TOG Exhaust Emissions

Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEXH_23RD	23rd Avenue	NW-SE	2	632	0.39	7.3	24	1.3	20	6,641

Emission Factors - TOG Exhaust

Speed Category	1	2	3	4
Travel Speed (mph)	20			
All Vehicles TOG Emissions per Vehicle (g/VMT)	0.05822			
Diesel Vehicles TOG Emissions per Vehicle (g/VMT)	0.00226			
Gasoline Vehicles Emissions per Vehicle (g/VMT)	0.05596			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Exhaust Emissions - TEXH_23RD

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	81	4.94E-04	9	7.09%	471	2.87E-03	17	7.33%	487	2.97E-03
2	0.45%	30	1.84E-04	10	4.47%	297	1.81E-03	18	8.03%	533	3.25E-03
3	0.46%	31	1.88E-04	11	4.72%	313	1.91E-03	19	5.61%	373	2.28E-03
4	0.38%	25	1.55E-04	12	5.92%	393	2.40E-03	20	4.20%	279	1.70E-03
5	0.55%	37	2.25E-04	13	6.15%	409	2.49E-03	21	3.25%	216	1.32E-03
6	1.00%	66	4.05E-04	14	6.04%	401	2.45E-03	22	3.31%	220	1.34E-03
7	3.85%	256	1.56E-03	15	6.96%	462	2.82E-03	23	2.45%	162	9.92E-04
8	7.68%	510	3.11E-03	16	7.03%	467	2.85E-03	24	1.85%	123	7.49E-04
								Total		6,641	

23rd Avenue - Traffic

TOG Evaporative Emissions Modeling - Roadway Links, Traffic Volumes, and TOG Evaporative Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
TEVAP_23RD	23rd Avenue	NW-SE	2	632	0.39	7.3	24	1.3	20	6,641

Emission Factors - PM2.5 - Evaporative TOG

Speed Category	1	2	3	4
Travel Speed (mph)	20			
Emissions per Vehicle per Hour (g/hour)	1.37035			
Emissions per Vehicle per Mile (g/VMT)	0.06852			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and TOG Evaporative Emissions - TEVAP 23RD

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	81	6.05E-04	9	7.09%	471	3.52E-03	17	7.33%	487	3.64E-03
2	0.45%	30	2.25E-04	10	4.47%	297	2.22E-03	18	8.03%	533	3.98E-03
3	0.46%	31	2.30E-04	11	4.72%	313	2.34E-03	19	5.61%	373	2.79E-03
4	0.38%	25	1.90E-04	12	5.92%	393	2.94E-03	20	4.20%	279	2.08E-03
5	0.55%	37	2.75E-04	13	6.15%	409	3.05E-03	21	3.25%	216	1.61E-03
6	1.00%	66	4.96E-04	14	6.04%	401	3.00E-03	22	3.31%	220	1.64E-03
7	3.85%	256	1.91E-03	15	6.96%	462	3.45E-03	23	2.45%	162	1.21E-03
8	7.68%	510	3.81E-03	16	7.03%	467	3.49E-03	24	1.85%	123	9.17E-04
						·		Total	·	6,641	•

Palace Theater Charter School Oakland,CA 23rd Avenue - Traffic

Fugitive Road PM2.5 Modeling - Roadway Links, Traffic Volumes, and Fugitive Road PM2.5 Emissions Year = 2024

Road Link	Description	Direction	No. Lanes	Link Length (m)	Link Length (mi)	Link Width (m)	Link Width (ft)	Release Height (m)	Average Speed (mph)	Average Vehicles per Day
FUG_23RD	23rd Avenue	NW-SE	2	632	0.39	7.3	24	1.3	20	6,641
·										
·										

Emission Factors - Fugitive PM2.5

Emission ractors - ragitive riviz.5				
Speed Category	1	2	3	4
Travel Speed (mph)	20			
Tire Wear - Emissions per Vehicle (g/VMT)	0.00216			
Brake Wear - Emissions per Vehicle (g/VMT)	0.01674			
Road Dust - Emissions per Vehicle (g/VMT)	0.01604			
Total Fugitive PM2.5 - Emissions per Vehicle (g/VMT)	0.03495			

Emisson Factors from CT-EMFAC2017

2024 Hourly Traffic Volumes and Fugitive PM2.5 Emissions - FUG_23RD

	% Per				% Per				% Per		
Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s	Hour	Hour	VPH	g/s
1	1.22%	81	3.09E-04	9	7.09%	471	1.79E-03	17	7.33%	487	1.85E-03
2	0.45%	30	1.15E-04	10	4.47%	297	1.13E-03	18	8.03%	533	2.03E-03
3	0.46%	31	1.17E-04	11	4.72%	313	1.19E-03	19	5.61%	373	1.42E-03
4	0.38%	25	9.69E-05	12	5.92%	393	1.50E-03	20	4.20%	279	1.06E-03
5	0.55%	37	1.40E-04	13	6.15%	409	1.56E-03	21	3.25%	216	8.22E-04
6	1.00%	66	2.53E-04	14	6.04%	401	1.53E-03	22	3.31%	220	8.38E-04
7	3.85%	256	9.75E-04	15	6.96%	462	1.76E-03	23	2.45%	162	6.19E-04
8	7.68%	510	1.95E-03	16	7.03%	467	1.78E-03	24	1.85%	123	4.68E-04
								Total		6,641	

I-880 and Local Roads Health Risk Calculations

Palace Theater Charter School - Roadway Traffic - TACs & PM2.5 Maximum Cancer Risk and PM2.5 Concentration AERMOD Risk Modeling Parameters and Maximum Concentrations

Emissions Years 2024

Receptor Information

Number of Receptors 36
Receptor Height = 1.5 meters

Receptor distances = 6 meter grid in school building

Meteorological Conditions

BAAQMD Oakland Airport Met Data 2013-2017
Land Use Classification urban
Wind speed = variable
Wind direction = variable

Emission	Concentration (µg/m³)					
Years	DPM	Exhaust TOG	Evaporative TOG			
2024	0.00798	0.37595	0.44656			

Emission	PM2.5 Concentrations (μg/m³)				
Years	Total PM2.5 Fugitive PM2.5 Vehicle PM2				
2024	0.3296	0.3068	0.0228		

Maximum School Child PM2.5 Concentr	ation (µg/m³)* =	0.094

^{*} Concentration adjusted for exposure duration at school

Palace Theater Charter School, Oakland, CA - Operation Impacts Maximum DPM Cancer Risk and PM2.5 From I-880 & Local Roads Impacts at School Site - 1st Floor Level (1.5 m receptor height)

Cancer Risk Calculation Method

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 SAF x 8hr BR x A x (EF/365) x 10^{-6}

Where: $C_{air} = concentration in air (\mu g/m^3)$

SAF = School Adjustment Factor (unitless) for source operation and exposures different than 8 hours/day

= (24/SHR) x (7days/SDay) x (ScHR/8 hrs)

SHR = Hours of emission source operation

SDay = Modeled 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

Cancer Potency Factors (mg/kg-day)⁻¹

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

	Infant	Child
Age>	0 - <2	2 - <16
Parameter		
ASF	10	3
8-Hr BR* =	1200	520
ScHR** =	10	10
SHR =	24	24
SDay =	7	7
A =	1	1
EF =	250	250
AT =	70	70
SAF =	1.25	1.25

^{* 95}th percentile 8-hr breathing rates for moderate intensity activities

Road Traffic Cancer Risk by Year - Maximum Impact Receptor Location

				Maxi	Maximum - Exposure Information							
Exposure		Exposure		Age	Annua	l TAC Cond	c (ug/m3)		Cancer Ris	sk (per million))	
Year/		Duration		Sensitivity		Exhaust	Evaporative		Exhaust	Evaporative		Haza
Grade	Year	(years)	Age	Factor	DPM	TOG	TOG	DPM	TOG	TOG	Total	Ind
1 - 6th	2022	1	11 - 12	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	0.001
2 - 7th	2023	1	12 - 13	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
3 - 8th	2024	1	13 - 14	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
4 - 9th	2025	1	14 - 15	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
5 - 10th	2026	1	15 - 16	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
6 - 11th	2027	1	16 - 17	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
7 - 12th	2028	1	17 - 18	3	0.0080	0.3760	0.4466	0.1675	0.0451	0.0032	0.2157	
Total Increase	d Cancer Risk							1.172	0.315	0.022	1.51	

azard ndex 00160

^{**} SCHR based on 9 hours school day



Stationary Source Data Request Form



Background

Please provide all information below and submit this form with a printout of the Stationary Source Screening Report (instructions below) available via the <u>Stationary Source Screening Map</u> to <u>Public Records Request</u>. Facility level emissions are publicly available on the Air Resources Board <u>California Emissions Inventory Development and Reporting System</u> website. All other CEQA related questions can be emailed to <u>CEQA@baaqmd.gov</u>.

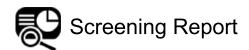
Requester Information

Public Records Request #	Project Name	
Contact Name	Project Location: (City, County)	
Contact Phone	Contact Email	

Instructions

- 1. Create a <u>Public Records Request</u> to get a request #.
- 2. Go to the Stationary Sources Screening Map on the CEQA Resources page.
- 3. Select "Draw" or "Coordinate" (top left).
- 4. Draw project parcel or place marker.
- 5. Indicate the desired buffer distance.
- 6. Click "Report".
- 7. Download .CSV and print boundary pdf.
- 8. Complete this form with any additional data requests.
- Email this form and supporting files to <u>Public</u> <u>Records Request</u> email. In the <u>email subject line</u> include your Public Records Number.

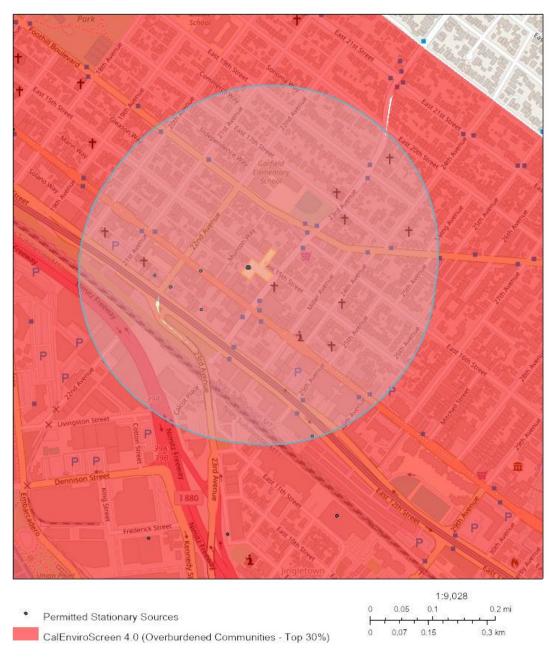
Additional Data Request	



Area of Interest (AOI) Information

Area: 7,171,959.45 ft2

Jul 1 2022 15:06:57 Pacific Daylight Time



Map data © OpenStreetMap contributors, CC-BY-SA

Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	5	N/A	N/A

Permitted Stationary Sources

#	FacID	FacName Address		City	Street
1	13344	Experience Auto Body	2230 International Blvd	Oakland	CA
2	8994	Eastern Autobody & Repair	1223 Miller Avenue	Oakland	CA
3	20856	TY Auto Body LLC	2222 E 12th St	Oakland	CA
4	112492_1	East Bay Gas & Food	2146 E 12th St	Oakland	CA
5	110546_1	Wong's Valero	2200 E 12th St	Oakland	CA

#	Zip	County	Latitude	Longitude	Details
1	94,606.00	Alameda	37.78	-122.24	No Data
2	94,601.00	Alameda	37.78	-122.23	No Data
3	94,606.00	Alameda	37.78 -122.24		No Data
4	94,606.00	Alameda	37.78	-122.24	Gas Dispensing Facility
5	94,606.00	Alameda	37.78	-122.24	Gas Dispensing Facility

#	NAICS	Sector	Sub_Sector	Industry	ChronicHI
1	811,121.00	Other Services (except Public Administration)	Repair and Maintenance	Automotive Body, Paint, and Interior Repair and Maintenance	0.0010094
2	811,121.00	Other Services (except Public Administration)	Repair and Maintenance	Automotive Body, Paint, and Interior Repair and Maintenance	0.0037851
3	811,121.00	Other Services (except Public Administration)	Repair and Maintenance	Automotive Body, Paint, and Interior Repair and Maintenance	0.0001262
4	447,110.00	Retail Trade	Gasoline Stations	Gasoline Stations with Convenience Stores	0.0753490
5	447,110.00	Retail Trade	Gasoline Stations	Gasoline Stations with Convenience Stores	0.0442367

#	PM2_5	Cancer Risk {expression/expr0}	Chronic Hazard Index {expression/expr1}	PM2.5 {expression/expr2}	Count
1	0.0000000	No Data	0.001	No Data	1
2	0.0000000	No Data	0.004	No Data	1
3	0.0000000	No Data	0	No Data	1
4	0.0000000	15.733	0.075	No Data	1
5	0.0000000	9.237	0.044	No Data	1

NOTE: A larger buffer than 1000 feet may be warranted depending on proximity to significant sources.

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 coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

cannot be adjusted further.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request 8/16/2022

Contact Name Casey Divine

Affiliation Illingworth & Rodkin, Inc.

Phone 707-794-0400 x103

Email cdivine@illingworthrodkin.com

Palace Theater/BayTech

Project Name School

Address 1445 23rd Avenue

City Oakland
County Alameda

Type (residential, commercial, mixed use, industrial, etc.) School Project Size (# of

units or building

square feet) 350 students

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 PMZ.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 _____ blue section

6. Note that a small percentage of the statio have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the (Map B on right). If HRSA values are presented, these values have already been modeled and

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									ruction ME	uction MEIProject Site			
Distance from				Cancer	Hazard						Distance Adjustment	Adjusted Cancer Risk	Adjuste	d Adjusted
MEI ¹	Plant No.	Facility Name	Address	Risk ²	Risk ²	PM2.5	Source No. ³	Type of Source ⁴	Fuel Code ⁵	Status/Comments	Multiplier	Estimate	Risk	PM2.5
			2230 International					Auto Body Coating			0.68	#VALUE!	0.001	#VALUE!
170	13344	Experience Auto Body	Blvd		- 0.001		-	Operation		2020 Dataset	0.08	#VALUL:	0.001	#VALUE:
		Eastern Autobody &						Auto Body Coating			0.31	#VALUE!	0.001	#VALUE!
560	8994	Repair	1223 Miller Avenue		- 0.004	ļ	-	Operation		2020 Dataset	0.31	#VALUL:	0.001	#VALUE:
								Auto Body Coating						

440	20856	TY Auto Body LLC	2222 E 12th St	-	0.0001	-	Operation	2020 Dataset	0.39	#VALUE	i! 0.0000	5 #VALUE!
640	112492_1	East Bay Gas & Food	2146 E 12th St	15.73	0.08	-	Gas Dispensing Facility	2020 Dataset	CARB GDF Tool	0.05	0.01	-
480	110546_1	Wong's Valero	2200 E 12th St	9.24	0.04	-	Gas Dispensing Facility	2020 Dataset	CARB GDF Tool	0.51	0.02	-

Footnotes:

- 1. Maximally exposed individual
- 2. These Cancer Risk, Hazard Index, and PM2.5 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.
- 7. The date that the HRSA was completed.
- 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. To be conservative, requestor should assume the cancer risk is 1 in a million and the hazard index is 0.003 for these sources.
- 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 PM2.5 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 number of years perc use will continue after the project's residents or other sensitive receptors (such as students, patients, etc) take occupancy.
- e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier 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

ATTACHMENT E: CULTURAL RESOURCES TECHNICAL REPORT

PAGE&TURNBULL



CULTURAL RESOURCES TECHNICAL REPORT BAY TECH CHARTER SCHOOL PROJECT

OAKLAND, CALIFORNIA [22032]

PREPARED FOR:
BAY AREA TECHNOLOGY SCHOOL

January 2023



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I. INTRODUCTION

This Cultural Resources Technical Report has been prepared for the proposed Bay Tech Charter School Project. The proposed project would be located at the site of the Palace Theatre building at 1443-1453 23rd Avenue, Oakland (**Figure 1**). The building was constructed in 1923 as a motion picture and live performance theater, and has been primarily in use as a church since 1953. The subject property occupies a roughly L-shaped 0.37-acre parcel at the southwest corner of 23rd Avenue and East 15th Street in the San Antonio neighborhood of Oakland.

The Palace Theatre building was evaluated by Page & Turnbull in April 2022, and found to be eligible for listing as an individual resource in the California Register of Historical Resources (California Register) under Criterion 3 (Architecture) as a good example of a neighborhood theater designed in the early 1920s in a Spanish Colonial Revival style, as well as for its association with master architects, the Reid Brothers, who designed an interior renovation to the building in 1931. The building is included in the City of Oakland's Local Register of Historical Resources, and is a contributor to the 23rd Avenue Commercial District Area of Secondary Importance (ASI). The subject property meets the City of Oakland's thresholds for significance as a historical resource under the California Environmental Quality Act (CEQA).²

The proposed project would alter the exterior and interior of the Palace Theatre building for reuse as the Bay Tech Charter School, a middle and high school for 350 students. Alterations which would be required to rehabilitate the building for reuse as a school include seismic retrofitting, construction of a third story within the building's existing auditorium space, conversion of the auditorium to a gymnasium, and renovation of existing office, kitchen, classroom, and backstage spaces for office and classroom use.

Methodology

This report includes a summary of the current historic status of the Palace Theatre building, a brief description of the structure, its significance, a list of character-defining features that enable the property to convey its historic significance, and photographs taken of the property during a site visit on March 10, 2022. The report also includes a summary of the significance and historic character of the 23rd Avenue Commercial District ASI to which the Palace Theatre building is a primary contributor. Page & Turnbull staff reviewed proposed project drawings prepared by Artik Art &

¹ Page & Turnbull, *Historic Resource Evaluation: Palace Theatre, 1443-1453 23rd Avenue, Oakland, California* (San Francisco: Prepared for the Bay Area Technology School, 2022).

² City of Oakland, CEQA Thresholds of Significance Guidelines, December 16, 2020, Appendix A: Guidance on Historical Resources.

Architecture. The potential impact of the proposed project on the Palace Theatre, as an individual historical resource and as a contributor to the 23rd Avenue Commercial District ASI is evaluated using the *Secretary of the Interior's Standards for Rehabilitation*. Unless otherwise noted, all site photographs were taken by Page & Turnbull on March 10, 2022.

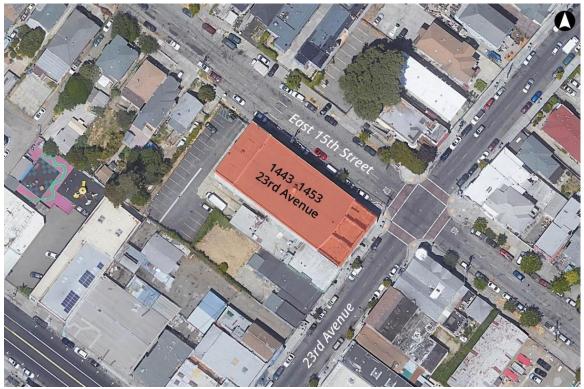


Figure 1: Aerial Overview of 1443-1453 23rd Avenue. Source image: Google Earth 2021, edited by Page & Turnbull.

II. SUMMARY OF HISTORIC RESOURCES

Palace Theatre

The proposed project site contains one individual historical resource, the Palace Theatre building at 1443-1453 23rd Avenue. It is a two-story, stucco-clad concrete building with Spanish Colonial Revival style design elements, particularly at its primary, 23rd Avenue-facing façade. The building was originally designed and built in 1922-1923 by General Contractor Frank T. Kennedy, and operated for a decade as a venue for motion picture and vaudeville performances. In 1931, the Reid Brothers architectural firm designed an interior renovation which reconfigured the lobby and mezzanine areas and added elaborate decorative elements in the auditorium.

State of California Department of Parks and Recreation (DPR) 523 forms completed by the Oakland Cultural Heritage Survey (OCHS) for the property in 1996 recommend an OCHS rating of "B-b+2+" with the following description:

The Oakland Cultural Heritage Survey rates this property B-b+2+ (B, major importance, landmark quality; potentially B+, National Register, if restored), particularly for its design quality and historical associations and designer. It is a primary contributor to the locally important 23rd Avenue and East 14th Street Commercial district (Area of Secondary Importance: 2+). Its survey rating makes it a historic property under Oakland's Preservation Element. At present it does not appear eligible for the National Register. However, if it were accurately restored, it might become eligible.³

In a 2022 evaluation completed by Page & Turnbull, the Palace Theatre building at 1443-1453 23rd Avenue was found to be significant under California Register Criterion 3 (Architecture) as a good local example of a neighborhood motion picture theater designed in a Spanish Colonial Revival style, with a period of significance of 1923-1931 to span from the building's year of construction to the year of its interior renovation by the Reid Brothers.⁴ The building was not found to be significant at the local or state level under Criteria 1 (Events), 2 (Persons), or 4 (Information Potential). Although it has been altered in some ways since its original construction and use as a theater, the Palace Theatre building at 1443-1453 23rd Avenue fully or substantially retains all seven aspects of integrity.

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³ Oakland Cultural Heritage Survey, State of California Department of Parks and Recreation (DPR) 523 Forms for 1443-1453 23rd Avenue (Oakland, 1994), 2-3.

⁴ Page & Turnbull, *Historic Resource Evaluation: Palace Theatre*, 55.

The building consists of three main volumes as viewed from the exterior, each of which correspond to the interior configuration of the building established for its use as a theater: the front, "lobby" portion facing 23rd Avenue is located at the southeast side, with a flat roof and stepped parapets; the "auditorium" portion, set behind and with a slightly higher roofline than the lobby portion; a shallow-pitched gable roof with low, unadorned concrete parapets and a small central rooftop dome; and the rear, "backstage" portion, with a higher roofline than the auditorium (most likely for a stage fly loft) and low, unadorned concrete parapets.

The primary, southeast façade of the Palace Theatre building includes the majority of the building's exterior decorative features, including the configuration of storefronts and theater entrance at the ground floor, blind-arched window openings and low-relief rectangular pilasters with terracotta capitals at the second story, and a stepped parapet with plaster ornamentation in Classical motifs. Some of the parapet ornamentation wraps to the southwest and northeast side façades, though for the most part these façades lack significant architectural details.

The interior of the building is divided into three segments corresponding to those at the exterior, and include a lobby and mezzanine area, auditorium area, and backstage area. The lobby and mezzanine feature a staircase split at the first landing, with painted wrought-iron railings and which is framed at the rear by a textured plaster wall with radiused corners and a decorative painted wood ceiling, with cased beams and ornate corbels. Two decorative glazed tile drinking fountains are located in the lobby and mezzanine. The auditorium and balcony are decorated in a Spanish Colonial Revival Style intended to evoke a village setting, with plaster-clad false streetscape elements at the northeast and southwest walls and proscenium arch, featuring tile-clad peaked and shed roof segments topping false building façades.

The character-defining features which date to the building's period of significance and which convey its character as a neighborhood motion picture theater built in the 1920s-1930s in a Spanish Colonial Revival Style include, but are not limited to, the following⁵:

Exterior Character-Defining Features (Figure 2 through Figure 5):

- Reinforced concrete construction
- Two-story height
- Plaster cladding at front "lobby" portion of exterior
- Ground floor arrangement of storefronts with recessed entrances flanking the theater's main entrance

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⁵ Excerpted from Page & Turnbull, *Historic Resource Evaluation: Palace Theatre*, 61-62.

- Location and configuration of recessed entrance to upper floors at southwest side of southeast façade, including rectangular transom
- Tile flooring with "shadow" of ticket booth at theater entrance
- Deeply recessed theater entrance (placement of entrance is significant and characterdefining, although door materials are not original)
- Four rectangular pilasters with terracotta capitals at the second story, capped by urn-shaped finials
- Second story fenestration pattern, with blind-arched window surrounds and rectangular pilasters (window sash materials are not original)
- Stepped parapet at primary, southeast façade
- Symmetrically arranged ornamentation at second story and parapet, including rectangular
 pilasters with shield and scroll motifs, an arcaded intermediate cornice, a leaf and urn motif
 frieze, and a simple cornice with projecting scrolls

Interior Character-Defining Features (Figure 6 through Figure 19):

- Circulation pattern of entrance, lobby, staircases, mezzanine, and auditorium
- Location and configuration of lobby staircases (carpeting not original or character-defining)
- Cased beam painted wood ceiling at staircase/mezzanine and auditorium stage
- Two glazed tile drinking fountains, in lobby and mezzanine
- Four wood plank doors with decorative strap hinges at mezzanine
- Undivided volume of auditorium
- "False façade" ornamentation at auditorium side walls, including arched openings, variable "roof" lines, spiral columns, spandrel panels, and iron balconette railings
- Ornamentation at stage and proscenium arch, including engaged columns, blind arches with molded decoration, tiled shed roof segments, and molded balconettes with iron railings
- Location, curved plan, and stepped seating configuration of balcony
- Wrought iron railing at balcony and lobby staircase
- Location of projection room and projector openings with sliding metal covers at rear of balcony



Figure 2. Primary façade, view north.



Figure 3. Southeast and northeast façades, view west.



Figure 4. Plaster decorative elements at parapet, view southwest.



Figure 5. Primary entrance and northeast storefront, view north.



Figure 6. Staircase and decorative cased beam ceiling at entrance lobby.



Figure 7. View southwest toward mezzanine lobby from staircase landing.



Figure 8. Decorative tile drinking fountain, southwest wall of entrance lobby.



Figure 9. Decorative tile drinking fountain, southeast wall of mezzanine lobby.



Figure 10. Door with decorative strap hinges, southwest side of mezzanine.



Figure 11. Door with decorative strap hinges, northeast side of mezzanine.



Figure 12. False façade elements at southwest wall of auditorium, stage at right.



Figure 13 False façade elements at southwest wall of auditorium, balcony at left



Figure 14. False façade elements at northeast wall of auditorium, stage at left.



Figure 15. False façade elements at northeast wall of auditorium, balcony at right.



Figure 16. Proscenium arch and stage viewed from balcony.



Figure 17. Balcony viewed from upper walkway behind false façade element at southwest side of auditorium.



Figure 18. Lower portion of balcony, view toward northeast wall of auditorium.



Figure 19. Upper portion of balcony, view toward northeast wall of auditorium. Projection windows at right.

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23rd Avenue Commercial District Area of Secondary Importance

The Palace Theatre building is located within the 23rd Avenue Commercial District ASI. This ASI was defined by the OCHS in 1996, and includes "about 35 buildings, extending two blocks northeast-southwest on 23rd Avenue and three blocks southeast-northwest on East 14th Street, plus adjoining blocks of Miller Avenue and East 15th Street." ⁶ During its 1889-1931 period of significance, the district served as a local commercial node centered around what was, at the time of the contributors' construction, East 14th Street (now International Boulevard), East 15th Street, and 23rd Avenue. While most buildings within the district have been subject to some degree of remodeling, typical characteristics of late 19th- and early 20th-century commercial storefronts, as well as elements of Spanish Colonial Revival and Mission Revival architectural styles, are present on some contributors. Many of the buildings have what the OCHS referred to in the district's documentation as "layered construction dates," with earlier buildings expanded or remodeled in later years within the district's period of significance.

In 1996, OCHS evaluators identified four "primary" contributors to the 23rd Avenue Commercial District ASI, which established the district's overall character. These included the Palace Theatre building, the former Globe Theater building across the street at 1424 23rd Avenue, the former Kronenberg Bros. store building at 2285 International Boulevard, and the Oakland Free Library 23rd Avenue Branch at 1449 Miller Avenue. The library building, which was also an Oakland Landmark, was demolished in 2018 after sustaining damage in fires in 2017 and 2018.⁷ As such, three primary contributing buildings remain within the district.

The 19 additional remaining contributors to the district include a variety of commercial and mixed commercial and residential buildings, most two or three stories, constructed between 1889 and 1931. The 23rd Avenue Commercial District ASI adjoins the much larger 23rd Avenue Residential District ASI at East 15th Street.

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⁶ Oakland Cultural Heritage Survey, State of California Department of Parks & Recreation (DPR) 523 Forms for the 23rd Avenue Commercial District (Oakland, June 30, 1996).

⁷ Aaron Davis, Angela Ruggiero, and Harry Harris, "Former historic East Oakland library branch burns second time in a year," *The Mercury News*, February 23, 2018. Electronic resource at https://www.mercurynews.com/2018/02/23/fire-erupts-at-former-east-oakland-library-damaged-by-blaze-last-year/, accessed April 11, 2022.



Figure 20. 23rd Avenue Commercial District ASI. Border indicated by dashed line. Primary contributors shaded yellow. Other contributors shaded red. Base image: Google Earth, edited by Page & Turnbull.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA is state legislation (Pub. Res. Code §21000 et seq.), which provides for the development and maintenance of a high-quality environment for the present day and future through the identification of significant environmental effects.⁸ For public agencies, the main goals of CEQA are to identify and inform decision makers and the public about the significant environmental effects of projects; and either avoid or mitigate those significant environmental effects, where feasible.

CEQA applies to "projects," defined as "...an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" and which are undertaken, financially supported, or permitted by a public agency. Historical and cultural resources are considered to be part of the environment. In general, the lead agency must complete the environmental review process as required by CEQA. The City of Oakland is the lead agency for review of the proposed project under CEQA.

Status of Historical Resources at the Project Site

In completing an analysis of a project under CEQA, it must first be determined if the project site possesses any historical resource. A site may qualify as a historical resource if it falls within at least one of four categories listed in CEQA Guidelines Section 15064.5(a). The four categories are:

- 1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seq.).
- 2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, should be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- 3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering,

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⁸ State of California Natural Resources Agency, California Environmental Quality Act, electronic resource at http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=PRC&division=13.&title=&part=&chapter =&article=, accessed September 4, 2022.

⁹ State of California Natural Resources Agency, California Environmental Quality Act, "Chapter 2.5. Definitions."

scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource should be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852)

4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

In general, a resource that meets any of the four criteria listed in CEQA Guidelines Section 15064.5(a) is considered to be a historical resource unless "the preponderance of evidence demonstrates" that the resource is not historically or culturally significant."¹⁰

City of Oakland CEQA Thresholds of Significance Guidelines

As a certified local government and the lead agency in CEQA determinations, the City of Oakland has developed thresholds for initiating review of historical resources under CEQA. Guidance on historical resources updated by the City of Oakland in 2020 states that a resource that meets <u>any</u> of the following criteria is a historical resource under CEQA.

- 1. A resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources;
- 2. A resource included in Oakland's Local Register of historical resources (defined below), unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- 3. A resource identified as significant (e.g., rated 1-5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;

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¹⁰ Pub. Res. Code SS5024.1, Title 14 CCR, Section 4850 et seg.

- 4. Meets the criteria for listing on the California Register of Historical Resources; or
- 5. A resource that is determined by the Oakland City Council to be historically or culturally significant even though it does not meet the other four criteria listed above.

Based on Page & Turnbull's 2022 evaluation, the Palace Theatre building at 1443-1453 23rd Avenue appears to be eligible for listing in the California Register, and as such meets Criteria 1 and 4 of the City of Oakland's Thresholds of Significance Guidelines for historical resources under CEQA. In addition, the subject property is currently included in Oakland's Local Register (Threshold of Significance Criterion 2). Previous evaluation of 1443-1453 23rd Avenue, conducted in 1994 by the OCHS, assigned a local rating of B*2+. As such, the property meets the requirements for Threshold of Significance Criterion 3. The subject property therefore meets the City of Oakland's thresholds for significance, and is a historical resource under CEQA.

Threshold for Substantial Adverse Change

According to CEQA, a "project with an effect that may cause a substantial adverse change in the significance of an historic resource is a project that may have a significant effect on the environment." Substantial adverse change is defined as: "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historic resource would be materially impaired." The historic significance of an historical resource is materially impaired when a project "demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance" and that justify or account for its inclusion in, or eligibility for inclusion in, the California Register, or which "account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code" ¹³

A project may cause an adverse change in a historic resource but still not have a significant effect on the environment as defined by CEQA as long as the impact of the change on the historic resource is determined to be less than significant, negligible, neutral, or even beneficial. In other words, a project may have an impact on a historical resource, and that impact may or may not impair the resource's eligibility for inclusion in the California Register. If an identified impact would result in a resource that is no longer able to convey its historic significance and is therefore no longer eligible

¹¹ CEQA Guidelines subsection 15064.5(b).

¹² CEQA Guidelines subsection 15064.5(b)(1).

¹³ CEQA Guidelines subsection 15064.5(b)(2).

for listing in the California Register or to remain listed on a local register, then it would be considered a significant effect.

In addition, according to Section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project adheres to the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (the Standards), the project's impact "will generally be considered mitigated below the level of a significance and thus is not significant."¹⁴

According to the City of Oakland Thresholds of Significance Guidelines, a project would have a significant impact on the environment in relation to cultural and historical resources if it would cause any of the following:

- 1. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines section 15064.5. 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);
- 2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;
- 3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- 4. Disturb any human remains, including those interred outside of formal cemeteries. 15

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¹⁴ CEQA Guidelines subsection 15126.4(b)(1).

¹⁵ City of Oakland, CEQA Thresholds of Significance Guidelines, December 16, 2020.

IV. PROPOSED PROJECT IMPACT ANALYSIS

This section analyzes the project-specific impacts of the proposed development of the Bay Tech Charter School at the Palace Theatre building,1443-1453 23rd Avenue, on the environment as required by the California Environmental Quality Act (CEQA). The following analysis describes the proposed project; assesses its compliance with the *Secretary of the Interior's Standards for Rehabilitation*; and identifies cumulative impacts.

Consideration of Interior Features Under CEQA

As discussed above, according to CEQA Guidelines subsection 15064.5(b)(2) and the City of Oakland CEQA Thresholds of Significance Guidelines regarding impacts to cultural and historic resources, a project which "demolishes or materially alters in an adverse manner" the physical characteristics of a resource which justify its listing on or eligibility for the California Register, or which account for its listing on a local register of historical resources, could have a significant impact on the environment. Frequently, for CEQA review the character-defining features of privately owned residences and some institutional and commercial buildings are limited to exterior features which can be observed from public rights-of-way. CEQA review does not, for example, include the interior features of private single-family residences. For some types of historical resources, however, interior character-defining features are important to a building's ability to convey its significance, and are included in the finding of eligibility for the California Register or justification for listing on a local register.

Theater and church buildings are among those which often have significant, publicly accessible interior spaces. The lobbies, auditoriums, and sanctuaries of these buildings frequently include distinctive stylistic details and spatial relationships which convey their use and architectural character. For example, interior character-defining features of the lobby and auditorium of Crest Theater in Los Angeles; the lobby, balcony, and auditorium of the Strand Theater in San Francisco; the sanctuary of the church building at 240 Page Street, San Francisco; and the narthex, nave, and choir loft of the Sacred Heart Church in San Francisco have been included in recent years in project analyses and mitigations under CEQA.¹⁷

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¹⁶ CEQA Guidelines subsection 15126.4(b)(2); City of Oakland, CEQA Thresholds of Significance Guidelines, December 16, 2020. ¹⁷ T&B Planning, Inc., Nimoy Theater Renovation Project, Project No. 908004 (Irvine: Prepared for the University of California, Los Angeles, 2019); San Francisco Planning Department, Preliminary Mitigated Negative Declaration: 1127 Market Street / Strand Theater (Case No. 2012.0370E); San Francisco Planning Department, Part II Historic Resource Evaluation Response, 240 Page Street (Record No. 2019-013777ENV), 2020; San Francisco Planning Department, Preliminary Mitigated Negative Declaration, 554 Fillmore Street (Case No. 2018.001788ENV), 2020.

The Palace Theatre building is currently listed on Oakland's Local Register of Historical Resources, with the "atmospheric interior by eminent theater architects Reid Bros." identified by the Oakland Cultural Heritage Survey as an aspect of the building's significance. ¹⁸ Interior features designed by the Reid Bros. within public areas of the Palace Theatre, including the lobby, mezzanine, and auditorium, contribute to the building's significance as a historical resource listed on the Local Register. Proposed alterations to or removal of these interior features will therefore be considered in analysis of the proposed project.

Proposed Project Description

This proposed project description is based on a Planning Submittal set of drawings dated August 2, 2022 and a narrative project description, both produced by Artik Art & Architecture.

Exterior Alterations

At the exterior, the primary, 23rd Avenue-facing façade would be retained and would continue in use as the primary building entrance. The stucco cladding would be repaired as necessary and painted to match the existing color. At the ground floor, the two storefronts to the northwest and southeast of the recessed main entrance would be partially retained. New aluminum storefront systems and transoms would be installed at these storefronts, and the existing, non-historic tile bulkheads would be retained. The recessed entrances centered in each of the two storefronts would be removed. The existing recessed entrance at the southwest side of the southeast façade, including the rectangular transom, would be retained. The recessed main entrance to the theater and existing exterior tile flooring, centered between the two storefronts, would also be retained.

At the second story, non-historic aluminum windows within historic openings would be replaced with contemporary, undivided-lite aluminum windows. Four undivided-lite, contemporary aluminum frame fixed windows would be installed in new openings at the parapet level of the 23rd Street-facing façade. Existing historic terracotta and plaster ornamentation at the second story and parapet would be retained and repaired. A small vertical addition would be built at the southeast portion of the building to accommodate construction of a third story, predominantly within the existing volume of the auditorium portion of the building. This small addition would be set within an area which is shielded from view by the existing historic parapet.

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¹⁸ Oakland Cultural Heritage Survey, State of California Department of Parks and Recreation (DPR) 523 Forms for 1443-1453 23rd Avenue (Oakland, 1994), 2.

At the northeast, East 15th Street-facing façade, two new, contemporary aluminum-frame fixed rectangular windows would be placed in existing openings at the second story in the two front bays. All other existing openings, including five sets of paired wood theater exit doors, one with an exterior staircase, and five rectangular window openings, would be removed from this façade. A new pair of unglazed steel doors would be located at the ground floor near the rear of the southwest façade. The two existing doors and exterior staircase would be removed from this façade. Bands of contemporary aluminum-frame, undivided-lite fixed rectangular windows with perforated metal sunshades would be installed at the third story across the rear five bays of the northeast and southwest façades.

An exterior, steel exit staircase would be installed across all three stories at the rear, northwest façade of the building. Two unglazed steel doors would be added in new openings at the staircase landing, and three new openings at the ground floor would be added, one with paired and two with single unglazed steel doors. The existing ground-floor door opening at the northwest façade would be removed.

As part of the project, a non-historic parcel opposite the Palace Theatre building on East 15th Street would be developed for use as a staff parking lot.

Interior Alterations

To accommodate the use of the building as a school, a third story would be built at the roof level of the southeast, "lobby" portion of the building, extending from the southeast façade, behind the historic parapet, through the upper portion of the current auditorium space. The new third floor would include classroom, restroom, and office spaces. The lower portion of the auditorium space would be converted to a gymnasium. Backstage spaces to the northwest of the current auditorium space would be altered for use as a classroom and service area.

Seismic bracing would be installed at the interior of all perimeter walls. Installation of seismic bracing and construction of the third story would require removal of all "false façade" elements at the southwest and northeast sides of the auditorium, as well as the existing stage, decorative cased beam stage ceiling, decorative proscenium arch, balcony, and projection room. The streetscape facades at the side walls of the auditorium and stage, columns at the base of the proscenium arch, lower portions of the arch, and decorative ceiling beams would be retained and stored during installation of seismic bracing. The retained streetscape elements would be altered slightly by removing some unadorned portions to reduce their overall height, and through connection of segments currently separated by the balcony. They would be reinstalled at the gymnasium side walls following completion of seismic retrofit. The tripartite columns and arch segments from each

side of the stage would be installed at the rear wall of the gymnasium. The decorative painted ceiling beams at the proscenium would be relocated to the ceiling of the science classroom proposed for the northwest end of the first floor, at the current location of the stage. The decorative painted pattern between the beams would be documented using digital photography and reproduced at the science room ceiling.

The existing main lobby space and split staircase (including the wrought-iron railings), mezzanine lobby area, and decorative cased beam wood ceiling, would be retained. The historic decorative tile drinking fountain at the southwest side of the ground floor lobby would be relocated to the northeast to accommodate enlargement of the restroom and installation of an elevator. The historic decorative tile drinking fountain at the mezzanine lobby would be retained at its existing location. Ground floor and mezzanine partitions would be reconfigured in the bays flanking the lobbies. Two of the four wood plank doors with decorative strap hinges at the mezzanine lobby would be retained and reused as mezzanine office doors. A new elevator would be installed at the southwest side of the building, near the location of the existing ground-floor women's restroom. A new exit staircase would be installed to the northeast of the main entrance lobby, and a new staircase from the rear, southeast side of the mezzanine lobby would access the third floor. The interiors of the two storefront spaces, currently used for storage and office space, would be renovated for use as the school's reception area and a conference room. New ground-floor boys' and girls' restrooms would be installed. The existing storage and restroom spaces to the northeast and southwest of the mezzanine lobby would be altered for use as offices, with a new all-gender restroom located at the southwest side.

Table 1 below provides a summary of proposed alterations to the character-defining features of the Palace Theatre building.

Table 1. Proposed Retention and Removal of Character-Defining Features

Character-Defining Feature	Retained?	
Exterior Features		
Reinforced concrete construction	Yes	
Two-story height	Yes	
Plaster cladding at front "lobby" portion of exterior	Yes	
Ground floor arrangement of storefronts with recessed entrances		
flanking the theater's main entrance	rance Partially	
Location and configuration of recessed entrance to upper floors at Yes		
southwest side of southeast façade, including rectangular transom	res	
Tile flooring with "shadow" of ticket booth at theater entrance	Yes	
Deeply recessed theater entrance (placement of entrance is	Yes	
significant and character-defining, although door materials are not	162	

Character-Defining Feature	Retained?	
original)		
Four rectangular pilasters with terracotta capitals at the second story, capped by urn-shaped finials	Yes	
Second story fenestration pattern, with blind-arched window surrounds and rectangular pilasters (window sash materials are not original)	Yes	
Stepped parapet at primary, southeast façade	Yes	
Symmetrically arranged ornamentation at second story and parapet, including rectangular pilasters with shield and scroll motifs, an arcaded intermediate cornice, a leaf and urn motif frieze, and a simple cornice with projecting scrolls	Yes	
Interior Features		
Circulation pattern of entrance, lobby, staircases, mezzanine, and auditorium	Yes	
Location and configuration of lobby staircases (carpeting not original or character-defining)	Yes	
Glazed tile drinking fountains in lobby and mezzanine	Yes (one relocated)	
Cased beam painted wood ceiling at staircase/mezzanine and auditorium stage	Partially	
Undivided volume of auditorium	No	
"False façade" ornamentation at auditorium side walls, including arched openings, variable "roof" lines, spiral columns, spandrel panels, and iron balconette railings	Partially	
Ornamentation at stage and proscenium arch, including engaged columns, blind arches with molded decoration, tile-clad shed roof segments, and molded balconettes with iron railings	Partially	
Location, curved plan, and stepped seating configuration of balcony	No	
Wrought iron railing at balcony and lobby staircase	Partially	
Location of projection room and projector openings with sliding metal covers at rear of balcony	No	
Wood plank doors with decorative strap hinges at mezzanine	Partially (two relocated)	

Secretary of the Interior's Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings provides standards and guidance for reviewing proposed work on historic properties. ¹⁹ The Standards for the Treatment of Historic Properties are used by federal agencies in evaluating work on historic properties. They have also been adopted by local government bodies across the country for reviewing proposed rehabilitation work on historic properties under local preservation ordinances. The Standards for the Treatment of Historic Properties are a useful analytic tool for understanding and describing the potential impacts of substantial changes to historic resources. Projects that comply with the Standards for the Treatment of Historic Properties benefit from a regulatory presumption that they would have a less-than-significant adverse impact on a historic resource. ²⁰ Projects that do not comply with the Standards for the Treatment of Historic Properties may cause either a substantial or less-than-substantial adverse change in the significance of a historic resource.

The Secretary of the Interior offers four sets of standards to guide the treatment of historic properties: Preservation, Rehabilitation, Restoration, and Reconstruction. The four distinct treatments are defined as follows:

The Standards for Preservation "require retention of the greatest amount of historic fabric, along with the building's historic form, features, and detailing as they have evolved over time."

The Standards for Rehabilitation "acknowledge the need to alter or add to a historic building to meet continuing or new uses while retaining the building's historic character."

The Standards for Restoration "allow for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods."

The Standards for Reconstruction "establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes." ²¹

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¹⁹ Anne E. Grimmer, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings,* (U.S. Department of the Interior National Park Service Technical Preservation Services, Washington, D.C. 2017).

²⁰ CEQA Guidelines subsection 15064.5(b)(3).

²¹ Grimmer, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings.

Typically, one set of standards is chosen for a project based on the project scope. In this case, the proposed project scope is seeking to alter a historic building for continued use. Therefore, the *Standards for Rehabilitation* are applied.

Standard 1: A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

Discussion: The proposed project would involve a change in the use of the Palace Theatre building from its current use as a church, its use since 1953, to use as a middle and high school. While many character-defining features would be preserved at the interior and exterior, rehabilitation of the building for use as a school would require substantial alterations to significant interior features, resulting in the subdivision of the auditorium space; removal of the auditorium balcony, projection room, and most of the proscenium arch; and alteration of the façade ornamentation at the auditorium side walls and decorative cased beam stage ceiling. As such, significant interior spaces which convey the building's identity as a theater, as well as character-defining features which convey the building's 1931 renovation by the Reid Brothers, would be lost or significantly altered. As designed, the proposed project would not comply with Standard 1.

Standard 2: The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize the property will be avoided.

Discussion: The proposed project would retain many character-defining features at the exterior of the Palace Theatre building, as well as in the interior lobby and mezzanine spaces. However, several character-defining features which relate to its original design and use would be altered or removed. At the exterior the recessed entrance doors to the storefronts would be removed and replaced with continuous storefront window systems. At the interior, the auditorium space would be vertically partitioned to build a third story. The balcony and most of the proscenium arch would be removed. The false façade side wall décor in the auditorium decorative cased beam stage ceiling would be altered and relocated within the subdivided auditorium and stage spaces. As designed, the proposed project would not comply with Standard 2.

Standard 3: Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historical properties, will not be undertaken.

Discussion: The proposed project would not add conjectural features or elements from other historic properties. New doors and windows at the exterior, and new interior finishes would be

contemporary in style and visually distinct from the building's historic features. Several interior historic features would be relocated within the rehabilitated Palace Theatre building. The false facade details at the side walls of the auditorium would be temporarily removed during seismic retrofit work, altered to reduce their height, and reinstalled. Beams from the decorative cased beam stage ceiling would be salvaged and installed in a new classroom space at the location of the stage, with the painted panels between each beam recreated in the new location based on photo documentation. The decorative tile drinking fountain at the entrance lobby would be moved within the space in which it was originally installed. Rather than creating a false sense of historical development, these retained and recreated features would interpret the building's history as a theater and convey its historic significance in its new use as a school. As designed, the proposed project would comply with Standard 3.

Standard 4: Changes to a property that have acquired significance in their own right will be retained and preserved.

Discussion: No features at the Palace Theatre building which date outside of its 1923-1931 period of significance have acquired significance in their own right. As designed, the proposed project <u>would comply</u> with Standard 4.

Standard 5: Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.

Discussion: As discussed above with respect to Standards 1 and 2, the project proposes to alter and remove several character-defining features which date to the theater's 1931 renovation designed by the Reid Brothers, and which convey the Spanish Colonial Revival character of the building's interior. The "village" streetscape elements within the auditorium, including the false façade elements at the side walls and a portion of the proscenium arch, would be removed, altered, and reinstalled within the renovated gymnasium space. The decorative beams of the stage ceiling would be relocated to a classroom space. These features, like stage sets for the experiences of theater patrons, reflect the craftsmanship that was required to create the atmospheric movie palaces of the 1920s and 1930s. Although the features would be partially retained to interpret the building's history and convey some of its significant historic character, the retained elements would not fully convey the theater auditorium space as a place to be experienced as a small world apart from patrons' day-to-day lives. As designed, the proposed project would not comply with Standard 5.

Standard 6: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design,

color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

Discussion: Historic features which would be retained at the Palace Theatre building, including the exterior plaster and terracotta ornamentation at the primary façade, the decorative tile drinking fountains in the entry and mezzanine lobbies, the cased beam staircase and mezzanine ceilings, and the historic staircase and railing, would be repaired. Repairs to the altered and reinstalled village streetscape, and recreation of the decorative pattern between the beams of the relocated stage ceiling, would be based on documentation of the historic appearance of these features. Exterior windows and doors which the project would replace in their existing openings are later 20th-century replacements not original to the building. As designed, the proposed project would comply with Standard 6.

Standard 7: Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

Discussion: While the proposed project has not yet developed its plan for rehabilitation and repair of historic materials at the Palace Theatre building in detail, any treatments would use the gentlest means possible. The proposed project <u>would comply</u> with Standard 7.

Standard 8: Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Discussion: The project does not propose to conduct any substantial new ground disturbance at the site of the Palace Theatre or the non-historic parcel opposite the historic building on East 15th Street which will be developed as a staff parking lot. However, if archaeological materials or deposits are discovered during project activities, the proposed project <u>would comply</u> with Rehabilitation Standard 8 as long as the standard discovery procedures outlined by the City of Oakland in the Department of Planning and Building Standard Conditions of Approval (Adopted by City Council on November 3, 2008, Ordinance No. 12899 C.M.S., revised January 24, 2020) are followed.

Standard 9: New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work should be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and environment.

Discussion: The proposed new exterior elements at the Palace Theatre building, such as replacement windows and doors, replacement storefront systems, new openings and windows, and the exterior

staircase at the rear façade, would be designed in a simple contemporary style which would be distinct from the building's Spanish Colonial Revival style while allowing original materials to remain visually prominent. The proposed vertical addition at the southeast portion of the building, to accommodate construction of a third story, would be set behind the existing historic parapets, and would by minimally visible from public rights-of-way. However, as discussed above with respect to Standard 1, the recessed entrance doors to the storefronts would be removed and replaced with continuous storefront window systems. This exterior alteration would change the spatial relationship of the property to the pedestrian right-of-way by changing the building from having the appearance of three separate entrances accessing three businesses to a building with one primary entrance. As designed, the proposed project would not comply with Standard 9.

Standard 10: New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Discussion: The construction of the third story at the interior of the Palace Theatre site, which requires an addition at the southeast side of the building behind the historic parapet, would require substantial alterations to the interior spaces and features of the existing auditorium, balcony, and projection room. In theory, the addition proposed to accommodate the southeast portion of the new third story could be removed without impacting the historic integrity of the building at its exterior. However, alteration, relocation, and removal of interior character-defining features to facilitate construction of the third story, of which the addition would be a part, would be irreversible. This loss of integrity would be limited to the interior of the building. New construction at the site of the Palace Theatre would also include the proposed exterior staircase at the rear façade of the building, and development of the open space in the parcel from paved parking and vehicle circulation area to a recreation area for the school's students. If the staircase and recreation features were removed in the future, the essential form and integrity of the exterior of the property would be unimpaired. As designed, the proposed project would substantially comply with Standard 10.

Analysis of Project-Specific Impacts Under CEQA

As the above analysis demonstrates, the Bay Tech Charter School Project, as currently designed, appears to be in compliance or substantial compliance with six of the ten *Secretary of the Interior's Standards for Rehabilitation*. The project is not in compliance with Standards 1, 2, 5, and 9, which relate to alteration or removal of historic features, spatial relationships, and materials which characterize a property.

According to Section 15126.4(b)(1) of the Public Resources Code (CEQA), if a project complies with the Standards for Rehabilitation, the project's impact "will generally be considered mitigated below a level of significance and thus is not significant." As the proposed project does not comply with all of the *Standards for Rehabilitation*, it may cause a significant adverse impact under CEQA. The following analysis is provided to determine if the proposed project may affect the Palace Theatre building's character-defining features and historic integrity to the extent that its significance would be materially impaired.

The Palace Theatre building is significant under California Register Criterion 3 as a good example of a neighborhood theater designed in the early 1920s in a Spanish Colonial Revival style, and for its association with master architects, the Reid Brothers, who designed the 1931 interior renovation. Its period of significance is 1923-1931.

Proposed changes to the exterior of the Palace Theatre building would include the removal of two recessed storefront entrances; replacement of non-historic windows, doors, and storefront systems in existing openings; the addition of new openings, with new windows and doors, on all façades; the addition of an exterior staircase at the rear façade; and conversion of the paved area at the rear of the building to recreational space. A small vertical addition at the southeast side of the building would be located behind the historic parapet. The proposed new and replacement windows and doors would have a simple, contemporary style which would not remove, replace, or detract from the exterior character-defining features of the building such as its overall height and massing and ornamented second story and parapet at the primary façade. Removal of the two recessed storefront entrances to either side of the main theater entrance would remove character-defining features and disrupt the spatial relationship of the building with the adjacent pedestrian right-ofway. However, removal of these two entrances would not alter the appearance of the building to the extent that, when viewed from the outside, it would not be able to convey its original design and use as a theater. With its wide and deeply recessed central entrance, configuration and ornamentation of the primary façade, and bulky massing related to the interior auditorium and stage spaces, the building's original use would continue to be legible. It would thus continue to convey its significance under Criterion 3 of the California Register as a neighborhood theater built in the 1920s. Though several distinctive exterior features have been removed through time, including the marquee and ticket booth, the integrity of the Palace Theater building relative to other examples of its building type and period in Oakland would remain good. Smaller in scale and simpler in ornamentation than its downtown theater contemporaries like the rehabilitated Paramount and Fox theaters, the Palace Theatre building represents a once-common property type for which there are few good lasting examples in Oakland's smaller commercial neighborhoods.

Proposed interior changes at the Palace Theatre building would include subdivision of the

auditorium space for construction of a third story within its existing volume and removal of the balcony, projection room, majority of the proscenium arch, and stage. The false façade details installed as part of the 1931 renovation would be removed during installation of seismic bracing, then altered to fit within the lower-height gymnasium space and reinstalled on the side walls. The spatial relationships and features of the entry and mezzanine lobbies, including the split staircase, would be preserved. At its interior, the building would retain several features associated with the building's 1931 renovation designed by the architectural firm of the Reid Brothers. However, with the false façade side walls in a renovated gymnasium, the cased beam stage ceiling recreated in a science classroom, and the balcony and most of the proscenium arch removed, the interior space would lose much of its ability to convey the Reid Brothers' design for an atmospheric motion picture theater with a Spanish Colonial style streetscape. The proposed interior alterations would diminish the Palace Theatre building's integrity of design, materials, workmanship, feeling, and association. This could affect the ability of the building to remain eligible for listing on the California Register and Local Register as an individual resource, constituting a significant adverse impact. The impact could become less than significant with the implementation of Standard Conditions of Approval (SCAs) and associated cultural resources management measures to rehabilitate retained historic features, document historic and existing conditions at the site, salvage historic materials for interpretive use, and provide public interpretation about the building's history and original design.

Impact to the 23rd Avenue Commercial District Area of Secondary Importance

The 23rd Avenue Commercial District ASI includes 23 contributing buildings constructed between ca. 1890 and 1931, centered around 23rd Avenue, International Boulevard, and East 15th Street. Three contributors are identified as primary to the district's character: the Palace Theatre building (1443-1453 23rd Avenue), the Globe Theatre building (1424 23rd Avenue), and the Kronenberg Bros. department store building (2285 International Boulevard). Located at an intersection and taller than nearby contributors, the Palace Theatre building is an important visual feature within the district, and conveys the district's significance as a neighborhood commercial center through the first decades of the twentieth century. Proposed exterior alterations to the Palace Theatre building would retain most of the exterior character-defining features which date to its 1923-1932 period of significance, allowing it to retain its status as a primary contributor to the ASI. Further, rehabilitation of the building for use as a school would repair its exterior historic decorative features and increase pedestrian activity in this portion of the district, increasing both the visual appeal and public awareness of the Palace Theatre and district's history.

Cumulative Historic Resources Impacts

To evaluate the potential cumulative impact of the proposed project to Oakland's existing historic built environment, Page & Turnbull reviewed projects listed in the City of Oakland Major

Development Projects List map and spreadsheet, dated May 21, 2022. Projects with potential impacts to the 23rd Avenue Commercial District ASI and with the potential to impact historic theater buildings of the 1920s and 1930s were identified for the consideration of cumulative impacts.

Recent and Proposed Projects in the 23rd Avenue Commercial District ASI

One current project, the 2372 International Boulevard Project (PLN20116), is located within the 23rd Avenue Commercial District ASI. This project is located in a newly subdivided parcel to the rear of the historic Grant D. Miller Mortuary and Garage building (currently the Agnes Memorial Church) at 2372 International Boulevard, a which is a contributor to the ASI. The 2372 International Boulevard Project will demolish non-historic commercial and industrial buildings behind the existing historic mortuary building to construct a four-story, 60-unit affordable housing development for senior citizens. This project will not remove or alter a district contributor, and will result in new development which is set back from the main axes of the ASI, International Boulevard and 23rd Avenue. The 2372 International Boulevard Project would not, when combined with the proposed Bay Tech Charter School Project, contribute to a cumulative impact to historic resources within the ASI.

Recent and Proposed Projects with Impacts to Historic Neighborhood Theaters of the 1920s and 1930s

Of the dozens of theaters which once operated in Oakland's neighborhoods, a small number of buildings remain which represent the early growth of motion picture theaters from the 1920s (and earlier) into the 1930s. These include the buildings of the Eastmont Theatre (7402 MacArthur Boulevard, opened 1927); the Granada Theatre (8820 International Boulevard, opened 1924); the Fairfax Theatre (5345 Foothill Boulevard, opened 1926); the Hopkins Theatre (3529 MacArthur Boulevard, opened 1939), Rialto Theatre (2723 San Pablo Avenue, opened 1914); Roxie (Dufwin) Theatre (517 17th Street, opened 1928), and the Parkway Theater (1834 Park Boulevard, opened 1925). With a few exceptions such as the Parkway Theater, these buildings are no longer in use as entertainment venues, and interiors have been modified for commercial or religious uses.

One current project, the 7300 MacArthur Project (PLN22084), will demolish the former Eastmont Theatre at 7402 MacArthur Boulevard, most recently in commercial use as a pharmacy. This building has not been found to be historically significant as an example of a theater, and it does not appear to retain exterior features which identify or convey its original use. The Bay Tech Charter School Project does not propose to demolish a theater building, and would retain most of the exterior character-defining features of the Palace Theatre building which allow it to convey its original use. As such, the proposed Bay Tech Charter School Project would not contribute to a cumulative impact to historic resources.

V. IMPACTS AND RECOMMENDATIONS

The proposed Bay Tech Charter School Project includes rehabilitation of and alterations to the historic Palace Theatre building at 1443-1453 23rd Avenue, Oakland. While exterior alterations would allow the theater building to retain most character-defining features associated with its 1923-1931 period of significance, proposed rehabilitation activities, as with any treatment, do have the potential to impact the building's historic features. Proposed interior alterations would remove and alter character-defining features related to the building's association with the architectural firm of the Reid Brothers, who designed the comprehensive 1931 interior renovation.

Historical Resources Impacts and Recommendations

The impacts of the proposed project to the Palace Theatre building could be reduced in severity to be less than significant with implementation of appropriate measures, as described below.

The project would implement the following City of Oakland SCAs, as it applies to cultural resource management:

SCA #13, Construction Management Plan. Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department, Department of Transportation, and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

The CMP would include as Conditions of Approval the following Cultural Resources Management Measures in furtherance of the above SCA.

Impact 1: The project's rehabilitation of exterior and interior character-defining features has the potential to affect the integrity of the Palace Theatre building.

Cultural Resources Management Measure 1: Rehabilitation Treatment Plan. A detailed conditions analysis and rehabilitation plan for retained exterior and interior character-defining features at the Palace Theatre building, including but not limited to the exterior plaster and terracotta decorative elements, exterior floor tile, interior cased beam ceilings, interior auditorium false façade elements, interior staircase and railing, and interior tiled drinking fountains, should be prepared by a historic preservation professional meeting the Secretary of the Interior's Professional Qualifications Standards for Historic Architecture. The plan should include procedures for removal, storage, rehabilitation, and installation of historic elements which are proposed to be relocated within the building, including a contingency plan if there are changes to the project, ownership, and/or schedule mid-stream. The storage plan should specify where removed and retained elements will be held for the duration of project activities prior to reinstallation, and how they will be transported and secured during storage. The rehabilitation plan should additionally describe measures for the protection of historic materials where alterations to the building, such as non-original windows, interface with character-defining historic features such as original window and storefront openings. This rehabilitation plan should include narrative descriptions of proposed activities, significance diagrams, plans, elevations, and section drawings, as needed. The rehabilitation plan should be consistent with the standards outlined in the following documents:

- The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, with specific reference to the Secretary of the Interior's Standards for Rehabilitation.
- The City of Oakland's 1994 Historic Preservation Element of the Oakland General Plan.

The rehabilitation plan should be submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction-related site permit.

Impact 2: The project's alteration and removal of interior character-defining features would affect the integrity of the Palace Theatre building relative to its significance under Criterion 3, specifically its association with the architectural firm of the Reid Brothers.

<u>Cultural Resources Management Measure 2a: Historic American Building Survey (HABS)-Type Documentation</u>. To reduce the adverse effect on historical resources, the Project Sponsor should retain a professional who meets the Secretary of the of the Interior's Professional Qualifications Standards for Architectural History to prepare written and photographic documentation of the Palace Theatre building. The documentation should be prepared based on the National Park Service's Historic American Building Survey (HABS) Guidelines, and should include the following:

- Drawings: Efforts should be made to locate original construction and renovation drawings dating to the building's period of significance. If located, these drawings should be photographed or scanned at high resolution, reproduced, and included in the dataset. If construction drawings or plans cannot be located, as-built drawings should be produced. The as-built drawings should be reviewed by a professional who meets the Secretary of the Interior's Professional Qualification Standards for Architecture or Historic Architecture and be reviewed by the professional retained to prepare the written history.
- 2 Photographs: Standard large-format or digital photography should be used. If large-format photography is undertaken, it should follow the HABS/HAER/HALS Photography Guidelines (November 2011; updated June 2015). If digital photography is used, it should follow the National Park Service's National Register Photo Policy Factsheet (June 2013), including ink and paper combinations for printing photographs that have a permanency rating of approximately 115 years. Digital photographs should be saved in uncompressed TIF file format. The size of each image should be 1600x1200 pixels at 300 pixels per inch or larger, color format, and printed in black and white. The file name for each electronic image should correspond with the index of photographs and photograph label. Photograph views for the dataset should include:
 - Exterior contextual views.
 - Oblique views of the exterior of the building;
 - Orthogonal views of each side of the building, where possible;
 - Interior views;
 - Detail views of exterior and interior character-defining features.

All views should be referenced on a photographic key. This photograph key should be on a map of the property and should show the photograph number with an arrow indicating the direction of the view. Historical photographs should also be collected, reproduced, and included in the dataset.

- 3 Interior and Exterior 3D Photographic Models: New or existing digital models based on 3D photography should be included in the documentation package. The interior model should provide the capability for user-guided access to all character-defining interior spaces.
- 4 Written History: A historical report should be prepared for the building, summarizing the history of the building, property description, and historical significance. Documentation should adhere to National Park Service standards for "outline form" HABS documentation.

The documentation should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site.

Copies of the drawings, photographs, and report should be given to the Oakland Planning Department and Oakland Cultural Heritage Survey (OCHS), and offered to publicly accessible repositories such as the Oakland Public Library's Oakland History Center and the Bancroft Library at the University of California, Berkeley. Repositories may specify their preference for print and/or digital formats. This measure would create a collection of reference materials that would be available to the public and inform future research.

Cultural Resources Management Measure 2b: Commemoration and Public Interpretation. The Project Sponsor should prepare a permanent exhibit/display, in coordination with an experienced interpretation/exhibit designer, of the history of the Palace Theatre, including but not limited to historic and current condition photographs, interpretive text, and drawings. Content should focus on the original and renovated interior appearance, the Reid Brothers architectural firm, and the original use of the building as a venue for motion pictures and live performances. The interpretive display should be placed in a suitable publicly accessible space(s) at the project site. As the altered auditorium streetscape elements and relocated stage ceiling would serve more as salvaged interpretive elements rather than as preserved original features, the process of removal, alteration, and reinstallation of these features should be clearly described in on-site interpretive materials.

Design sketches, exhibit text, and narrative descriptions should be prepared by a consultant meeting the Secretary of the Interior's Professional Qualifications Standards for History or Architectural History, and submitted for review and approval by the Director of the Planning & Building Department or their designee prior to issuance of any construction permits for the site. Planning & Building Department staff should inspect the installed interpretive display to confirm its adherence to mitigation measure requirements prior to issuance of a Certificate of Occupancy.

<u>Cultural Resources Management Measure 2c: Salvage</u>. In consultation with a professional who meets the Secretary of the of the Interior's Professional Qualifications Standards for Architectural History, the Project Sponsor should prepare a Salvage Plan which identifies elements of interior character-defining features not proposed for retention and reuse on site, and which may be salvaged for use in public interpretation. Appropriate venues for interpretation may include but would not necessarily be limited to off-site displays which interpret the history of the 23rd Avenue Commercial District ASI, the history of Oakland's early motion picture theaters, or the work of the Reid Bros. architectural firm. Materials that may be salvaged from the auditorium, balcony, or

lobbies for interpretive use may include, but are not limited to theater seats, iron railings, terracotta roof tiles, and wood or plaster decorative features. The Salvage Plan should describe the procedures to be undertaken by the Project Sponsor for advertising the availability of salvaged materials for use at appropriate off-site display venues and for removal and transfer of elements to other entities. Planning & Building Department staff should review the Salvage Plan prior to issuance of any construction permits for the site.

Project Improvement Recommendations

The Bay Tech Charter School Project proposes to replace non-historic second-story windows within historic openings at the southeast façade of the Palace Theatre building with contemporary, undivided-lite aluminum windows. It also proposes to add new undivided lite aluminum windows at the historic parapet. While these replacements are not associated with a significant impact to historical resources, small adjustments to the style of the proposed windows could improve these alterations' compatibility with the historic character of the building. At the second story, one-overone hung windows would provide an appearance more consistent with the original fenestration of the building, which featured one-over-one double-hung wood windows within these openings. At the third story, bands of smaller rectangular windows would be more compatible with the appearance of the historic façade than would the proposed undivided horizontally oriented windows. In both cases, the new aluminum windows would be visually distinct from historic wood windows in materials and profile, while also being compatible with historic features in their proportions and configuration of lites and lessen the visual impact of large undivided expanses of glass.

VI. CONCLUSION

The Palace Theatre building at 1443-1453 23rd Avenue, Oakland is historically significant as an example of a 1920s-1930s neighborhood theater, and for its association with the architectural firm of the Reid Brothers, who designed a Spanish Colonial Revival-style interior renovation to the building in 1931. The building is eligible for listing in the California Register as an individual resource under Criterion 3, is listed on Oakland's Local Register of Historical Resources, and is a primary contributor to the 23rd Avenue Commercial District ASI. The building is a historical resource for the purposes of CEQA.

This Cultural Resources Technical Report evaluated the Bay Tech Charter School Project according to the Secretary of the Interior's Standards for Rehabilitation, and was determined to comply with six of the ten standards. The proposed project could cause a significant impact on the Palace Theatre building, as it would alter and remove character-defining features, particularly interior features, which convey the building's historic significance. It could diminish the building's historic integrity and may impair its ability to convey its historical associations to the extent that it would lose its eligibility for listing in the California Register and Local Register. Without implementation of appropriate cultural resources management measures in support of the City of Oakland's Standard Conditions of Approval, this could constitute a significant impact under CEQA. The impact would be less than significant with measures developed to ensure the preservation of retained character-defining features, document the historic and existing conditions of the resource, and increase public awareness of the building's history through salvage and interpretive use of interior features and installation of a permanent interpretive display. While some historic elements would be removed or modified, with implementation of City SCAs and the identified implementing measures, the building would retain the existing eligibility for listing in the California Register and Local Register as a historically significant example of a 1920s-1930s neighborhood theater, and for its association with the architectural firm of the Reid Brothers, who designed a Spanish Colonial Revival-style interior renovation to the building in 1931. Rehabilitation of historic exterior features and adaptive reuse of the Palace Theatre building as a school would enhance its public visibility in the community, and contribute to public awareness of the neighborhood's history.

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ATTACHMENT F: NOISE AND VIBRATION ASSESSMENT

BAY AREA TECHNOLOGY SCHOOL NOISE AND VIBRATION ASSESSMENT

Oakland, California

January 11, 2023

Prepared for:

Rebecca Auld Vice President Lamphier-Gregory 4100 Redwood Road STE 20A - #601 Oakland, CA 94619

Prepared by:

Micah Black Michael S. Thill

LLINGWORTH & RODKIN, INC.

Acoustics • Air Quality | 1111 | 429 E. Cotati Avenue

Cotati, CA 94931

(707) 794-0400

Project: 22-110

INTRODUCTION

This report assesses potential noise and vibration impacts resulting from the construction and operation of the proposed Bay Area Technology School (BayTech) project at the former Palace Theater building located at 1445 23rd Avenue in Oakland, California. The project proposes extensive interior remodeling and restoration of the building exterior. The interior remodeling calls for the addition of a full-size two-story high school gymnasium/multi-purpose area, as well as the creation of an additional 25,000 square-foot level above the gymnasium that will include classrooms and offices. The existing on-site parking lot adjacent to the building would be demolished to build an outdoor recreational use area for students. An additional existing parking lot associated with the project is located across East 15th Avenue at 247 East 15th Avenue. This parking lot is to be restored and utilized as a vehicle parking area.

This report evaluates the project's potential to result in significant impacts with respect to applicable California Environmental Quality Act (CEQA) guidelines. The report is divided into three sections: 1) the Setting Section provides a brief description of the fundamentals of environmental noise, summarizes applicable regulatory criteria, and discusses the results of the ambient noise monitoring survey completed to document existing noise conditions; 2) the General Plan Consistency – Noise and Land use Compatibility section discusses noise and land use compatibility utilizing policies in the City's General Plan; and, 3) the Impacts and Mitigation Measures Section describes the significance criteria used to evaluate project impacts and provides a discussion of each project impact with respect to the significance criteria.

SETTING

Fundamentals of Environmental Noise

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its pitch or its loudness. Pitch is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. Loudness is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales which are used to describe noise in a particular location. A decibel (dB) is a unit of measurement which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in Table 1.

There are several methods of characterizing sound. The most common in California is the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in Table 2. Because sound levels can vary markedly over a short period of time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called $L_{\rm eq}$. The most common averaging period is hourly, but $L_{\rm eq}$ can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep -- 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The Community Noise Equivalent Level (CNEL) is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm - 10:00 pm) and a 10 dB addition to nocturnal (10:00 pm - 7:00 am) noise levels. The Day/Night Average Sound Level (L_{dn} or DNL) is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

Effects of Noise

Sleep and Speech Interference

The thresholds for speech interference indoors are about 45 dBA if the noise is steady and above 55 dBA if the noise is fluctuating. Outdoors the thresholds are about 15 dBA higher. Steady noises of sufficient intensity (above 35 dBA) and fluctuating noise levels above about 45 dBA have been shown to affect sleep. Interior residential standards for multi-family dwellings are set by the State of California at 45 dBA L_{dn}. Typically, the highest steady traffic noise level during the daytime is about equal to the L_{dn} and nighttime levels are 10 dBA lower. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses. Typical structural attenuation is 12-17 dBA with open windows. With closed windows in good condition, the noise attenuation factor is around 20 dBA for an older structure and 25 dBA for a newer dwelling. Sleep and speech interference is therefore possible when exterior noise levels are about 57-62 dBA L_{dn} with open windows and 65-70 dBA L_{dn} if the windows are closed. Levels of 55-60 dBA are common along collector streets and secondary arterials, while 65-70 dBA is a typical value for a primary/major arterial. Levels of 75-80 dBA are normal noise levels at the first row of development outside a freeway right-of-way. In order to achieve an acceptable interior noise environment, bedrooms facing secondary roadways need

to be able to have their windows closed, those facing major roadways and freeways typically need special glass windows.

Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that the causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources. When measuring the percentage of the population highly annoyed, the threshold for ground vehicle noise is about 50 dBA L_{dn}. At a L_{dn} of about 60 dBA, approximately 12 percent of the population is highly annoyed. When the L_{dn} increases to 70 dBA, the percentage of the population highly annoyed increases to about 25-30 percent of the population. There is, therefore, an increase of about 2 percent per dBA between a L_{dn} of 60-70 dBA. Between a L_{dn} of 70-80 dBA, each decibel increase increases by about 3 percent the percentage of the population highly annoyed. People appear to respond more adversely to aircraft noise. When the L_{dn} is 60 dBA, approximately 30-35 percent of the population is believed to be highly annoyed. Each decibel increase to 70 dBA adds about 3 percentage points to the number of people highly annoyed. Above 70 dBA, each decibel increase results in about a 4 percent increase in the percentage of the population highly annoyed.

TABLE 1 Definition of Acoustical Terms Used in this Report

TABLE 1 Definition	of Acoustical Terms Used in this Report
Term	Definition
Decibel, dB	A unit describing, the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20 micro Pascals.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e. g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter deemphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L _{eq}	The average A-weighted noise level during the measurement period.
$L_{\text{max}}, L_{\text{min}}$	The maximum and minimum A-weighted noise level during the measurement period.
$L_{01}, L_{10}, L_{50}, L_{90}$	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L _{dn} or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels measured in the night between 10:00 pm and 7:00 am.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, Harris, 1998.

TABLE 2 Typical Noise Levels in the Environment

TABLE 2 Typical Noise Level	s in the Environment	
Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110 dBA	Rock band
Jet fly-over at 1,000 feet		
	100 dBA	
Gas lawn mower at 3 feet		
	90 dBA	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80 dBA	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	70 dBA	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60 dBA	
		Large business office
Quiet urban daytime	50 dBA	Dishwasher in next room
Quiet urban nighttime Quiet suburban nighttime	40 dBA	Theater, large conference room
Quiet suburban inglittime	30 dBA	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	20 dBA	(vackground)
	10.75	Broadcast/recording studio
	10 dBA	
	0 dBA	

Source: Technical Noise Supplement (TeNS), California Department of Transportation, September 2013.

Fundamentals of Groundborne Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One method is the Peak Particle Velocity (PPV). The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. In this report, a PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 3 displays the reactions of people and the effects on buildings that continuous or frequent intermittent vibration levels produce. The guidelines in Table 3 represent syntheses of vibration criteria for human response and potential damage to buildings resulting from construction vibration.

Construction activities can cause vibration that varies in intensity depending on several factors. The use of pile driving and vibratory compaction equipment typically generates the highest construction related groundborne vibration levels. Because of the impulsive nature of such activities, the use of the PPV descriptor has been routinely used to measure and assess groundborne vibration and almost exclusively to assess the potential of vibration to cause damage and the degree of annoyance for humans.

The two primary concerns with construction-induced vibration, the potential to damage a structure and the potential to interfere with the enjoyment of life, are evaluated against different vibration limits. Human perception to vibration varies with the individual and is a function of physical setting and the type of vibration. Persons exposed to elevated ambient vibration levels, such as people in an urban environment, may tolerate a higher vibration level.

Structural damage can be classified as cosmetic only, such as paint flaking or minimal extension of cracks in building surfaces; minor, including limited surface cracking; or major, that may threaten the structural integrity of the building. Safe vibration limits that can be applied to assess the potential for damaging a structure vary by researcher. The damage criteria presented in Table 3 include several categories for ancient, fragile, and historic structures, the types of structures most at risk to damage. Most buildings are included within the categories ranging from "Historic and some old buildings" to "Modern industrial/commercial buildings". Construction-induced vibration that can be detrimental to the building is very rare and has only been observed in instances where the structure is at a high state of disrepair and the construction activity occurs immediately adjacent to the structure.

The annoyance levels shown in Table 3 should be interpreted with care since vibration may be found to be annoying at lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage.

TABLE 3 Reaction of People and Damage to Buildings from Continuous or Frequent Intermittent Vibration Levels

Velocity Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1	Strongly perceptible	Threshold at which there is a risk of damage to fragile buildings with no risk of damage to most buildings
0.25	Strongly perceptible to severe	Threshold at which there is a risk of damage to historic and some old buildings.
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential structures
0.5	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to new residential and modern commercial/industrial structures

Source: Transportation and Construction Vibration Guidance Manual, California Department of Transportation, April 2020.

Regulatory Background - Noise

Noise-related regulations, plans, and policies established by the State of California and the City of Oakland are applicable in this assessment of the proposed project. These planning documents are implemented during the environmental review process to limit noise exposure at existing and proposed noise-sensitive land uses.

State of California

State CEQA Guidelines. The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

- (a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (b) Generation of excessive groundborne vibration or groundborne noise levels;
- (c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels.

Checklist items (a) and (b) are applicable to the proposed project. The project is not located within the vicinity of a private airstrip or a public airport and would not expose people residing or working in the project area to excessive aircraft noise levels; therefore, item (c) is not carried further in this analysis.

2019 California Green Building Standards Code (Cal Green Code). The State of California established exterior sound transmission control standards for new non-residential buildings as set forth in the 2019 California Green Building Standards Code (Section 5.507.4.1 and 5.507.4.2). Section 5.507 states that either the prescriptive (Section 5.507.4.1) or the performance method (Section 5.507.4.2) shall be used to determine environmental control at indoor areas. The prescriptive method is very conservative and not practical in most cases; however, the performance method can be quantitatively verified using exterior-to-interior calculations. For the purposes of this report, the performance method is utilized to determine consistency with the Cal Green Code. Both of the sections that pertain to this project are as follows:

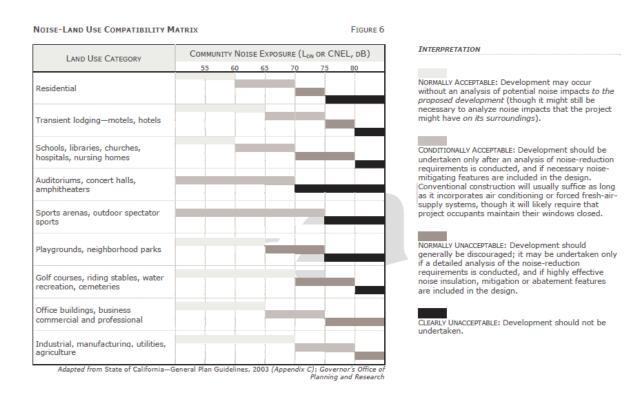
5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies making up the building envelope that are exposed to the noise source shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 when the building falls within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, as determined by the local general plan noise element.

5.507.4.2 Performance method. For buildings located within the 65 dBA L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway noise source, wall and roof-ceiling assemblies making up the building envelope and exposed to the noise source shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level ($L_{eq~(1-hr)}$) of 50 dBA in occupied areas during any hour of operation.

The performance method, which establishes the acceptable interior noise level, is the method typically used when applying these standards.

City of Oakland

City of Oakland General Plan Noise Element. The Noise-Land Use Compatibility Matrix (Figure 6 of the Noise Element) categorizes noise levels at schools of up to 60 dBA L_{dn} /CNEL as "normally acceptable", from 60 to 70 dBA L_{dn} /CNEL as "conditionally acceptable", and from 70 to 80 dBA L_{dn} /CNEL as "normally unacceptable".



City of Oakland Planning Code. The noise performance standards of the Oakland Planning Code set out to control operational and construction noise levels. These policies were further clarified in the City of Oakland CEQA Thresholds of Significance Guidelines, dated October 17, 2016. The following policies are applicable to the project.

<u>Section 17.120.050 G, Temporary Construction and Demolition Noise:</u> Table Oakland-1, below, specifies the maximum noise level allowable at receiving uses during short and long term

construction or demolition projects. The City allows for an exemption if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts.¹

TABLE Oakland-1 City of Oakland Construction Noise Standards at Receiving Property Line, dBA ¹			
	Maximum Allowable Noise Level (dBA)		
Receiving Land Use	Weekdays	Weekends	
Receiving Land Osc	7 a.m7 p.m.	9 a.m8 p.m.	
Less than 10 days			
Residential	80	65	
Commercial, Industrial	85	70	
More than 10 Days			
Residential	65	55	
Commercial, Industrial	70	60	
Notes: 1) If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.			

<u>Section 8.18.020</u>, <u>Persistent Noises a Nuisance</u>: The persistent maintenance or emission of any noise or sound produced by human, animal or mechanical means, between the hours of nine p.m. and seven a.m., which, by reason of its raucous or nerve-racking nature, shall disturb the peace or comfort, or be injurious to the health of any person shall constitute a nuisance.

Failure to comply with the following provisions shall constitute a nuisance.

- A. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- B. Unnecessary idling of internal combustion engines is prohibited.
- C. All stationary noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.
- D. Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- E. Use of pile drivers and jack hammers shall be prohibited on Sundays and holidays, except for emergencies and as approved in advance by the Building Official.

Section 17.120.050 A-F, Operational Noise: Table Oakland-2, below, specifies the maximum

⁻

¹ 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.

noise level allowable at receiving uses during new project operations.

 $5(L_{8.3})$

 $1(L_{1.7})$

 $0 (L_{max})$

TABLE Oakland-2 City of Oakland Operational Noise Standards at Receiving Property Line, dBA ¹			
	Cumulative Maximum Allowable Noise Level (dBA)		
Receiving Land Use	No. of Minutes in 1-Hr Period ²	Daytime 7 a.m10 p.m.	Nighttime 10 p.m7 a.m.
	20 (L ₃₃)	60	45
D '1 ('1 1	10 (L _{16.7})	65	50
Residential and Civic ³	5 (L _{8.3})	70	55
	1 (L _{1.7})	75	60
	0 (L _{max})	80	65
Anytime			time
	20 (L ₃₃)	65	
Commercial	10 (L _{16.7})	70	
	5 (L _{8.3})	75	
	1 (L _{1.7})	80	
	0 (L _{max})	85	
	20 (L ₃₃)	70 75	
Manufacturing,	10 (L _{16.7})		

Notes:

Mining, and

Quarrying

1) These standards are reduced 5 dBA for simple tone noise, noise consisting primarily of speech or music, or recurring impact noise. If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

80

85 90

- 2) L_x represents the noise level that is exceeded X percent of a given period. L_{max} is the maximum instantaneous noise level.
- 3) Legal residences, schools and childcare facilities, health care or nursing home, public open space, or similarly sensitive land uses.

City of Oakland Standard Conditions of Approval. The City of Oakland has adopted Standard Conditions of Approval (adopted 2008, revised 2020), which are uniformly applied to projects under City of Oakland jurisdiction. The following noise and vibration-related measures would be applicable to the proposed project:

SCA 62. 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

SCA 63. 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

SCA 64. Extreme Construction Noise

a. Construction Noise Management Plan Required

Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90 dBA), 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:

- i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;
- 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;
- iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;
- 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

v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

b. Public Notification Required

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.

When Required: During construction Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA 68. Operational Noise

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.

When Required: Ongoing Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA 70. Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities

Requirement: The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located at 2263 E 15th Street. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.

When Required: Prior to construction Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building

Existing Noise Environment

The project site is located on the west corner of the intersection of 23rd Avenue and E 15th Street, and consists of approximately 0.37 acres of land occupied by the former Palace Theater building and parking lot. Just across E 15th street to the northeast is an additional existing parking lot associated with the project, which is approximately 0.10 acres in size. International Boulevard is located approximately 195 feet southwest of the project site. The surrounding area is a mix of residential and commercial land-uses, with multi-family and single-family residences to the northeast, single-family residences to the northwest, multi-family residences and commercial uses to the southeast, and commercial uses to the southwest. The Bay Area Rapid Transit (BART) tracks and the Union Pacific Railroad (UPRR) tracks are approximately 585 feet and 870 feet to the southwest of the project site, respectively. Interstate 880 (I-880) is approximately 1,100 feet to the southwest as well. Oakland International Airport is located approximately three miles to the south.

A noise monitoring survey was performed between Tuesday, July 26, 2022 and Thursday, July 28, 2022 to quantify and characterize ambient noise levels at the site and in the project vicinity. The monitoring survey included two long-term measurements (LT-1 and LT-2) and two short-term noise measurements (ST-1 and ST-2). The noise environment results primarily from local traffic along E 15th Street and 23rd Avenue. Other secondary sources of noise, including traffic along International Boulevard, BART operations, aircraft, dogs barking, and children playing, are audible in the site vicinity. Figure 1 shows the noise measurement locations relative to the project site.

Long-term measurement LT-1 was made in the existing main parking lot, approximately 100 feet southwest of the centerline of E 15^{th} Street. This location was chosen to represent ambient noise levels on-site as well as at nearby residential land-uses northwest of the site. Typical hourly average noise levels at this location ranged from 52 to 61 dBA L_{eq} during the day and from 46 to 56 dBA L_{eq} at night. The day-night average noise level on Wednesday, July 23, 2022 was 59 dBA L_{dn} . The daily trend in noise levels at LT-1 is shown in Figures 2 through 4.

Long-term measurement LT-2 was made in the existing smaller parking lot, approximately 75 feet northeast of the centerline of E 15^{th} Street. This location was chosen to represent ambient noise levels at nearby residential land-uses northeast of the site. Typical hourly average noise levels at this location ranged from 53 to 62 dBA L_{eq} during the day and from 46 to 55 dBA L_{eq} at night. The day-night average noise level on Wednesday, July 23, 2022 was 60 dBA L_{dn} . The daily trend in noise levels at LT-2 is shown in Figures 5 through 7.

Short-term noise measurement ST-1 was made over a 10-minute period on Tuesday, July 26, 2022 between 10:20 a.m. and 10:30 a.m. This location was approximately 40 feet southwest of the centerline of E 15th Street and quantified typical noise levels at the residential building facades along E 15th Street, adjacent to the existing Palace Theater building. Eleven vehicles passed along E 15th Street during the measurement, including one truck and one motorcycle. Recorded noise levels from smaller vehicles passing by ranged from 56 to 64 dBA, while the truck and motorcycle produced noise levels of 72 dBA and 67 dBA, respectively. Distant traffic noise from other local roads and I-880 ranged from 52 to 55 dBA. A helicopter generated noise

levels up to 62 dBA, while dogs barking ranged from 53 to 55 dBA and sounds of children playing ranged from 55 to 57 dBA. The 10-minute L_{eq} measured at ST-1 was 58 dBA.

Short-term noise measurement ST-2 was made concurrently with ST-1 over a 10-minute period on Tuesday, July 26, 2022 between 10:20 a.m. and 10:30 a.m. This location was approximately 35 feet northeast of the centerline of E 15^{th} Street and quantified typical noise levels at the residential building facades along E 15^{th} Street, across from the existing Palace Theater building. Noise sources and levels similar to those at ST-1 were identified and measured. The 10-minute L_{eq} measured at ST-1 was 57 dBA. Table 4 summarizes the results of measurements ST-1 and ST-2.

TABLE 4 Summary of Short-Term Noise Measurement Data (dBA)

Noise Measurement Location (Date, Time)	L _{max}	L ₍₁₎	L ₍₁₀₎	L ₍₅₀₎	L ₍₉₀₎	Leq(10-min)
ST-1: ~40 Southwest of the Centerline of E 15 th Street (Tuesday, 7/26/2020, 10:20 – 10:30 a.m.)	72	67	61	54	51	58
ST-2: ~35 Northeast of the Centerline of E 15 th Street (Tuesday, 7/26/2020, 10:20 – 10:30 a.m.)	71	69	60	53	50	57

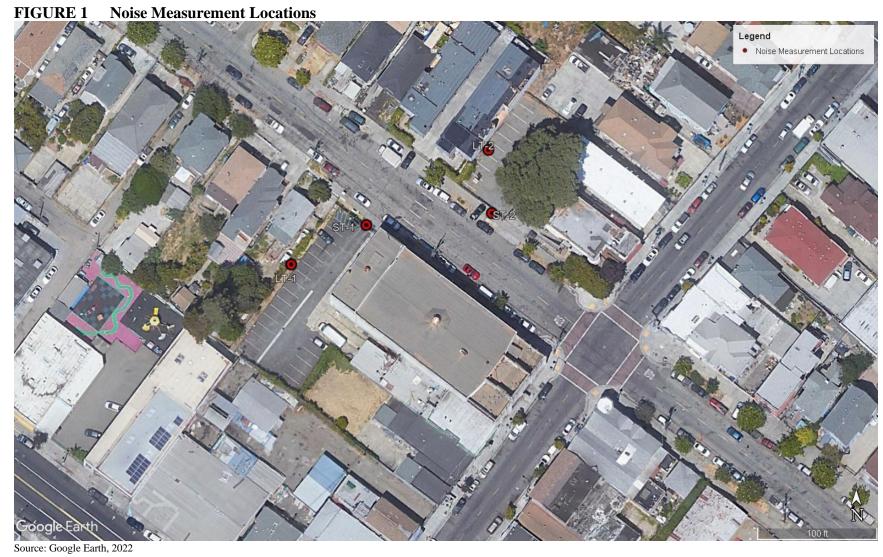


FIGURE 2 Noise Levels at Measurement Site LT-1 on Tuesday, July 26, 2022

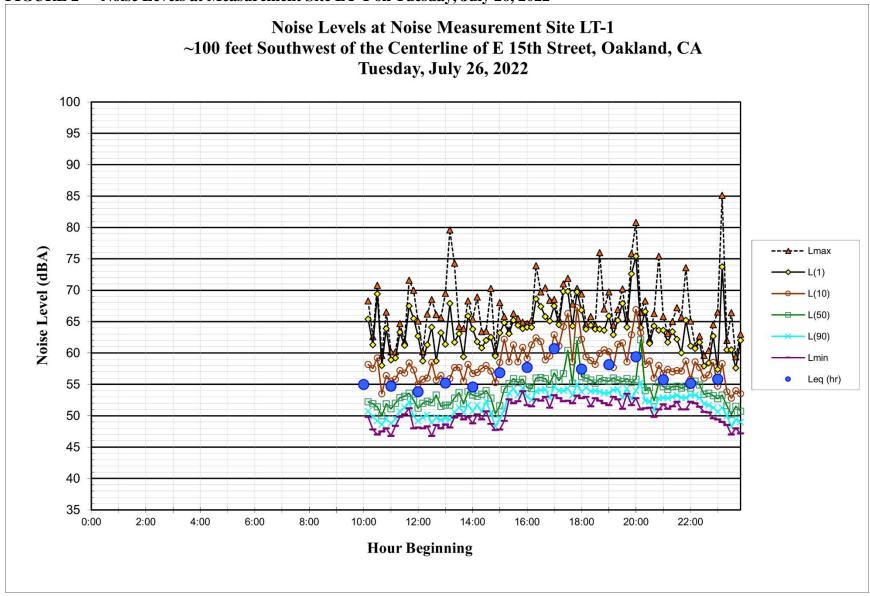


FIGURE 3 Noise Levels at Measurement Site LT-1 on Wednesday, July 27, 2022 Noise Levels at Noise Measurement Site LT-1 ~100 feet Southwest of the Centerline of E 15th Street, Oakland, CA Wednesday, July 27, 2022 100 95 90 85 80 Noise Level (dBA) ---- Lmax 75 — L(1) 70 — L(10) □ L(50) 65 - L(90) 60 Lmin Leq (hr) 55 Ldn = 59 dBA 50 45 40

12:00

Hour Beginning

14:00

16:00

20:00

18:00

22:00

35 - 0:00

2:00

6:00

4:00

8:00

10:00

FIGURE 4 Noise Levels at Measurement Site LT-1 on Thursday, July 28, 2022 Noise Levels at Noise Measurement Site LT-1 ~100 feet Southwest of the Centerline of E 15th Street, Oakland, CA Thursday, July 28, 2022 100 95 90 85 80 Noise Level (dBA) ---- Lmax 75 — L(1) 70 — L(10) □ L(50) 65 - L(90) 60 - Lmin Leq (hr) 55 50

12:00

Hour Beginning

14:00

16:00

20:00

22:00

18:00

10:00

8:00

45

35

0:00

2:00

4:00

6:00

FIGURE 5 Noise Levels at Measurement Site LT-2 on Tuesday, July 26, 2022

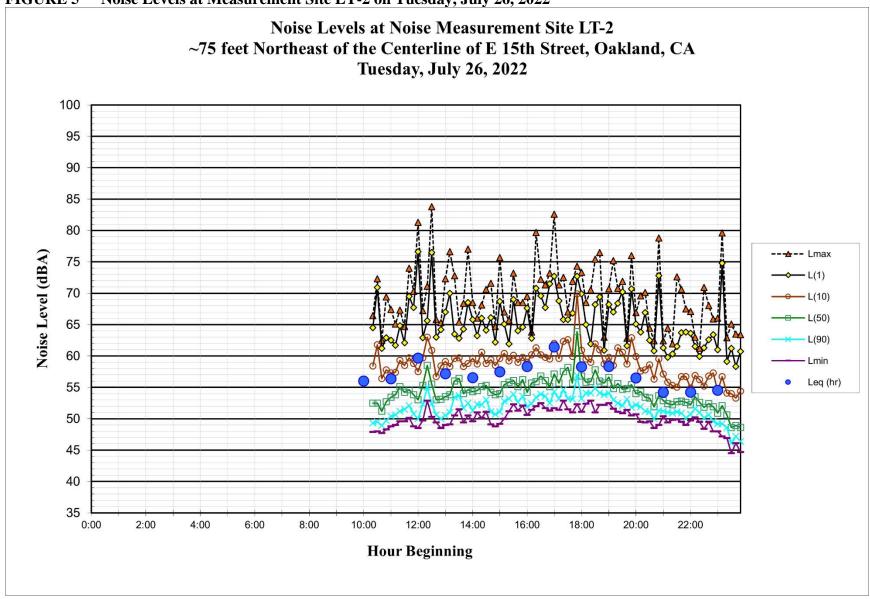
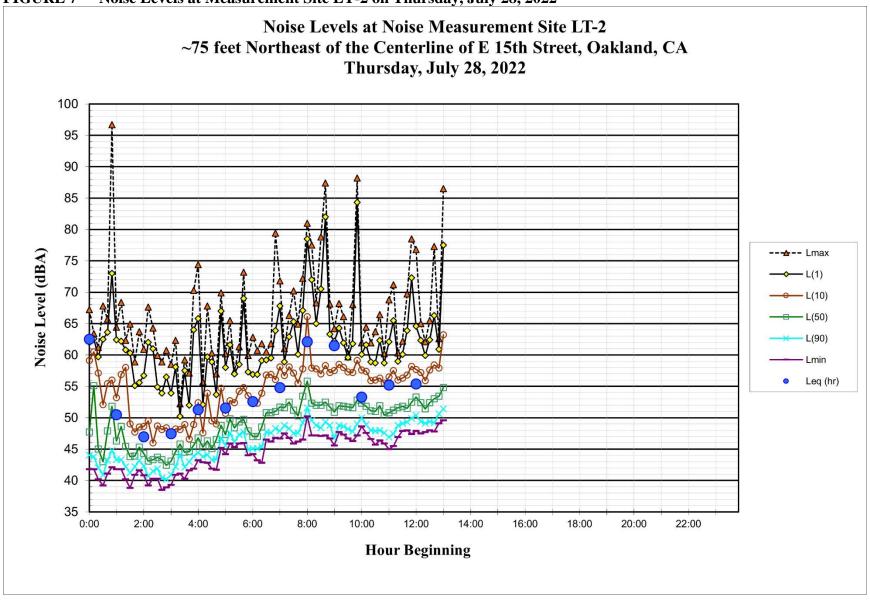


FIGURE 6 Noise Levels at Measurement Site LT-2 on Wednesday, July 27, 2022 Noise Levels at Noise Measurement Site LT-2 ~75 feet Northeast of the Centerline of E 15th Street, Oakland, CA Wednesday, July 27, 2022 100 95 90 85 80 Noise Level (dBA) ---**-**-- Lmax 75 — L(1) 70 — L(10) □ L(50) 65 - L(90) 60 Lmin Leq (hr) 55 50 Ldn = 60 dBA45 40 35 0:00 2:00 4:00 6:00 8:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00 **Hour Beginning**

FIGURE 7 Noise Levels at Measurement Site LT-2 on Thursday, July 28, 2022



GENERAL PLAN CONSISTENCY ANALYSIS

The impacts of site constraints such as exposure to excessive levels of noise and vibration are not considered under CEQA. This section addresses Noise and Land Use Compatibility for consistency with the policies set forth in the Oakland General Plan and California Green Building Standards Code.

Noise and Land Use Compatibility

The applicable State of California and City of Oakland General Plan policies were presented in detail in the Regulatory Background section and are summarized below:

- The City of Oakland General Plan specifies exterior noise level standards for school uses.
 An exterior noise level up to 60 dBA L_{dn} is considered 'normally acceptable' and an exterior noise level of 60 to 70 dBA L_{dn} is considered 'conditionally acceptable.'
- The Cal Green Code establishes a maximum interior noise limit of 50 dBA L_{eq (1-hr)} for occupied areas of non-residential buildings during any hour of operation.

Future Exterior Noise Environment

The future exterior noise environment at the project site would continue to result primarily from local traffic along 23^{rd} Avenue and E 15^{th} Street. Based on measurement data, noise levels throughout the site would be dependent on distance from local roadways. Noise levels would range from 59 dBA L_{dn} to about 64 dBA L_{dn} on-site where outdoor-use areas are planned. This falls within both the 'normally acceptable' and 'conditionally acceptable' range of noise levels specified for school land uses in the City of Oakland General Plan.

Project plans indicate that an outdoor recreation area would replace the existing parking lot on the northwestern side of the existing building. Given the proximity of E 15th Street, the outdooruse area would need to be set back approximately 80 feet from the centerline of E 15th Street to ensure that traffic noise levels are below the 60 dBA L_{dn} 'normally acceptable' criterion. This distance from the centerline would extend onto the project site approximately 45 feet from the outdoor area fence line and would encompass mostly site and building egress features, entry landscaping, and a portion of the hardscape basketball hoop area. The outdoor seating area, service area, and mini soccer field would be within the normally acceptable noise level area. No outdoor-use areas are planned along 23rd Avenue. Considering that the majority of the outdoor recreation area (80%) would be exposed to 'normally acceptable' noise levels, no additional noise control or analysis is recommended.

Future Interior Noise Environment

The Cal Green Code requires that interior noise levels attributable to exterior sources not exceed 50 dBA $L_{eq~(1-hr)}$ in occupied areas of non-residential uses during any hour of operation. Based on the results of the noise monitoring survey, peak-hour noise levels would be up 2 dBA higher than day-night average levels and would range from 61 dBA $L_{eq~(1-hr)}$ at the portion of the site furthest

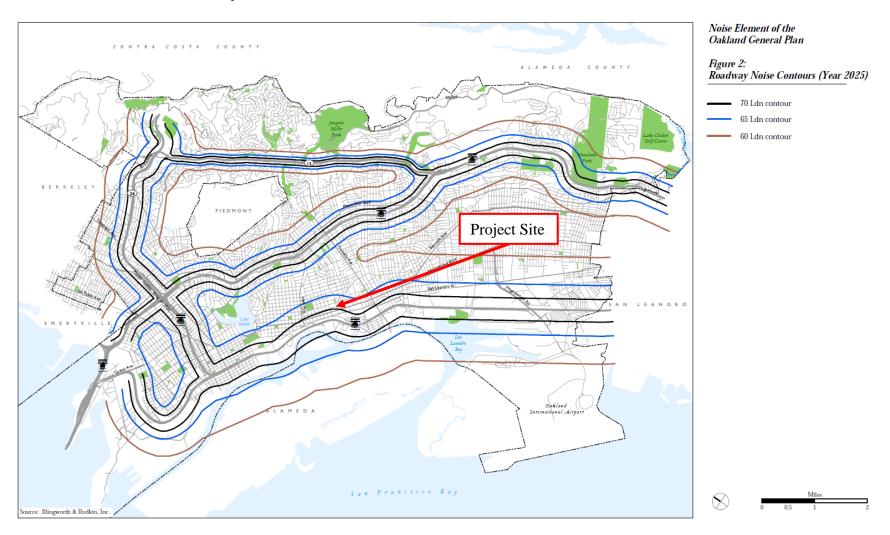
from E 15th Street to 62 dBA $L_{eq~(1-hr)}$ at sites LT-1 and LT-2. The greatest noise exposure would occur along 23^{rd} Avenue and E 15th Street. According to the Noise Element of the Oakland General Plan (Figure 8), the project site falls within the 65 L_{dn} noise contour, and peak-hour noise levels would be expected to be up to 67 dBA $L_{eq~(1-hr)}$ along 23^{rd} Avenue. The on-site noise study conducted by I&R correlated well with the noise contour map.

The second-floor rooms along 23^{rd} Avenue have existing windows. In good condition, the standard noise attenuation factor is around 20 dBA for an older structure, resulting in interior noise levels below the Cal Green Code standard of 50 dBA $L_{eq~(1-hr)}$ along 23^{rd} Avenue. New windows are to be added to the existing building façade along E 15^{th} Street. The noise attenuation factor for new construction is around 25 dBA. Because the noise environment along E 15^{th} Street is quieter than along 23^{rd} Avenue and because the new construction will have a higher attenuation factor, the resulting interior noise levels along E 15^{th} Street will also be below the Cal Green Code standard of 50 dBA $L_{eq~(1-hr)}$. Future traffic noise levels are expected to result in a noise level increase of less than 1 dBA in the vicinity of the project.

Additionally, the project would include a forced-air heating and cooling system, which would allow for windows to be closed to control noise if necessary.

The existing construction and proposed improvements would be sufficient in reducing interior noise levels to below the Cal Green Code standard of 50 dBA $L_{eq\ (1-hr)}$. Other sides of the existing building would be exposed to less noise.

FIGURE 8 Oakland Roadway Noise Contours - 2025



IMPACTS AND MITIGATION MEASURES

Significance Criteria

The following criteria were used to evaluate the significance of environmental noise resulting from the project:

- 1. <u>Temporary or Permanent Noise Increases in Excess of Established Standards:</u> A significant impact would be identified in the following cases:
 - a. <u>Operational Noise in Excess of Standards.</u> A significant impact would be identified if project operations were to exceed the noise level standards specified in Table Oakland-2.
 - b. <u>Permanent Noise Increase</u>. A significant permanent noise increase would occur if a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} , or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
 - c. <u>Temporary Noise Increase.</u> Construction noise impacts would be considered significant if project construction were to exceed the City of Oakland's Construction (or Demolition) Noise Performance Standards for activities that occur for more than 10 days (70 dBA at commercial uses and 65 dBA at residential uses during weekday daytime hours).
- 2. Generation of Excessive Groundborne Vibration: A significant impact would be identified if the construction of the project would expose persons to excessive vibration levels. Groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to buildings.
- Impact 1: Temporary or Permanent Noise Increases in Excess of Established Standards. Without proper noise mitigation, the proposed project could generate operational noise levels in excess of the standards established in the City's General Plan or Municipal Code at nearby sensitive receptors. With the implementation of Oakland's standard controls and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels occurring during construction would be in compliance with the City's Code. With the implementation of standard conditions of approval, this is a less-than-significant impact.
 - a. Permanent Noise from On-Site Operations

Operational noise sources attributable to the proposed Project include parking lot activities and outdoor recreational activities at the proposed outdoor-use area. Table Oakland-2 of the City of Oakland Planning Code establishes maximum allowable noise levels at residential, civic, and commercial receiving land uses to be enforced during daytime operational hours.

Parking Lot

Parking for the project would be provided at an existing 0.10-acre parking lot across E 15th Street from the main site. Noise-sensitive residential land uses are adjacent to the parking lot, to the northwest and southeast, with the closest being approximately 30-feet from the center of the parking lot.

Noise sources associated with the use of the parking lots include vehicular circulation, engines, car alarms, squealing tires, door slams, and human voices. The sound of engines starting, doors slam closing, and people talking in the parking lot typically reach maximum levels of 50 to 60 dBA L_{max} at a distance of 50 feet. Parking lot noise would generate maximum noise levels in the range of 54 to 64 dBA L_{max} at a distance of 30 feet. The hourly average noise level resulting from all these noise-generating activities in a small parking lot would be anticipated to reach 40 dBA L_{eq} at a distance of 50 feet, and 44 dBA L_{eq} at a distance of 50 feet from the parking area.

Maximum noise levels generated in the parking lot would be lower in level than existing maximum noise levels in the area and would be below the 80 dBA L_{max} daytime threshold established by the City of Oakland. This is a **less-than-significant** impact.

Recreational Area

An outdoor recreational use area would be located on the northwestern portion of the main site. Noise-sensitive residential land uses are to the northwest, with the closest receptor location being approximately 40-feet from the assumed center of the recreational use area. The noise standards contained in Table Oakland-2 are reduced by 5 dBA for noise consisting primarily of speech, therefore the applicable noise limit would be 55 dBA at the adjacent residential property.

The loudest part of the day would be during lunchtime when up to 200 students may be outside. However, during this time many of the students will be eating lunch and not participating in louder recreational activities. Lunchtime is proposed from 12:10 p.m. to 12:40 p.m. during the week, except for Wednesdays when it will be from 11:25 a.m. to 11:55 a.m. After school outdoor activities will occur between 3:30 p.m. and 6:00 p.m. during the week except for Wednesdays when they will occur from 1:00 p.m. to 6:00 p.m. Only 30 students at a time are expected outside during after school activities, and the noise levels will be much lower than at lunchtime.

The noise associated with the use of playground areas is typically characterized by children yelling and playing and whistles during recess or physical education classes. Average noise levels generated during playground activities typically range from 59 to 65 dBA L_{eq} at a distance of 50 feet. At a distance of 40 feet, average noise levels during recess periods could reach 61 to 67 dBA L_{eq} at the nearest residential property line, which would exceed the 55 dBA limit by 6 to 12 dBA. The existing walls along the commercial property lines would be sufficient to maintain noise levels at or below City of Oakland standards, and noise levels at the residences across E 15th Street would not exceed 55 dBA.

The project would be required to implement City of Oakland SCA 68 (Operational Noise), which requires implementation of noise reduction measures to reach operational noise levels in compliance with performance standards. (See regulatory setting for full text of SCAs.)

Improvement to Implement SCA 68 (Operational Noise): Construct a solid noise barrier along the northwest residential property line to shield adjacent residential land-uses from outdoor area noise. This noise barrier shall be a minimum of 8 feet tall except in the 10 feet adjacent to the property line with 15th Street, which shall be a minimum of 6 feet tall.

Figure 9 shows the locations of existing and proposed noise barriers. To comply with the 55 dBA noise threshold, a minimum 8-foot-tall, solid noise barrier should be constructed along the residential property line. The barrier will need to be 6-feet-tall for the first ten feet of barrier nearest to the property line along E 15th Street to comply with City code requirements. With the implementation of this identified improvement, SCA 68 would be satisfied and noise levels would be maintained at or below 55 dBA, resulting in a **less-than-significant impact**.

FIGURE 9 Existing 6-foot and Proposed 8-foot Noise Barriers

C Bernter

Source: Google Earth, 2023

b. Permanent Noise Increases from Project Traffic

Project trip generation numbers were provided by Parisi Transportation Consulting. Daily operations at the site would result in a net peak hour generation of 95 trips. It is anticipated that there will be approximately 40 total staff employees working on a typical day and 350 students.

Traffic noise increases resulting from daily operations were calculated based on existing daily traffic counts and proposed daily project trip generation numbers. Based on the calculations, the project would generate a daily traffic noise level increase of less than 1 dBA, as well as peak a.m. hour and peak p.m. hour increases of less than 1 dBA.

Traffic resulting from daily operations would not measurably increase daily noise levels in the site vicinity. Hourly trip generation resulting from typical daily project operations would not significantly increase noise levels above that of the existing ambient noise environment, which ranged from 52 to 62 dBA L_{eq} during the measurement survey. This is a **less-than-significant** impact.

c. Temporary Noise Increases from Project Construction

Table Oakland-1 of the City of Oakland Planning Code regulates hours of construction and noise from construction activity. Construction activities are limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 8:00 p.m. on weekends. Daytime construction noise levels for projects lasting more than 10 days are limited to a maximum of 65 dBA at receiving property lines of residences and 70 dBA at receiving property lines of commercial and industrial uses, except for areas where the existing ambient noise level exceeds these limits and the limit is then set to the ambient level. Based on noise measurement data, existing ambient noise levels are below 65 dBA at nearby residences that could be affected by the project-generated construction noise. Section 8.18.020 of the Planning Code includes provisions to mitigate noise from construction activities. The City of Oakland allows for an exemption from these requirements if an acoustical analysis is performed that identifies measures to reduce potential impacts.

Construction activities are expected to last for nine months and are to take place mainly inside the existing building. However, minor construction and restoration is planned for the exterior of the building. The main parking lot is to be demolished to make way for the proposed recreational-use area. The parking lot demolition is assumed to last for less than 10 days. Minor repair work on the smaller parking lot is not expected to generate significant noise levels.

During each stage of construction, there would be a different mix of equipment operating, and noise levels would vary by stage and vary within stages, based on the amount of equipment in operation and the location at which the equipment is operating. Typical construction noise levels at a distance of 50 feet are shown in Tables 5 and 6. Table 5 shows the average noise level ranges by construction phase, and Table 6 shows the maximum noise level ranges for different construction equipment.

Construction would take place Monday through Friday during the hours of 7:00 a.m. to 7:00 p.m., consistent with the Planning Code. Using typical construction noise levels for schools as shown in Table 5, noise from outdoor construction activities would range from 75 to 84 dBA L_{eq} at a distance of 50 feet assuming the that only minimal equipment would be present at site given the relatively small exterior work areas. The nearest residential property line is located about 35 feet northwest of the approximate center of construction. At this distance, construction noise levels may reach 87 dBA L_{eq} during parking lot demolition. This would result in an increase of 23 to 28 dBA over the existing daytime ambient noise level of 59 to 64 dBA Leq along the property line. The nearest nonresidential property line is located about 75 feet southwest of the approximate center of construction. Noise levels during parking lot demolition may reach 80 dBA L_{eq} at the property line. This would result in an increase of up to 21 dBA over the existing daytime ambient noise level of 59 dBA Leq at the property line. While both of these noise levels are above receiving property line maximum standards, such standards would not be applicable because this portion of the work would last less than 10 days. Most other construction work would occur inside of the existing building, which will shield the nearby properties from the noise. Interior construction noise is not anticipated to cause a significant noise increase at nearby property lines

TABLE 5 Typical Ranges of Construction Noise Levels at 50 Feet, Leq (dBA)

	Dom Hou	estic sing	Hotel, Schoo	Building, Hospital, ol, Public Vorks	Parkin Rel Amus Recr Store	ustrial g Garage, igious ement & eations, , Service ation	Ro Hig Sew	ic Works bads & ghways, ers, and enches
	Ι	II	I	II	Ι	II	Ι	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 I - All pertinent eq	88 uipment prese	72 ent at site.	89	75	89	74	84	84

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

II - Minimum required equipment present at site.

TABLE 6 Construction Equipment 50-foot Noise Emission Limits

Are Welder	Equipment Category	Lmax Level (dBA) ^{1,2}	Impact/Continuou
Auger Drill Rig Backhoe Bar Bender Bar Bender Boring Jack Power Unit			s
Backhoe Bar Bender Boring Jack Power Unit Boring Jack Power Unit Chain Saw Continuous Compressor³ 70 Continuous Compressor (other) Concrete Mixer Concrete Mixer Concrete Wibrator Concrete Vibrator Concrete Vibrator Concrete Vibrator Concrete Vibrator Continuous Concrete Vibrator Continuous Concrete Vibrator Sexcavator Front End Loader Senerator Generator Generator Generator Generator Generator (25 KVA or less) Gradall Grader Borind Saw Horizontal Boring Hydro Jack Hydra Break Ram Horizontal Boring Hydro Jack Hydra Break Ram Horizontal Impact Pile Driver Insitu Soil Sampling Rig Jack Power Subreting Say Rock Drill Scraper Subruty Subreting Say Rock Drill Situry Trenching Machine Soil Mix Drill Rig Subratory Pile Driver Subratory Subrator	Arc Welder	73	Continuous
Bar Bender Boring Jack Power Unit Chain Saw Continuous Compressor³ 70 Continuous Compressor (other) Concrete Mixer Concrete Mixer Concrete Pump 82 Concrete Saw Concrete Saw Concrete Vibrator Crane S5 Continuous Concrete Vibrator Crane 85 Continuous Concrete Nash Continuous Concrete Saw Continuous Concrete Saw Continuous Concrete Saw Continuous Concrete Saw Continuous Concrete Vibrator Crane 85 Continuous Concrete Saw Continuous Concrete Vibrator Crane 85 Continuous Concrete Sab Continuous Concrete Sab Continuous Concrete Vibrator Crane 85 Continuous Concrete Vibrator Crane 85 Continuous Concrete Vibrator 85 Continuous Generator Generator Generator Generator Generator Generator (25 KVA or less) Gradall 85 Continuous Generator (25 KVA or less) Gradall 85 Continuous Grader 85 Continuous Grinder Saw 85 Continuous Grinder Saw 85 Continuous Horizontal Boring Hydro Jack 80 Continuous Hydra Break Ram 90 Impact Impact Impact Pile Driver 105 Impact Insitu Soil Sampling Rig 84 Continuous Mounted Impact Hammer (hoe ram) 90 Impact Impact Mounted Impact Hammer (hoe ram) 90 Impact Nounted Impact Hammer 85 Continuous Paver 85 Continuous Soil Mix Drill Rig 80 Continuous Vacuum Excavator Truck (vac-truck) Vibratory Compactor Vibratory Pile Driver 95 Continuous	Auger Drill Rig	85	Continuous
Boring Jack Power Unit Chain Saw Chain Saw S5 Continuous Compressor³ Compressor (other) Concrete Mixer S5 Continuous Concrete Mixer S6 Concrete Pump S2 Concrete Saw S0 Continuous Concrete Saw S0 Continuous Concrete Vibrator Concrete Vibrator Crane S5 Continuous Concrete Vibrator Crane S5 Continuous Continuous Excavator S5 Continuous Excavator S6 Excavator S7 Excavator S8 Continuous Excavator S9 Excavator	Backhoe	80	Continuous
Chain Saw85ContinuousCompressor³70ContinuousCompressor (other)80ContinuousConcrete Mixer85ContinuousConcrete Pump82ContinuousConcrete Saw90ContinuousConcrete Vibrator80ContinuousConcrete Vibrator85ContinuousCrane85ContinuousDozer85ContinuousExcavator85ContinuousFront End Loader80ContinuousGenerator82ContinuousGenerator (25 KVA or less)70ContinuousGradall85ContinuousGrader85ContinuousGrinder Saw85ContinuousHorizontal Boring Hydro Jack80ContinuousHydra Break Ram90ImpactImpact Pile Driver105ImpactImpact Brist Soil Sampling Rig84ContinuousJackhammer85ContinuousMounted Impact Hammer (hoe ram)90ImpactPaver85ContinuousPumps77ContinuousRock Drill85ContinuousSurry Trenching Machine82ContinuousSil Mix Drill Rig80ContinuousSilvery Trenching Machine82ContinuousSilvery Trenching Machine82ContinuousSilvery Trenching Machine82ContinuousSilvery Trenching Machine84ContinuousSilver S	Bar Bender	80	Continuous
Compressor³ Compressor (other) Compressor (other) Concrete Mixer Concrete Mixer Concrete Pump Recontinuous Concrete Saw Concrete Saw Continuous Concrete Saw Concrete Saw Continuous Concrete Vibrator Crane Recontinuous Concrete Vibrator Recontinuous Concrete Saw Recontinuous Concrete Saw Recontinuous Concrete Saw Recontinuous Concrete Saw Recontinuous Continuous Recavator Recontinuous Recavator Recontinuous Recontinuou	Boring Jack Power Unit	80	Continuous
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Notes:

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

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

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

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

The project would be required to implement City of Oakland SCAs 62 (Construction Days/Hours) and 63 (Construction Noise), which require implementation of construction hour limitations and measures to reduce construction noise. (See regulatory setting for full text of SCAs.)

Implementation of the applicable Oakland SCAs would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these SCAs and recognizing that noise generated by construction activities would occur over a temporary period, the temporary increase in ambient noise levels would be **less-than-significant**.

Note that SCA 64 (Extreme Construction Noise) is strictly applicable to all construction projects in Oakland. However, there are no known extreme noise (90 dBA) generating construction activities (such as pile driving) proposed for this reuse project. This SCA would only be triggered if extreme noise generating activities are subsequently proposed.

Exposure to Excessive Groundborne Vibration. Construction-related vibration has the potential to be excessive at nearby residential land uses if uncontrolled. With the implementation of standard conditions of approval, **this is a less-than-significant impact**.

The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams, etc.) are used in areas adjacent to developed properties. Construction activities would include demolition of an existing parking lot, parking lot renovation, and interior construction of offices, classrooms, and a gymnasium/multi-purpose area.

The City of Oakland does not establish a vibration limit for construction. The California Department of Transportation recommends a vibration limit of 0.3 in/sec PPV for buildings that are found to be structurally sound and designed to modern engineering standards and a vibration limit of 0.25 in/sec PPV for historic and some old buildings (see Table 3). The nearest historic building to the site is the California Cotton Mills located approximately 1,100 feet to the southwest at 1091 Calcot Place. Groundborne vibration levels exceeding 0.3 in/sec PPV at surrounding structures of modern construction and/or vibration levels exceeding 0.25 in/sec PPV at the California Cotton Mills would have the potential to result in a significant vibration impact.

Project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity of the work area. Table 7 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet and calculated vibration levels at distances representative of nearby structures. Pile driving would not be used as a method of construction for the project.

TABLE 7 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25	PPV at 15	PPV at 45	PPV at 1,100 ft.
		ft. (in/sec)	ft. (in/sec)	ft. (in/sec)	(in/sec)
Clam shovel drop		0.202	0.354	0.106	0.003
Hydromill (slurry wall)	In soil	0.014	0.004	0.000	0.000
	In rock	0.030	0.009	0.000	0.000
Vibratory Roller		0.210	0.368	0.110	0.003
Hoe Ram		0.089	0.156	0.047	0.001
Large bulldozer		0.089	0.156	0.047	0.001
Caisson drilling		0.089	0.156	0.047	0.001
Loaded trucks		0.076	0.133	0.040	0.001
Jackhammer		0.035	0.061	0.018	0.001
Small bulldozer		0.003	0.005	0.002	0.000

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, September 2018 as modified by Illingworth & Rodkin, Inc., August 2022.

Vibration levels would vary depending on soil conditions, construction methods, and equipment used. Residences are located as close as about 15 feet from the northwestern property line of the main site. At this distance, vibration levels resulting from heavy equipment use (e.g., vibratory rollers, clam shovel drops) would be expected to be about 0.354 to 0.368 in/sec PPV, which would be above the 0.3 in/sec PPV limit recommended by the California Department of Transportation. Vibration levels at the Herbert Hoover House are not expected to exceed 0.003 in/sec PPV and would not exceed any recommended limits.

The project would be required to implement City of Oakland SCA 70 (Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities), which requires a vibration analysis and measures to reduce vibrations such that they do not exceed threshold levels. (See regulatory setting for full text of SCAs.) In this case, the potentially affected building is the adjacent residential building at 2263 15th Street.

Improvements to Implement SCA 70: The following site-specific construction vibration reduction measures shall be implemented:

- Avoid using heavy construction equipment such as vibratory rollers, hoe rams, large bulldozers, and tampers within 20 feet of nearby structures.
- Avoid dropping heavy objects or materials within 20 feet of nearby structures.
- Place operating equipment on the construction site as far as possible from vibrationsensitive receptors.
- Use smaller equipment to minimize vibration levels below the limits.

• Select demolition methods not involving impact tools.

With implementation of the above site-specific construction vibration reduction measures, SCA 70 would be satisfied, construction vibration levels would not exceed threshold levels, and the impact would be **less-than-significant**.

ATTACHMENT G: TRANSPORTATION IMPACT ANALYSIS

Memo

To: Rebeca Auld, Lamphier & Gregory
From: Jimmy Jessup & Andrew Lee, PE, TE

Date: September 12, 2022, updated November 14, 2022

Subject: CEQA Transportation Impact Analysis for BayTech Charter School Project

This memo summarizes the CEQA-related Transportation Impact Analysis work performed for the proposed Bay Area Technology School ("BayTech") project ("Project") to relocate from its existing location at 8251 Fontaine Street in the City of Oakland ("City"), California to the site of the former Palace Theatre at 1453 23rd Avenue in Oakland. Additional non-CEQA transportation impact studies required by the City of Oakland's *Transportation Impact Review Guidelines* (TIRG), which include trip generation, transportation counts, multimodal site circulation, transportation demand management and parking needs, are provided in a separate document.

In January 2016, the California Office of Planning and Research (OPR) published a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA¹ for public review. These guidelines direct lead agencies to require project transportation impacts to be evaluated on the basis of Vehicle Miles Traveled (VMT). This proposal was formally issued by OPR in December 2018, as the Technical Advisory on Evaluating Transportation Impacts in CEQA.²

In April 2017, the City of Oakland issued *Transportation Impact Review Guidelines* (TIRG)³ that incorporated guidance requiring evaluation of potential impacts related to VMT criteria in CEQA transportation studies of proposed land use development projects. These guidelines also ensure that potentially significant impacts are studied according to the City's established thresholds of significance.

This section includes the City's thresholds of significance, describes the methodology and results of the VMT screening assessment and Project-specific analysis.

¹ California Governor's Office of Planning and Research, *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, Implementing Senate Bill 743 (Steinberg, 2013).* Issued January 20, 2016.
² California Governor's Office of Planning and Research, *Technical Advisory on Evaluating Transportation Impacts in CEQA.* Issued December 2018. https://opr.ca.gov/docs/20190122-743. Technical Advisory.pdf. Accessed Aug 4, 2022.
³ City of Oakland, *Transportation Impact Review Guidelines for Land Use Development Projects.* Issued April 14, 2017.



The California Code of Regulations Guidelines for Implementation of CEQA includes a sample environmental checklist form that may be used to foster agency review. Transportation-related checklist question results are in a later section.

1. CEQA SIGNIFICANCE CRITERIA

The following are CEQA significance criteria established by the City of Oakland as described in the TIRG. A land use project would have a significant effect on the environment if it would:

- Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay); or
- Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure; or
- Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new roadways to the network.

2. CEQA VMT THRESHOLDS OF SIGNIFICANCE

In line with CEQA Guidelines, public agencies are encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects related to substantial additional VMT per capita.⁴ The City used OPR guidance to establish its thresholds of significance as described in the TIRG:

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

Of note with respect to Oakland's thresholds of significance is that VMT impacts are compared on a regional basis, as opposed to a City-wide basis, i.e., the VMT thresholds are determined by the Alameda County Transportation Commission. Project VMT analyses are to apply the same methodologies described in thresholds of significance to the extent practicable. In the case of this Project's land use (Grade 6-12 school), the office projects threshold of significance will be applied, in accordance with the TIRG.

⁴ CEQA Guidelines, California Code of Regulations, Title 14, Division 6, Chapter 3, §15064.7(b). January 2022.

3. CONSISTENCY WITH PLANS

Transportation aspects of land use projects are shaped by adopted plans and policies at various levels of governmental agencies. These plans and policies are consulted as part of this Project in order to evaluate against applied principles and efforts to mitigate environmental effects. Discussion of this Project with respect to the framework established by federal, state, regional, and local plans and policies for purpose of mitigating significant environmental effects is presented in this section. This section also includes rationale behind the conclusion that the proposed Project does not conflict with any described plans and policies.

3.1. Federal Plans, Policies and Regulations

There are no federal plans, policies, or regulations related to transportation impacts that have been identified as applicable to this Project.

3.2. State Plans, Policies and Regulations

CEQA Statute & Guidelines

Senate Bill 743, which was signed into law in 2013, mandated a change in CEQA guidelines to utilize VMT as opposed to vehicle flow or traffic congestion as a more appropriate metric for assessing impacts associated with projects, in line with goals of helping to achieve climate commitments, improving health and safety, and prioritizing co-located land uses. After the California Governor's Office of Planning and Research issued the updated *Technical Advisory on Evaluating Transportation Impacts in CEQA* in 2018, CEQA analysis that met this framework became mandatory on July 1, 2020 for proposed land use projects. This Project ensures compliance with this technical advisory by following the TIRG issued in 2017 by the City of Oakland as the local authority.

3.3. Regional Plans, Policies and Regulations

Alameda County Congestion Management Program (CMP)

Alameda County Transportation Commission (Alameda CTC) is the congestion management agency for Alameda County, and develops and updates its mandated short-range Congestion Management Program (CMP) every two years to describe strategies to "assess and monitor the performance of the county's multimodal transportation system, address congestion and improve the performance of a multimodal system." The City of Oakland's TIRG describes where and how CMP requirements apply for transportation analyses. A CMP analysis is required if a project generates over 100 PM peak hour vehicle trips on a roadway segment designated as part of the designated CMP network. In context of this Project, relevant roadways under the CMP include International Boulevard and Foothill Boulevard.

⁵ Alameda County Transportation Commission, 2021 Congestion Management Program. https://www.alamedactc.org/planning/congestion-management-program/. Accessed Aug 4, 2022.

As shown in a later section, the Project is forecast to generate 59 vehicle trips during the PM peak hour, which is below the CMP threshold of 100 PM peak hour vehicle trips. As such, a CMP analysis is not required for the Project.

Plan Bay Area 2040 (2013)

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments updated the Regional Transportation Plan and Sustainable Communities Strategy in 2013.6 According to Plan Bay Area 2040, the Project site is located in a priority development area and is in line with plan objectives for multimodal transportation use.

3.4. Local Plans, Policies and Regulations

City of Oakland General Plan – Land Use and Transportation Element (1998)
The City establishes a local framework related to projects in its Land Use and Transportation
Element (LUTE)⁷ of the General Plan. The Project area is identified in the LUTE implementation
program as a target area for community and economic development and reuse of underdeveloped sites for community and economic development.

The City of Oakland's Land Use Diagram⁸ designates the Project site and surrounding blocks along 23rd Avenue between International Boulevard and Foothill Boulevard as Neighborhood Center Mixed Use. Indicated desired land use types include smaller scale retail, housing, office, active open space, eating and drinking establishments, personal and business services, and smaller scale educational, cultural, or entertainment uses. The Project proposal to utilize the existing Palace Theatre building is in line with the intent of this land use designation and goals in the LUTE.

City of Oakland General Plan – Bicycle Master Plan (2019)

The Oakland General Plan elements addressing circulation have been implemented recently in the Bicycle Master Plan (BMP), Lets Bike Oakland! (2019), and the Pedestrian Master Plan, Oakland Walks! (2017, described in next section). The BMP's recommendations that involve facilities near the Project site and in the major catchment area of the existing student body include:

⁶ Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area 2014, Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2013-2040.* Adopted July 18, 2013. https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2040. Accessed Aug 4, 2022.

⁷ City of Oakland, *Land Use and Transportation Element, Envision Oakland*. Issued March 1998. https://www.oaklandca.gov/resources/land-use-and-transportation-element. Accessed Jul 28, 2022.

⁸ City of Oakland Planning and Building Department, *Zoning and Estuary Policy Plan Map*, February 2022. https://www.oaklandca.gov/resources/zoning-map. Accessed Jul 28, 2022.

⁹ City of Oakland Department of Transportation, *Lets Bike Oakland*! Issued July 2019. https://www.oaklandca.gov/resources/bicycle-plan. Accessed Jul 28, 2022.

- Protected bike lanes on 12th Street from 14th Avenue to the Fruitvale BART Station, leading to a separated bike path along San Leandro Street from the Fruitvale BART station to the San Leandro BART station
- Buffered bike lanes on Foothill Boulevard from Lakeshore Avenue to 48th Avenue, and continuing along Bancroft Avenue from 50th Avenue to Havenscourt Boulevard, where the facility transitions to a separated bike path along Bancroft to 106th Avenue
- Neighborhood bike route on East 16th Street from 23rd Avenue to Fruitvale Avenue

Each of these projects is indicated as a short-term priority project as part of the priority corridor identification in the plan.

In addition to bicycle network facilities, the Bicycle Master Plan includes recommendations for supporting infrastructure such as bike parking and wayfinding, as well as recommendations addressing existing and future bicycle programs that facilitate progress against overall BMP goals.

The proposed Project would be generally consistent with the BMP. Bicycle parking facilities would be provided on site. The proposed Project would not conflict with any of the bike facilities proposed in the BMP.

City of Oakland General Plan – Pedestrian Master Plan (2017)

The Oakland General Plan circulation element also includes the Pedestrian Master Plan (PMP), Oakland Walks!¹⁰ The plan calculates that 36% of pedestrian collisions occur on only two percent of Oakland streets, which are designated as high injury network corridors and intersections. High injury network corridors and intersections in the proposed Project vicinity include the following:

- East 15th Street between 21st and 26th Avenues
- International Boulevard between 16th and 28th Avenues
- Intersection of International Boulevard and 21st Avenue

Recommended actions specific to these relevant high injury network locations near the proposed Project include the following:

At the intersection of 22nd Avenue and East 15th Street, add a pedestrian safety zone
extending from the curb, and install high visibility crosswalks with signage and advanced
yield markings

¹⁰ City of Oakland Department of Transportation, Oakland Walks! Issued 2017. https://www.oaklandca.gov/resources/pedestrian-plan-update. Accessed Jul 28, 2022.

- At the intersection of 23rd Avenue and East 15th Street, install advanced yield markings to each minor approach
- Along East 15th Street, restrict parking within 20 feet of intersections and marked crosswalks, and add edge line markings for street narrowing and parking definition

The proposed Project would be consistent with the PMP as it would incorporate features noted for improvement that would enhance pedestrian safety and facilitate pedestrian access to the Project site.

City of Oakland General Plan – Transit First Policy (1996)

The Transit First Policy is Oakland's "Resolution declaring the City of Oakland's Support of Public Transit & Other Alternatives to Single-Occupant Vehicles." The proposed Project is consistent with the Transit First Policy because it is within a half-mile from a Bus Rapid Transit line and other routes.

City of Oakland General Plan – Scenic Highways (1974)

The Scenic Highways Element addresses the preservation and enhancement of attractive roadways and major streets going through the City. 12 The proposed Project is not near roadways that are assigned as part of the existing or future scenic route network.

Central and East Oakland Community-Based Transportation Plan (2007)

This plan was developed by the Alameda County Congestion Management Agency to address an identified need to support local planning efforts in low-income communities throughout the region.¹³

The proposed Project would be consistent with the Central and East Oakland Community-Based Transportation Plan by fostering utilization of the transit lines that connect student and staff population with the Project site.

Oakland Department of Transportation Strategic Plan (2016)

The Oakland Department of Transportation released a strategic plan in 2016¹⁴ to underpin project and operational prioritization and strategy of the brand-new Oakland Department of Transportation. The plan includes 37 goals within the context of four values, and implementable

[&]quot; For more information on the Transit First Policy and how that translates into current action plans undertaken by local agencies, reference the *Transit Action Strategy* developed by AC Transit and City of Oakland Department of Transportation, 2020. https://cao-94612.53.amazonaws.com/documents/OakTAS-Final.pdf. Accessed Aug 4, 2022.

¹² City of Oakland, *Scenic Highways, an Element of the Oakland Comprehensive Plan*. Issued September 1974. https://www.oaklandca.gov/resources/download-the-city-of-oakland-scenic-highways-element. Accessed Aug 4, 2022.

¹³ Almeda County Congestion Management Agency, *Central and East Oakland Community-Based Transportation Plan*. Issued December 2007.

¹⁴ City of Oakland Department of Transportation, *Transportation Strategic Plan*. Issued 2016. https://mtc.ca.gov/sites/default/files/OaklandCBTPFinalPlan%202007.pdf. Accessed Jul 29, 2022.

strategies that support each goal. Two goals of the strategic plan are directly relevant to the Project:

- Provide safe access to all Oakland schools: strategies listed under this goal include
 development of stronger partnerships with the Alameda County Safe Routes to Schools
 program, and regularly updating school walking plans to support safe travel for students.
- Lower transportation costs for Oaklanders: strategies listed in pursuit of this goal include supporting transit subsidies for youth and leveraging public-private partnerships to support the transit needs of low-income residents. A specific mention of school transit passes to overcome cost of transportation to school as a barrier to school attendance and afterschool activities is highlighted in the report.

The Project would be consistent with the strategies presented in the strategic plan by incorporating features that would improve student access to schools and lower transit costs for students.

Americans with Disabilities Act Policy

Compliance with disability access laws is an integral responsibility to provide equitable services to the public. All California building owners and tenants with buildings open to the public fall under requirements of federal Americans with Disabilities Act (ADA) regulations and California Disabled Persons Act laws and must ensure that capital improvements meet these standards. In Oakland, code requirements for meeting these standards of access are described in the Oakland Municipal Code.

The Project would incorporate modifications to the school in accordance with the latest ADA standards and would not conflict with the City ADA policy.

Complete Streets Policy

The Oakland Complete Streets Policy, Resolution Number 84204 C.M.S., declares a policy to further ensure that Oakland streets provide safe and convenient travel options for all users."¹⁵

Off-site improvements initiated by the proposed Project would be in accordance with ADA requirements. The Project would contribute toward infrastructure and programs that facilitate alternative means of transportation, which is consistent with the principles contained in the Complete Streets Policy.

¹⁵ Oakland City Council, *Complete Streets Policy Resolution*. Filed January 2013. http://www2.oaklandnet.com/n/OAK039959. Accessed Jul 28, 2022.

4. VEHICLE-MILES TRAVELED ANALYSIS

4.1. VMT Screening Assessment

In Technical Advisory on Evaluating Transportation Impacts in CEQA, the California OPR includes guidelines for agencies to establish VMT screening thresholds, in order to facilitate rapid identification of projects that are expected to cause a less-than-significant impact. The City of Oakland includes VMT screening criteria in its TIRG. If projects meet any of the City's three screening criteria, they are considered to be "screened-out," and it is presumed that VMT impacts for the project would be less-than-significant, and a detailed VMT analysis is not required for transportation CEQA analysis purposes.

The VMT screening assessment determined that the Project meets the screening criterion for proximity to a transit station. Thus, the Project is considered to cause a less-than-significant impact and is exempt from a detailed CEQA analysis. The results of the VMT screening assessment are displayed in Table 3, and associated description for each screening criteria are included in this section.

Table 1: VMT Screening Analysis Results

Screening Criteria	Screening Criteria Description	Screening Criteria Met?
Small Project	Project generates less than 100 daily vehicle trips	No
Low-VMT Area	Project is located within a low-VMT area	No
Near Transit Station	Project is located within 0.5 mile of major transit stop	Yes

Small Projects Screening

Projects that generate fewer than 100 vehicle trips per day generally may be assumed to cause a less-than-significant transportation impact.

To determine vehicle trip generation, the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* was used to estimate the number of trips the Project would generate. The Trip Generation Manual categorizes rates for various land use types. The analysis applied rates for high schools as the primary land use associated with the Project (Land Use Code 525). Number of enrolled students is utilized as an independent variable that relates to the size of a school and is directly causal for the variation in trips generated. ITE trip generation rate and resulting trips account for all trips generated by the school, including trips made by students, staff, visitors, deliveries, and others. The listed average daily rate is 1.94 vehicle trips per enrolled student. Based on an enrollment cap at BayTech of 350 students, this would result in 679 trips per day, as shown in Table 2.

¹⁶ Institute of Transportation Engineers, *Trip Generation Manual*, 11th edition, 2021.

Table 2: Project Vehicle Trip Generation

	Daily	AM Pea	k Hour Tri	p Rate	PM Peak Hour Trip Rate			
Land Use	Trip Rate	Average Rate	% In	% Out	Average Rate	% In	% Out	
High School (525) ¹	1.94	0.51	68%	32%	0.32	32%	68%	
Dramand Drainet	Daily	AM Pe	AM Peak Hour Trips			PM Peak Hour Trips		
Proposed Project	Trips	Total	ln	Out	Total	In	Out	
Gross Trip Generation	679	179	121	57	112	36	76	
TIRG Vehicle Trip Reduction ² (47%)	(318)	(84)	(57)	(27)	(53)	(17)	(36)	
Net Vehicle Trip Generation	361	95	64	30	59	19	40	

Source: 1. Institute of Transportation Engineers, *Trip Generation Manual, 11th Edition, 2021.* 2. City of Oakland TIRG Mode Split Reduction Factors.

Note: Results based on independent variable value of 350 students. Trip generation results include all trips made by students, staff, visitors, deliveries, and others.

City of Oakland mode share for trips is based on the mode split adjustment factors provided in the TIRG. As the proposed Project at 1445 23rd Avenue is within 0.5 miles from the nearest Bus Rapid Transit (BRT) station at 24th Avenue and International Boulevard, vehicle trips will reduce by 47% to an estimated 53% of the total trips for this context. As shown in Table 2, this results in 361 daily vehicle trips generated by the Project at the 23rd Avenue site. This value exceeds 100 daily vehicle trips, and as a result the Project does not meet the screening criteria for small projects.

Low-VMT Area Screening

Projects located in an area with low VMT as determined by comparison to the thresholds of significance and incorporating similar characteristics of land use and multi-modal transportation accessibility exhibited by the existing built environment, can be presumed to cause a less-than-significant transportation impact. Comparison with the thresholds of significance is made according to the project transportation analysis zone (TAZ). For this Project screening, the BayTech campus is treated as an office use, and VMT per student and staff are used for screening.

Average daily VMT per employee for the region and the proposed Project TAZ based on Alameda County 2020 data¹⁷ is included in Table 3 below.

¹⁷Alameda County Transportation Commission, SB 743 and VMT tool resources. https://www.alamedactc.org/planning/sb743-vmt/. Accessed Jul 28, 2022.

Table 3: Results for Low-VMT Area Screening Criteria

	VMT / Employee		
Project Location	Regional Average	Threshold of Significance	Project TAZ
1445 23 rd Avenue Oakland, CA	15.9	13.5	18.9

Source: Alameda County Transportation Commission, SB 743 and VMT tool resources.

The average daily VMT per worker in the Project TAZ is 18.9 miles, which is above the threshold of significance (15 percent below the regional average) of 13.5 miles. As such, the Project does not meet screening criteria based on location within a low-VMT area.

Near Transit Station Screening

Projects proposed within 0.5 miles of an existing major transit stop or existing stop along a high-quality transit corridor are presumed to have less-than-significant impact on VMT. The 2021 CEQA Statue defines a Major Transit Stop as containing any of the following: 18

- a) An existing rail or bus rapid transit (BRT) station.
- b) A ferry terminal served by either a bus or rail transit service.
- c) The intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

The Project site at 1445 23rd Avenue is located 0.15 miles from the BRT stop at the intersection of International Boulevard and 24th Avenue, well within the distance of 0.5 miles from a major transit stop for screening purposes. BRT buses operate in an exclusive right-of-way, and the concept endeavors to combine the advantages of service frequency, accessibility, safety, and reliability. AC Transit BRT route 1T began service in August 2020, and runs 9.5 miles along International Boulevard, connecting Downtown Oakland through East Oakland to San Leandro. Route 1T BRT operates at a frequency service interval of 10 minutes during daytime hours continually from morning to afternoon peak commute periods²⁰.

City of Oakland guidelines require determination that a less than significant impact presumption for Projects near transit stations is valid by comparison against other VMT generating indicators. If the Project is described by any of the following indicators in Table 4, it is presumed that the Project may still generate significant levels of VMT.

¹⁸CEQA Statue. California Public Resources Code, Division 13, §21064.3. Published Jan 1, 2022.

¹⁹ AC Transit, *East Bay BRT, Revolutionizing Public Transit*. Factsheet issued August 2016. https://www.actransit.org/website/uploads/Factsheet_ENGLISH_Complete.pdf. Accessed Aug 1, 2022.

²⁰ AC Transit 1T Schedule. https://www.actransit.org/bus-lines-schedules/1T. Accessed Aug 1, 2022.

Table 4: VMT Generating Indicators for Near Transit Station VMT Screen

VMT Generating Indicator	Conclusion	Significant VMT Generated?
Floor Area Ratio (FAR) less than 0.75	Approximate combined FAR for all Project parcels is 1.4	No
Project includes more parking than required ²¹	The Project includes parking for 22 vehicles in an existing lot across the street from the main building. BayTech employs 40 staff in maximum enrollment scenario.	No
Inconsistent with Sustainable Communities Strategy ²²	The Project is in a priority development area	No
Retail component greater than 80,000 sf.	There is no retail component to this Project	No

City of Oakland, Transportation Impact Review Guidelines for Land Use Development Projects.

As the nearest BRT station is within 0.5 miles of the Project location, and Project-specific information in Table 4 does not indicate that significant levels of VMT would be generated, this screening criteria for being near a major transit stop is met, and it is determined that the Project would have a less than significant impact on VMT.

²¹ According to City of Oakland Municipal Code §17.116.070, there is no applicable off-street parking requirement for community education facility in the Project's context, though required number of parking spaces may be prescribed by the Director of City Planning based on results of a parking needs analysis.

²² Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area 2014, Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2013-2040.* Adopted July 18, 2013.

6. CEQA PROJECT IMPACTS

Table 5 is a summary of the Project's CEQA determination for each of the criteria that could constitute potential environmental impact. A discussion of each finding follows.

Table 5: CEQA Checklist Impact Determination

Question	CEQA Determination
Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Less Than Significant Impact
Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	Less Than Significant Impact
Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Less Than Significant Impact
Would the project result in inadequate emergency access?	Less Than Significant Impact

TRAF-1 Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Project would relocate an existing charter school from the Eastmont Hills / Oak Knoll-Golf Links neighborhood in the Oakland Hills to an existing vacant theater building in the San Antonio neighborhood in East Oakland. All Project improvements would be made within the existing site with no planned changes to the circulation system.

Ordinances and policies addressing the circulation system in the Project area include:

- Alameda County Congestion Management Program (CMP, 2021) ²⁸ The Project would generate fewer than 100 PM peak hour trips on a roadway segment designated as part of the designated CMP network, which in the project area are International Boulevard and Foothill Boulevard. As such, the Project is not required to develop a Congestion Management Plan CMP) analysis.
- Plan Bay Area 2040 (2013) ²⁹ The Project site is located in a priority development area and is in line with plan objectives for multimodal transportation use.
- City of Oakland General Plan Land Use and Transportation Element (1998) The Project area is identified in the LUTE implementation program as a target area for community

²⁸ Alameda County Transportation Commission, 2021 Congestion Management Program. https://www.alamedactc.org/planning/congestion-management-program/. Accessed Aug 4, 2022.

²⁹ Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area* 2014, *Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area* 2013-2040. Adopted July 18, 2013. https://mtc.ca.gov/planning/long-range-planning/plan-bay-area-2040. Accessed Aug 4, 2022.

and economic development and reuse of under-developed sites for community and economic development. The Project is consistent with the LUTE's seven overarching transportation goals:

- Capitalize on our location. Take full advantage of Oakland's position as a major West Coast transportation hub.
 - The Project location is approximately a half mile away from the I-880 freeways, is approximately 0.10 mile away from two arterial roadways (International and Foothill boulevards), and 0.10 mile away from two high-frequency transit routes (AC Transit Route 1T bus rapid transit (BRT) and Route 40).
- Integrate land use and transportation planning. Integrate transportation and land use planning at the neighborhood, city, and regional levels by developing transitoriented development, where appropriate, at transit and commercial nodes.
 - The Project is located near two existing high-frequency transit routes within an existing dense, mixed use urban area. The Project does not interfere with any planned improvements to the transportation network.
- Reduce congestion. Reduce congestion and improve traffic flow by developing and integrated road system and traffic demand management system that provides an appropriate mix of mobility and accessibility throughout the city.
 - The Project is located near two existing high-frequency transit routes within a dense urban area that allows nearly one half of students and staff to use non-drive modes. The Project's traffic operations analysis forecasts minor increases to vehicle delay as a result of Project vehicle trips.
- o **Promote alternative transportation options**. Reduce dependency on the automobile by providing facilities that support use of transportation modes.
 - The Project is located near between two high-frequency transit routes, including one BRT route, and is integrated into the City's existing bicycle and pedestrian networks. The City's TIRG guidelines forecast that nearly one-half of the Project trips will use non-drive modes.
- **Find funding**. Program and provide adequate funding for needed transportation facilities and services, and related investments.
 - The Project would work with the City and appropriate agencies to determine its cost responsibility for transportation improvements as part of its Transportation and Parking Demand Management Plan (TDMP) as a Standard Condition of Approval.
- Safety. Provide safe streets.

The Project would contributing its fair share toward infrastructure improvements at the East 15th Street / 22nd Avenue intersection that include marking the crosswalks, adding crosswalk warning signs, marking yield lines, adding edge line markings, and installing pedestrian safety zones at each corner.

At the 23rd Avenue / East 15th Street, 23rd Avenue / International Boulevard and East 15th Street / Miller Avenue, the Project would convert the marked crosswalks to yellow school crosswalks. The project would install School Area Warning Signs consistent with the California Manual on Uniform Traffic Control Devices (CA MUTCD).

The Project would coordinate with the City of Oakland to increase the pedestrian crossing time at the International Boulevard / Miller Avenue intersection.

 Improve the environment. Improve air quality and reduce exposure to traffic noise.

The Project is located near between two high-frequency transit routes, including one BRT route, and is integrated into the City's existing bicycle and pedestrian networks. The City's TIRG guidelines forecast that nearly one-half of the Project trips will use non-drive modes.

Since the Project would not make off-site improvements that would conflict with planned programs, plans, ordinances, or policies related to transportation and circulation in the Project vicinity and would implement the TDM strategies as a Standard Condition of Approval, the Project would result in a less than significant impact.

TRAF-2 Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Based on CEQA Guidelines Section 15064.3, Subdivision (b), vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. Additionally, according to the State of California Governor's Office of Planning and Research (OPR) and the City of Oakland *Transportation Impact Review Guidelines* (TIRG), projects within 0.5 mile of either an existing major transit stop or a stop along an existing high-quality transit corridor is presumed to cause a less-than-significant transportation impact to Vehicle Miles Traveled (VMT). A "high-quality transit corridor" means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

The Project site is located 0.15 miles from an existing stop at 24th Avenue and International Boulevard for AC Transit Bus Rapid Transit (BRT) Route 1T. Thus, the Project would meet the City VMT screening criteria of being located within 0.5 miles of an existing stop on a high-quality transit corridor and is therefore presumed to have a less than significant VMT impact; the project is also exempt from performing a detailed VMT analysis.

The Project would be required to implement a TDM as the peak hour trips are greater than 50. With implementation of the TDM plan (attached), the Project would further reduce any transportation impact to less than significant.

TRAF-3 Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project does not include off-site transportation network design alterations that may potentially increase sharp curves or other geometric hazards. Access to the campus via 22^{ndd} Avenue and East 15th Street would not be affected and no changes to existing city streets would be required. The Project is near other operating schools and does not present an incompatible transportation mode use.

The Project would provide a dedicated loading zone on E 15th Street, which is the Project's minor street frontage. E 15th Street is a local access street that does not have bus service. The overall block of E 15th Street is 650 feet long, which can accommodate 26 queued vehicles. E 15th Street is approximately 44 feet wide; assuming 8 feet for parking on each side of the street, the remaining width for vehicle travel lanes is 28 feet, which exceeds City fire department standards for a 26-foot two-way minimum width.³⁰

The Project's student drop-off and pick-up plan would require Project-related traffic to approach the loading zone on East 15th Street from 22nd Avenue, prohibit drop-off and pick-up from 23rd Avenue, prohibit double parking, and designate staff to assist with operations, among others. Vehicle delay for drivers at the egress intersection, East 15th Street at 23rd Avenue, is forecast to be on average 15 seconds or less per vehicle (LOS "B").

As the Project is not incompatible with the existing Neighborhood Mixed Use Zone land use designation, there are no off-site road geometric design alterations, and vehicle queuing issues associated with pick-up and drop-off will be addressed by Project programs, the Project results in a less-than-significant CEQA impact.

TRAF-4 Would the project result in inadequate emergency access?

Emergency access requirements applicable to the Project are included in the Oakland Fire Code, which adopts the California Fire Code with amendments.³¹ The Project does not include internal on-site drive aisles or circulation improvements that require emergency vehicle access within the Project boundary.

Fire apparatus access to the Project site would be included in the fire safety plan. Potential impacts to roadway emergency access during construction would be addressed through the

³⁰ City of Oakland, Oakland Fire Code. 4907.5 Fire Apparatus Access Roads.

³¹ City of Oakland, Oakland Fire Code.

https://library.municode.com/ca/oakland/codes/code of ordinances?nodeId=TIT15BUCO CH15.12OAFICO. Accessed Aug 23, 2022.

construction traffic control plan. Potential impacts to roadway emergency access during operational periods would be addressed in the pick-up and drop-off procedures. Each of these plans would be reviewed and approved by appropriate City departments.

Since adequate emergency access is required as part of the Oakland Fire Code and Project plans would be reviewed by local fire officials as part of design review, the Project would have a less-than-significant CEQA impact with respect to emergency access.