September 2024 | Addendum to the Eastside Elementary School EIR
State Clearinghouse No. 2021040779

EASTSIDE ELEMENTARY SCHOOL PROJECT

Riverside Unified School District

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1. Introduction

This document is an addendum to the Eastside Elementary School Project certified environmental impact report (EIR) (State Clearinghouse No. 2021040779) certified in September 2023. This Addendum has been prepared in accordance with Section 21166 of the California Environmental Quality Act (CEQA) and Sections 15162 and 15164 of the CEQA Guidelines. The Riverside Unified School District (RUSD or District) is the lead agency that approved the new Neighborhood Elementary School to be located on 13th Street, between Howard Avenue and Victoria Avenue (Approved Project) and certified the Neighborhood Eastside Elementary School EIR (certified EIR). The District is the lead agency for this Addendum to the certified EIR for the proposed improvements at the elementary school. The Modified Project would increase student population on the campus from 800 to 900 students, increase the square footage of the proposed buildings, remove the encroachment on Lincoln Park and upon approval of the City of Riverside, and convert 13th Street to a one-way street with diagonal parking (Modified Project).

1.1 PURPOSE OF AN EIR ADDENDUM

Pursuant to CEQA and the State CEQA Guidelines, this Addendum focuses on whether implementation of the Modified Project would require major revisions to the certified EIR due to the potential for new significant environmental effects or a substantial increase in the severity of previously identified significant effects, pursuant to State CEQA Guidelines Section 15162.

Pursuant to Public Resources Code Section 21166 and Section 15162 of the State CEQA Guidelines, when an EIR has been certified or a negative declaration adopted for a project, no subsequent or supplemental EIR shall be prepared for the project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

(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;

1. Introduction

(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. (CEQA Guidelines § 15162[a])

A supplement to an EIR (supplemental EIR), which is narrower in scope than a subsequent EIR, may be prepared if any of the above criteria apply, but "only minor changes or additions would be necessary to make the previous EIR adequately apply to the project in the changed situation" (CEQA Guidelines § 15163(a)). In the absence of the need to prepare either a subsequent or supplemental EIR, an addendum to a previously certified EIR may be prepared. Section 15164 states:

(a) The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR 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.

(b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.

(c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.

(d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.

(e) 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, the lead agency's findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence. (CEQA Guidelines § 15164)

This Addendum demonstrates that the Modified Project would not result in any of the conditions outlined in CEQA Guidelines Sections 15162(a)(1)-(3) as the proposed changes would not constitute substantial changes that would require major revisions to the certified EIR and would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects requiring major revisions to the certified EIR. This Addendum demonstrates that there are no substantial changes with respect to circumstance that would require major revisions to the certified EIR nor substantially increase the severity of previously identified significant effects. Thus, the impacts of the Modified Project are within the levels and types of environmental impacts disclosed in the certified EIR.

In addition, no information that was not known and could not have been known at the time of the certified EIR preparation has been revealed that shows new or substantially greater significant impacts would result (see CEQA Guidelines § 15162[a][3]). Upon review of the project and consideration of similar projects in the District, there are no new or different mitigation measures that would substantially reduce one or more significant impacts of the Approved Project but that are not adopted. The Modified Project does not identify or require adoption of any further mitigation measures beyond those provided in the certified EIR.

This Addendum provides the substantial evidence required by CEQA Guidelines Section 15164(e) to support the finding that a subsequent nor supplemental EIR are not required, and an addendum to the certified EIR is the appropriate environmental document to address changes associated with the Modified Project. Since this Addendum does not identify new or substantially greater significant impacts, circulation for public review and comment is not necessary (CEQA Guidelines § 15164[c]). The District Board of Education will consider this Addendum at a public meeting together with the previously certified EIR prior to the adoption of the Modified Project (CEQA Guidelines § 15164[d]).

1.2 APPROVED PROJECT

In recent years transitional kinder (TK) to 6th grade students from five independent attendance areas within the City of Riverside's Eastside Neighborhood have attended five surrounding RUSD schools outside of the Eastside Neighborhood, including Pachappa Elementary School, William Howard Taft Elementary School, Castle View Elementary School, Emerson Elementary School, and Magnolia Elementary School. In addition, Henry W. Longfellow Elementary School and Louisa May Alcott Elementary School are partially within the Eastside Neighborhood; however, students attending these schools are not part of RUSD's independent attendance areas. Thus, the majority of students in the Eastside Neighborhood are bused to attend schools outside of their neighborhood. The Approved Project provides a local school for the Eastside Neighborhood and the certified EIR analyzed three options.

All three options would vacate Park Avenue between 13th and 14th Streets, acquire and remove structures on parcels in Block B and C, and construct a school that would serve up to 800 students in TK to 6th grade with approximately 33 classrooms (2 TK classrooms; 4 kindergarten classrooms; 24 classrooms for 1st through 6th grades; two special education classrooms; and one lab). Additionally, all three options also assumed that the existing two historic buildings (the bungalow and the Multipurpose Room) at the southeast corner of Lincoln High School would not be demolished. As shown in Table 1, *Summary of Project Options*, shows a comparison of all three option analyzed in the certified EIR.

On September 14, 2023, the RUSD School Board of Education chose Option 2 for the Approved Project. Therefore, analysis in this EIR Addendum will compare the changes between the Modified Project and Option 2 of the Approved Project.

Table 1 Summary of Project Options

	Option 1	Option 2	Option 3	
Option Description	Acquire Block B and C parcels and clear the land; demolish Lincoln High School; construct elementary school	Acquire Block B and C parcels and clear the land; keep Lincoln High School; construct elementary school; joint-use of Lincoln Park	Acquire Block B and C parcels and clear the land; Construct elementary school; Demo existing Lincoln High School and construct new high school	
Project Site Size	A total of 8.62 acres • 23 Parcels (4.05 acres) • 2 alleyways (0.22 acres) • Lincoln High School (3.9 acres, RUSD-owned) • Park Avenue segment to be vacated (0.45 acres)	A total of 7.07 acres • 23 Parcels (4.05 acres) • 2 alleyways (0.22 acres) • A portion of Lincoln Park (0.78 acres) • A portion of Lincoln High School (1.05 acres, RUSD-owned) • Park Avenue segment to be vacated (0.45 acres) • 13th Street segment to be vacated (0.52 acres)	A total of 8.62 acres • 23 Parcels (4.05 acres) • 2 alleyways (0.22 acres) • Lincoln High School (3.9 acres, RUSD-owned) • Park Avenue segment to be vacated (0.45 acres)	
Total Building Demolition	45,505 sq. ft. (26,167 sf on Blocks B and C + 19,338 sf1 on Lincoln HS)	32,583 sq. ft. (26,167 sf on Block B and C parcels + 3,800 sf of portables on Lincoln HS)	45,505 sq. ft. (26,167 sf on Blocks B and C + 19,338 sf1 on Lincoln HS)	
Total Student Capacity	800 students (TK—6th)	800 students (TK—6th)	800 students (TK—6th)	200 students (Lincoln HS)
New Building Construction	Approx. 61,150 sq. ft.	Approx. 61,150 sq. ft.	Approx. 61,150 sq. ft. (TK—6th)	Approx. 22,200 sq. ft. (Lincoln HS)
TOTAL NEW CONSTRUCTION	**Approx. 61,150 sq. ft.**	**Approx. 61,150 sq. ft.**	**Approx. 83,350 sq. ft.**	

[1] Total square footage to be demolished for Lincoln High School excludes the historic multipurpose room (8,743 sq. ft.) and the historic bungalow (1,973 sq. ft).

1.3 MODIFIED PROJECT

The Modified Project would be constructed in approximately the same location as the Approved Project. The Modified Project would be developed on a total of 6.87 acres as detailed in Table 2, including eight parcels in Blocks B totaling 1.1 acres, 15 parcels in Block C totaling 3.5 acres, 0.49 acres of Park Avenue to be vacated between 13th and 14th Streets, 0.35 acres of 13th Street to be vacated between Howard Avenue and Park Avenue, and a 1.43-acre portion of Lincoln High School, the rest of the Lincoln High School campus would remain as is.

The Modified Project would increase student population on the campus would increase from 800, for the Approved Project, to 900 students. New school building areas would increase from approximately 61,500 square feet, as described in the certified EIR, to approximately 81,600 square feet, and for the proposed two 2-story classroom buildings that would include spaces for administration, food service, media center, visual arts, and fine arts.

Additionally, under the Modified Project, 13th Street would be converted to a one-way direction street, with angled parking created on the southern portion of the street, between Howard Avenue and Park Avenue. The

Modified Project would remove any encroachment to Lincoln Park located to the north of the project site; thus, the entirety of Lincoln Park would remain as is, open to the public without any access restrictions.

1.4 PREVIOUS ENVIRONMENTAL DOCUMENTATION

1.4.1 2023 Environmental Impact Report

On September 14, 2023, the RUSD certified the Eastside Elementary School EIR, as described in Section 1.2, *Approved Project*, that analyzed the impacts of the construction of the Eastside ES campus. The District also adopted a Mitigation Monitoring and Reporting Program (MMRP) and Findings of Fact for the Approved Project.

The Certified EIR determined that the Approved Project would result in less-than-significant impacts with no mitigation with regard to Greenhouse Gas Emissions, Recreation, and Transportation. Additionally, the Certified EIR determined that the Approved Project would require the implementation of mitigation measures to reduce potentially significant impacts to less-than-significant levels for Air Quality, Cultural Resources, Hazardous Materials, Noise, Tribal Cultural Resources. No significant and unavoidable impacts were identified.

1.5 AREAS OF CONTROVERSY

Under the Approved Project, residents of the Eastside Neighborhood expressed concern about the loss of a portion of Lincoln Park under Option 2, and the Project Site's proximity to the Riverside County Transportation Commission (RCTC) Station Improvement project.

1. Introduction

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2. Environmental Setting

2.1 PROJECT LOCATION

The Modified Project would be located in the same location as the Approved Project (see Figure 1, *Regional Location* and Figure 2, *Modified Project Location*), bounded by 14th Street to the south, Howard Avenue to the west, Lincoln High School to the east, and 13th Street and Lincoln Park to the north Figure 3, *Modified Project Site*)(Modified Project Site).

The Modified Project Site would encompass a total of approximately 6.87 acres and would consist of the following properties (see Table 2, *Modified Project Site*):

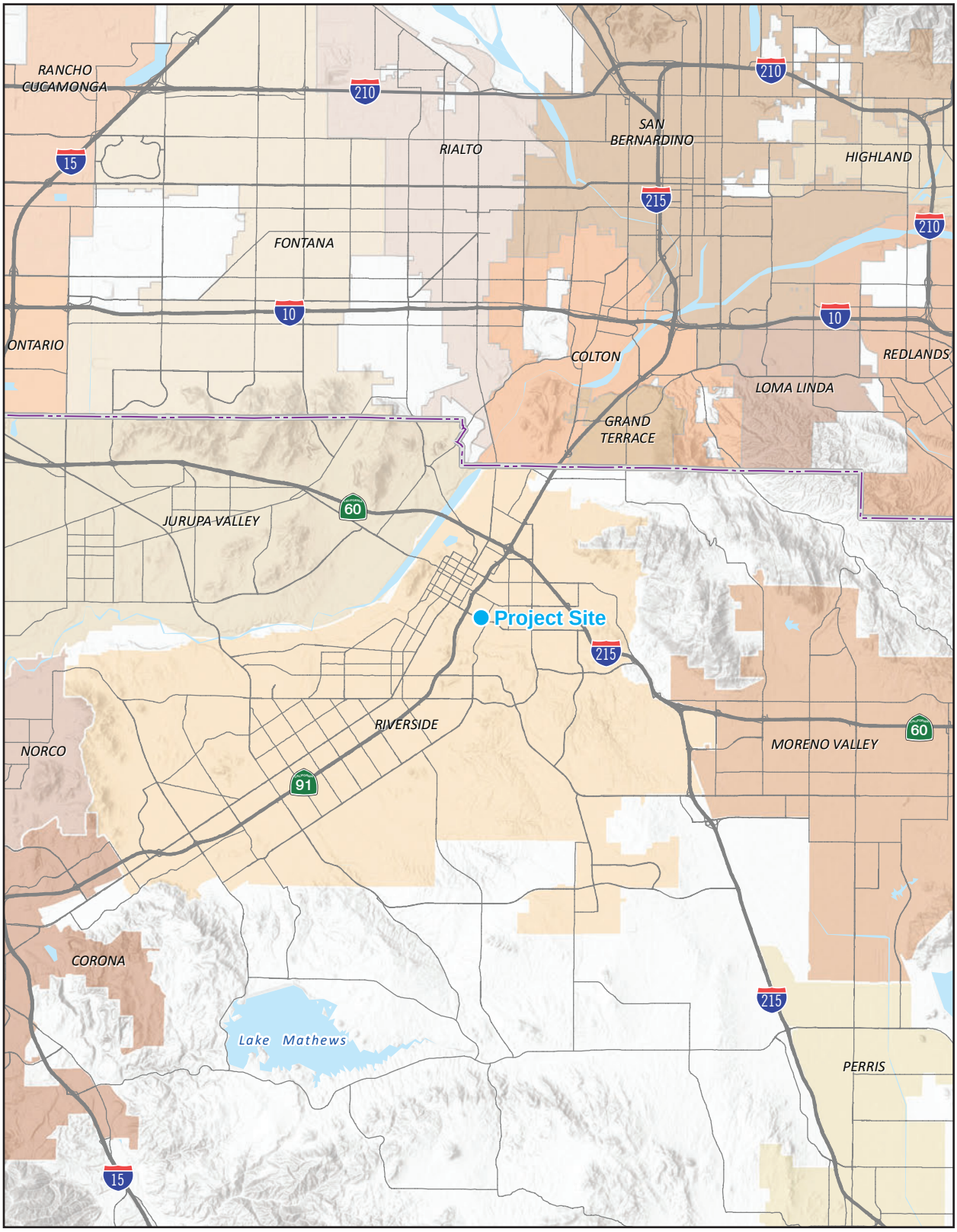
- A portion of Lincoln High School
- Twenty-three individual parcels (8 parcels in Block B and 15 parcels in Block C)
- Two alleyways (one in Block B and one in Block C)
- A segment of Park Avenue
- A segment of 13th Street

Table 2. Modified Project Site

Parcel	Lot Acres	Land Uses	GP/Zoning
Lincoln High School	1.43[a]	RUSD School	PF/PF
Park Avenue (from 13th Street to 14th Street)	0.49	right-of-way	N/A
13th Street (from Park Avenue to Howard Avenue)	0.35	right-of-way	N/A
Block B Parcels	1.1	Vacant, Single-Family Residential, Commercial, and Right-of-way	MDR/R-1-7000 MDR/CR
Block C Parcels	3.5	Vacant, Single-Family Residential, Multi-Family Residential, Commercial, and Right-of-way	C/CR C/R-3-1500 B-OP/R-3-1500 B-OP/CR B-OP/CR & CG C/CG
Total	**6.87**	**--**	**--**

a: 1.43 acres of the total campus (3.9 acres)
General Plan: MDR = Medium Density Residential; PF = Public Facilities/Institutional; P = Public Park; B-OP = Business-Office Park
Zoning: R-1-7000 Single Family Residential; R-3-1500 Multi-family Residential; PF = Public Facilities; CR = Commercial Retail; CF = Commercial General

Figure 1 - Regional Location



County Boundary

Note: Unincorporated county areas are shown in white.

Source: Generated using ArcMap 2024.

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Scale (Miles)

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Figure 2 - Modified Project Location

Source: Generated using ArcMap 2024.

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Figure 3 - Modified Project Site

Modified Project Boundary

Modified Project Boundary (Option 2 Only)

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Scale (Feet)

Source: Nearmap 2024.

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3. Modified Project Description

3.1 DESCRIPTION OF MODIFIED PROJECT

The District has identified two Options for the Modified Project. Option 1 would maintain the boundaries of the Modified Project Site, as shown in Figure 4, *Modified Project – Option 1*. Option 2 of the Modified Project would include the addition of 13th Street between Howard Avenue and Park Avenue, as shown in Figure 5, *Modified Project – Option 2*. For the purpose of this EIR Addendum, Option 2 has been analyzed as the Modified Project, since it would result in the largest impact footprint. Therefore, Option 2 will be herein referred to as the Modified Project.

The Modified Project would be developed on a total of 6.87 acres as detailed in Table 2, including eight parcels in Blocks B totaling 1.1 acres, 15 parcels in Block C totaling 3.5 acres, 0.49 acres of Park Avenue to be vacated between 13th and 14th Streets, 0.35 acres of 13th Street to be vacated between Howard Avenue and Park Avenue, and a 1.43-acre portion of Lincoln High School, the rest of the Lincoln High School campus would remain as is.

The Modified Project would require the acquisition of 4.6 acres within the Modified Project Site, compared to 4.05 acres of the Approved Project, and joint-use of a portion of Lincoln High School. As shown in Figures 4 and 5, the eastern portion of the Modified Project Site (east of the vacated Park Avenue) would include hardtop basketball courts, sports fields, and a play area on the east side of the campus that would be shared with Lincoln High School. The western portion of the Modified Project Site (west of the vacated Park Avenue) would include new elementary school buildings for grade TK- 6th, a lunch shelter, a transitional kinder and kindergarten playfield with an outdoor maker space, an amphitheater, and a parking lot and parent drop-off area along 13th Street.

3.1.1 Student Population

Student population on the campus would increase from 800, for the Approved Project, to 900 students for the Modified Project.

3.1.2 Proposed Building

New school building areas would increase from approximately 61,500 square feet, as described in the certified EIR, to approximately 81,600 square feet, and consist of two 2-story classroom buildings for 1st to 6th grades and transitional kinder and kindergarten as well as spaces for administration, food service, media center, visual arts, and fine arts.

3.1.3 13th Street

Under the Modified Project, 13th Street would be converted to a one-way direction street, with angled parking created on the southern portion of the street (see Figure 5), between Howard Avenue and Park Avenue.

3.1.4 Lincoln Park

The Modified Project would no longer require the acquisition of portion of Lincoln Park (approximately 0.78 acres) for joint-use turf playfields. The entirety of Lincoln Park (3.26 acres) would remain as is, open to the public without any access restrictions.

3.2 ACCESS, CIRCULATION, AND PARKING

As described in Section 3.1.3, *13th Street*, above, under the Modified Project, 13th Street would be converted to a one-way street, between Howard Avenue and Park Avenue, with parking on the southern side of the street.

The Approved Project included a total of 57 parking spaces on the Project Site. The Modified Project would include one parking lot located along the 13th Street that would contain approximately 19 total parking spaces within the staff parking lot that would include 13 standard parking stalls, two electric vehicle (EV) capable parking spaces, two EV capable spaces with EVSE (Future EVCS), one Van ADA accessible parking stall, and one ADA parking stall. The visitors parking lot will contain 38 total parking spaces including 26 standard parking stalls, four EV capable parking Spaces, six EV capable spaces with EVSE (Future EVCS), one Van ADA accessible parking stall, and one ADA parking stall. Additionally 17 angled parking spaces would be added along 13th Street (see Figure 5). The Modified Project would also include a two-lane parent drop-off area along the norther portion of the campus, that would be accessible via 13th Steet.

3.3 CONSTRUCTION

The Modified Project would be constructed in one phase, which would last approximately 20 months, from October 2025 to June 2027. Similar to the Approved Project, construction activities would include building and vegetation removal, site preparation and rough grading, utility trenching, fine grading, building construction, architectural coating, asphalt paving, finishing, and landscaping.

- **Demolition.** Buildings and vegetation would be removed as each parcel is acquired.
- **Grading.** When all parcels are acquired, the entire site would be graded flat.
- **Utility Trenching.** Utility trenches would be excavated, and utility pipes and cables would be laid in trenches and connected to existing lines. The maximum depth of trenching for storm drains and sewers would be about 8 feet.
- **Construction.** Permanent buildings would be constructed on-site.

- **Asphalt and Concrete.** Paving and off-site street work for parking lots, hardcourts, walkways, road widening, and curb and gutter.
- **Architectural Coating.** Inside and outside building painting.
- **Finishing and Landscaping.** Indoor finishing work such as installing of carpet, utilities and telecommunications, furniture; outdoor installation of landscaping and field.

3.3.1 CONSTRUCTION BEST MANAGEMENT PRACTICES

The RUSD requires its construction contractors to comply with all applicable rules and regulations in carrying out the construction of the Modified Project. Project construction would also comply with the RUSD construction best management practices, which are established and refined as part of the RUSD's current building efforts.

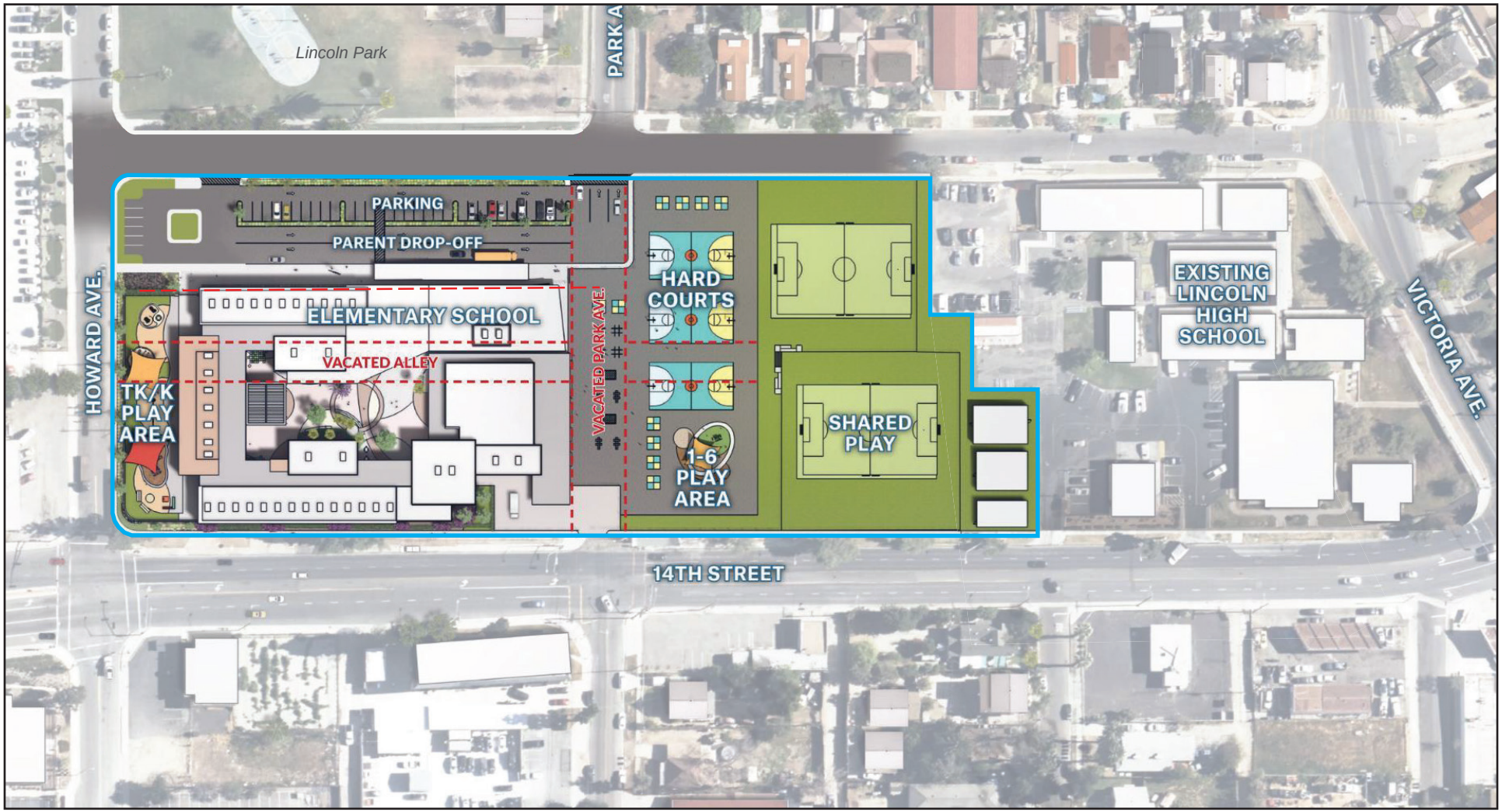
The RUSD requires its contractors to submit a worksite traffic control plan to the City of Riverside Public Works Department for review prior to construction. The plan would show the location of haul routes, construction hours, protective devices, warning signs, and access to abutting properties.

3.4 PROJECT APPROVALS

The EIR Addendum is intended to evaluate the environmental impacts of the Modified Project, thereby enabling RUSD and other responsible agencies to make informed decisions with respect to the proposed project. The anticipated approvals required for this project are:

Lead Agency	Action
Riverside Unified School District	Adopt the Environmental Impact Report Addendum and Mitigation Monitoring and Reporting Program; Approve project design and budget; Exempt the modified project site from local zoning pursuant to Government Code Section 53094.
Responsible Agencies	**Action**
City of Riverside Fire Department	Approval of plans for emergency access and emergency evacuation. DSA approval of the fire/life safety portion of a project requires local fire authority review of elevator/stair access for emergency rescue and patient transport; access roads, fire lane markings, pavers, and gate entrances; fire hydrant location and distribution; and fire flow (location of post indicator valve, fire department connection, and detector check valve assembly).
City of Riverside Engineering Services	Permit for curb, gutter, and other off-site improvements; Approval of construction-related haul route.
City of Riverside City Council	Final approval for entitlements to vacate Park Avenue, 13th Street and alleyways.
Department of the State Architect (DSA)	Approval of construction plans

Figure 4 - Modified Project – Option 1



Modified Project Boundary

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Scale (Feet)

Source: PBK Architects 2024.

3. Project Description

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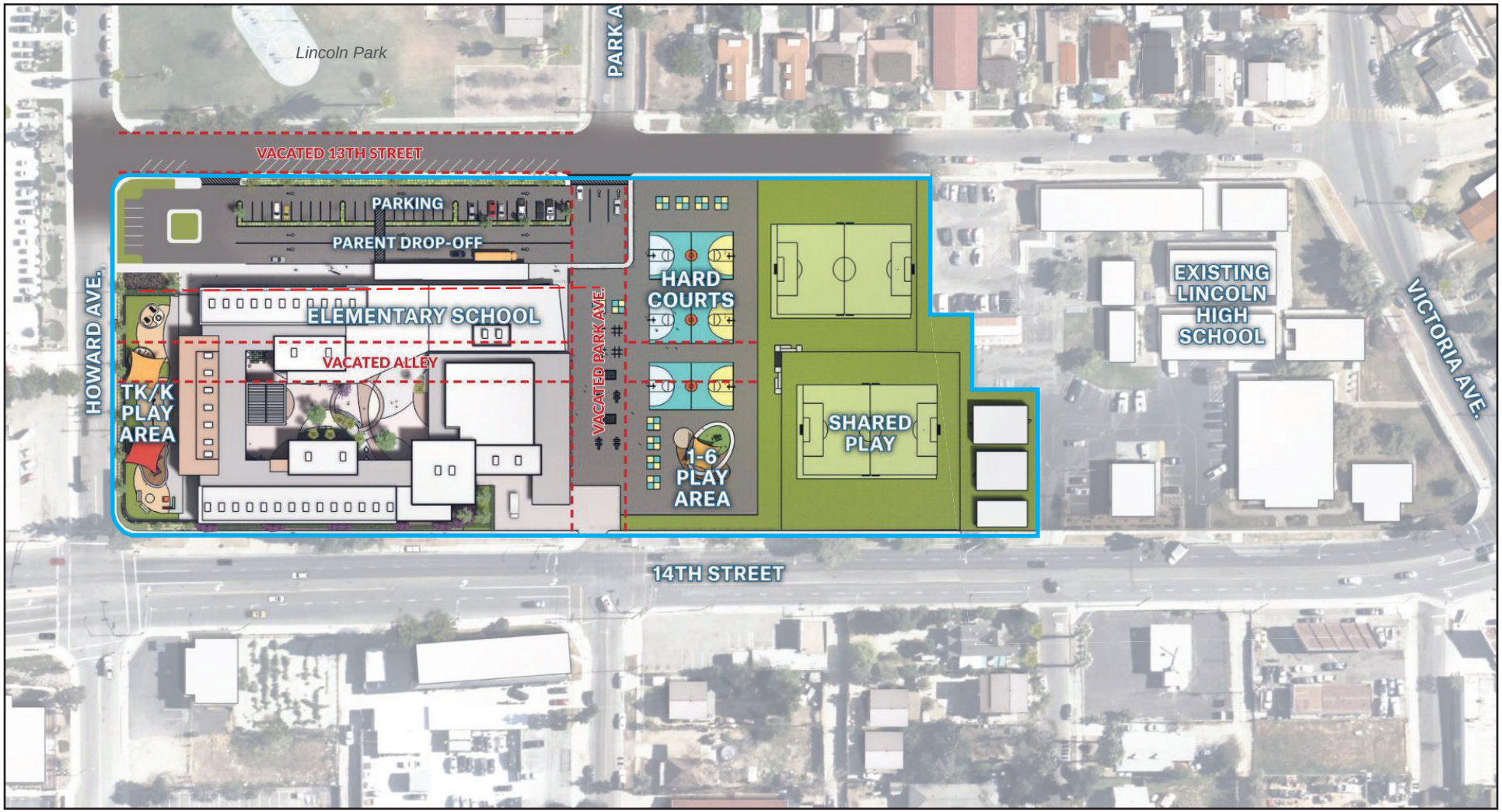
Figure 5 - Modified Project – Option 2



Modified Project Boundary

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Scale (Feet)

Source: PBK Architects 2024.

3. Project Description

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4. Environmental Analysis

4.1 CONDITIONS

The section briefly summarizes the conclusions of the certified EIR and discusses three conditions pursuant to CEQA Guidelines Section 15162 for impacts to biological resources:

> **Condition 1.** Whether or not the Modified Project represents a substantial change that will require major revisions to the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
>
> **Condition 2.** Whether or not substantial changes in the circumstances under which the Modified Project is being undertaken will require major revisions to the certified EIR due to new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
>
> **Condition 3.** If new information shows that the Modified Project would have one or more new significant effects; that significant effects would be substantially more severe than previously described; that mitigation measures or alternatives previously found not to be feasible would be feasible and substantially reduce impacts, but project proponents decline to adopt them; or that new or previously rejected mitigation measures or alternatives would be feasible and would substantially reduce one or more project impacts, but project proponents decline to adopt them.

If none of the above conditions are met, the analysis identifies where impacts of the Modified Project would not require major revisions to the certified EIR or substantially increase the severity of previously identified significant effects that would trigger the need to prepare a subsequent or supplemental EIR under Sections 15162(a) and 15163(a).

4.2 AIR QUALITY

The analysis in Section 4.2, *Air Quality,* is based in part on the following technical report:

- Eastside Elementary School Addendum Air Quality and Greenhouse Gas Emissions Analysis, PlaceWorks, August, 2024. (A complete copy of this report is included in Appendix A).

4.2.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.

AQ-2 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.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

4.2.2 Summary of Impacts Identified in the EIR

The certified EIR determined that the Approved Project would not conflict or obstruct to implementation of South Coast Air Quality Management District's (AQMD) 2022 Air Quality Management Plan (AQMP. The Approved Project did not require a land use change, nor would it have exceeded the regional growth projections beyond what was accounted for within the 2022 AQMP. Additionally, criteria air pollutant emissions associated with construction of the Approved Project[1] were determined to not exceed the South Coast AQMD threshold criteria and therefore were considered less than significant. Long-term operational emissions of the Approved Project[2] when compared to existing conditions did not exceed South AQMD's operation-related regional emissions thresholds and were also considered less than significant.

The certified EIR compared the Approved Project's maximum daily construction emissions to the South Coast AQMD's Construction-Phase Localized Significance Thresholds (LSTs) and determined that the Approved Project would not exceed the applicable LSTs. The certified EIR also conducted a construction risk health risk assessment which concluded that construction activities associated with the Approved Project would result in an increased cancer risk for off-site receptors that exceeds South Coast AQMD's 10 in a million-significance threshold. Mitigation Measure AQ-1 was incorporated to require the use of construction equipment that meets Tier 4 Interim emissions standards for engines over 50 horsepower. This mitigation measure would have

[1] The Certified EIR modeled the construction emissions associated with Option 3 under the Approved Project because this option represented the most intensive buildout scenario among those proposed.

[2] The Certified EIR modeled the operational emissions of Option 2 under the Approved Project because this option would have resulted in the greatest net increase in daily vehicle trips.

reduced the potential impacts associated with construction health risk to below the South Coast AQMD cancer risk threshold, mitigating impacts to less than significant.

Furthermore, the Approved Project was determined to have less than significant localized air quality impacts associated with operational activities. The Approved Project did not include land uses that would generate substantial quantities of criteria air pollutants and toxic air contaminants (TACs) nor would its net increase in peak trips exceed the number of peak-hour vehicle trips needed to generate a significant CO hotspot at nearby intersections. The certified EIR also determined that the Approved Project would not result in odor impacts and that adherence to South Coast AQMD Rule 402 would minimize and provide control for potential odors associated with construction and operational activities.

4.2.3 Impacts Associated with the Modified Project

Would the Modified Project:

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. A consistency determination with an AQMP plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in an AQMP. South Coast AQMD is responsible for developing the AQMP for the South Coast Air Basin (SoCAB) region. The certified EIR did not identify any significant impacts related to consistency with the AQMP.

The South Coast AQMD adopted the 2022 AQMP on December 2, 2022. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations included in city/county general plans. Projects that are consistent with the local general plan are considered consistent with the air quality–related regional plan. Changes in population, housing, or employment growth projections have the potential to affect SCAG's demographic projections, and therefore the assumptions in AQMPs prepared for the region. The Approved Project did not involve a general plan amendment or zoning change. The certified EIR also noted that the Approved Project's contribution to population growth was within SCAG's forecast growth projections for the area. The student population under the Approved Project was anticipated to be 800 students which would increase to 900 students under the Modified Project. Like the Approved Project, the Modified Project would not involve a land use change. Additionally, neither the Approved Project nor the Modified Project would induce population growth since they are intended to serve the existing student-age population in the Eastside Neighborhood that are currently bused to attend to different schools within the District. The additional students under the Modified Project would therefore not directly result in population growth that would exceed the demographic projections used for the 2022 AQMP.

Additionally, as demonstrated in Sections 4.2(b) and 4.2(c), the Modified Project would not result in a substantial increase in construction or operation-phase emissions compared to what was previously analyzed in the certified EIR. Therefore, the Modified Project would be consistent with the 2022 AQMP and its implementation is not anticipated to result in new or increase the severity of impacts pertaining to consistency with the 2022 AQMP when compared to the Approved Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the Modified Project.

Regional Short-Term Construction Impacts

Construction of the Approved Project was anticipated to generate criteria air pollutants associated with construction equipment exhaust and fugitive dust from demolition and debris haul, grading and soil haul, utilities trenching, building construction, architectural coating, pavement of asphalt and non-asphalt surfaces, and finishing and landscaping of the Modified Project Site. The Modified Project would involve the same activities and air pollutant sources during construction. However, as shown in Table 3, *Approved Project and Modified Project Construction Assumptions Comparison*, the Modified Project includes minor changes to the construction plans. While the land use of the Approved Project modeled in the certified EIR is less than that of the Modified Project, the proposed soil haul activities under the Modified Project are more intensive than that of the Approved Project, resulting in an approximately 150-percent increase in maximum daily haul truck trips when compared against the Approved Project.

Table 3 Approved Project and Modified Project Construction Assumptions Comparison

	Approved Project	Modified Project
Building Square Footage	83,350 SF[1]	81,600 SF
Construction Schedule	January 2026-July 2028 (662 workdays)	October 2025-June 2027 (455 workdays)
Demolition Volume	5,737 tons	2,259 tons
Demolition Maximum Daily Haul Trips	14 trips	9 trips
Soil Hauling Volume	68 cubic yards	7,000 cubic yards
Maximum Daily Soil Haul Trips	9 trips	23 trips

Source: PlaceWorks 2023 (Appendix A)
[1] 83,350 square feet is the building square footage assumed under Option 3 of the Approved Project. As the most intensive option of the three under the Approved Project, this square footage was used for the modeling of the AQ/GHG emissions in the Certified EIR.

As shown in Table 3, the Modified Project would result in more intensive soil hauling activities when compared Approved Project. The soil hauling quantity modeled for the Approved Project was an export of 68 cubic yards of material while the Modified Project is projected to require an import of approximately 7,000 cubic yards of soil during grading activities. However, because the Approved Project was projected to haul soil over one day

and the Modified Project is projected to haul soil over 30 days, the maximum daily hauling trips would only increase by 14 trips between the Approved Project and the Modified Project. As shown in Table 5.1-10, *Maximum Daily Regional Construction Emissions*, of the Certified EIR, soil haul activities of the Approved Project would generate minimal daily criteria air pollutants except for NOx, which would result in 26 pounds of NOx per day. Because the emission source during soil hauling activities are the hauling trucks and the Modified Project would result in an approximately 150-percent increase in daily soil hauling trips, the Modified Project is expected to generate approximately 65 pounds of NOx per day. As the South Coast AQMD significance threshold for construction-related NOx emissions is 100 pounds per day, soil haul associated with the Modified Project would not cause construction to exceed significance thresholds.

Since the maximum buildout of the Approved Project would have resulted in approximately 1,850 more building square feet than the Modified Project, the phases that concern the construction of the on-site buildings and utilities are expected to result in a similar or lower level of activity intensity for the Modified Project when compared to the Approved Project. Additionally, the District would use Tier 4 construction equipment for the Modified Project, consistent with Mitigation Measure AQ-1 of the certified EIR. Because construction of the Modified Project would result in similar activities to and 1,850 less building square feet than that analyzed in the certified EIR and soil hauling of the Modified Project would not exceed the South Coast AQMD significance thresholds, construction emissions associated with the Modified Project would be less than significant. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Long-Term Operation-Related Air Quality Impact

Typical long-term air pollutant emissions are generated by area sources (e.g., landscape fuel use, aerosols, architectural coatings, and asphalt pavement), energy use (natural gas), and mobile sources (i.e., on-road vehicles). As discussed above, the total building square footage under the Modified Project would be less than the most intensive option, Option 3, under the Approved Project, which was used for the modeling of construction criteria air pollutant emissions in the certified EIR. However, the Certified EIR analyzed the worst-case option for operation, Options 2 and 3, which would result in approximately 83,150 square feet of building space. Because Modified Project would result in the operation of 83,100 building square feet, operational emissions for area source emissions and energy use are expected to be less than those of the Approved Project.

The Modified Project would, however, result in an increase of 100 students when compared to the Approved Project, which would contribute to an increase in mobile source emissions. As discussed in the TIA prepared for the Modified Project (see Appendix C), the 900 students that would attend the new elementary school under the Modified Project would generate 2,040 average daily trips (ADT) (Garland and Associates 2024). The Certified EIR assumed a total of 1,820 ADT associated with the 800 students under the Approved Project. Table 4, *Comparison of Mobile Source Emissions Between Approved Project and Modified Project*, compares the mobile source emissions that were modeled in the Certified EIR to the mobile source emissions from the 2,040 trips associated with the Modified Project. The mobile source emissions of the Modified Project were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1 and utilized the same transportation behavior assumptions as those considered in the Certified EIR, such as trip lengths and share

of trip types. As shown in Table 4, the Modified Project, would not result in emissions that exceed the South Coast AQMD regional operation-phase significance thresholds. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Table 4 Comparison of Mobile Source Emissions Between Approved Project and Modified Project

Sources	Operation-Related Regional Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Approved Project						
Area	2	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	7	5	72	<1	19	5
Total	**9**	**5**	**72**	**<1**	**19**	**5**
Modified Project[1]						
Mobile	9	8	97	<1	23	6
Total[2]	**11**	**9**	**97**	**<1**	**23**	**6**
South Coast AQMD Regional Thresholds	55	55	550	150	150	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod Version 2022.1.1.26; PlaceWorks 2023 (see Table 5.1-11)
[1] The default trip lengths and share of trip types were adjusted to match the inputs used within the modeling of the Approved Project (see Appendix B of the Certified EIR)
[2] The total for the Modified Project incorporates the area and energy source emissions modeled under the Approved Project and the mobile source emissions modeled under the Modified Project.

c) Expose sensitive receptors to substantial pollutant concentrations.

Less Than Significant Impacts with Mitigation Incorporated/ No Changes or New Information Requiring Preparation of an EIR. Like the Approved Project, the Modified Project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

Construction LSTs

Localized significance thresholds (LSTs) are based on the California AAQS, which are the most stringent AAQS to provide a margin of safety in the protection of public health and welfare. They are designated to protect sensitive receptors most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and people engaged in strenuous work or exercise. The screening-level construction LSTs are based on the size of the Project Site, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). To assess localized air quality impacts, the certified EIR compared the construction emissions associated with the Approved project to the applicable LSTs in SRA 23.

The certified EIR found that the Approved Project would not generate construction-related on-site emissions that would exceed the screening-level LSTs and concluded that localized air quality impacts from construction activities would be less than significant. As discussed above, the Modified Project is projected to increase

emissions during soil hauling activities; however, the emissions from this activity are generated from off-site hauling trucks and would not contribute substantially to on-site emissions. Therefore, the Modified Project would not result in an increase in localized air pollutant concentrations when compared against the Approved Project. Localized air quality impacts from the Modified Project's construction activities would be less than significant. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Construction Health Risk

Because the Approved Project would elevate concentrations of TACs in the vicinity of sensitive land uses during construction activities, the certified EIR conducted a health risk assessment (HRA) (included as Appendix C to the certified EIR) that quantified the potential health risks to the single-family residences to the north, east, and south of the Modified Project Site. The HRA concluded that the cancer risk for the maximum exposed individual resident from construction activities would exceed the 10 in a million-significance threshold, resulting in potentially significant impacts with respect to health risk. As a result, the Approved Project incorporated Mitigation Measure AQ-1 which required the use of construction equipment that meets the Tier 4 Interim emission standards. With incorporation of Mitigation Measure AQ-1, the cancer risk associated with the Approved Project was reduced to below the South Coast AQMD threshold, reducing the impact to less than significant with mitigation.

As discussed above, construction emissions under the Modified Project would be similar to those of the Approved Project and therefore could also contribute to a health risk impact. However, the Modified Project would use construction equipment that meets Tier 4 emission control standards through implementation of Mitigation Measure AQ-1. Due to the Modified Project's projected use of Tier 4 engines during construction, the Modified Project is anticipated to result in the same health risk to nearby receptors as the Approved Project. Thus, impacts would be less than significant under the Modified Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Operational Phase LSTs

Types of land uses that typically generate substantial quantities of criteria air pollutants and toxic air contaminants (TAC) include industrial (stationary sources) and warehousing (truck idling) land uses. Like the Approved Project, the Modified Project would construct a new elementary school at the Modified Project Site which is a land use that does not typically generate a high or substantial number of truck trips. Operation of both versions of the project would include emissions from stationary and area sources like energy use (natural gas used for cooking and water heating) and landscaping fuel and aerosols. As discussed under Section 4.2(a), the Modified Project is anticipated to result in similar emissions from area and energy sources when compared to the Approved Project due to the similar sizes of the respective projects. Therefore, the Modified Project would not result in new land uses that would generate substantial concentrations of criteria air pollutant emissions. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would

be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

CO Hotspots

Vehicle congestion has the potential to create pockets of CO called hotspots. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles are backed-up and idle for longer periods and are subject to reduced speeds. These pockets could exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. However, because neither the Approved Project nor the Modified Project would constitute land uses or activities that are major CO generators, and because South Coast AQMD does not have adopted screening criteria to determine whether a CO hotspot could result from implementation of the Modified Project, methodology from the Bay Area Air Quality Management District (BAAQMD) was utilized in this analysis. According to BAAQMD, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—to generate a significant CO impact (BAAQMD 2017). The Certified EIR noted that the Approved Project would generate a net increase of 559 AM peak-hour trips which was determined to not have the potential to generate a CO hotspot.

According to the TIA conducted for the Modified Project, the project would result in a net increase of 633 AM peak-hour trips above existing conditions. The City Riverside conducted 24-Hour traffic volume counts at the intersection of Howard Avenue and 14th Street, which experiences the highest traffic volumes in the project vicinity with 19,683 daily trips (City of Riverside 2023). Utilizing the industry standard of dividing daily vehicle trips by 10 to identify an estimated peak-hour volume, this intersection would experience approximately 1,968 peak hour trips. The Modified Project's increase of 633 AM peak hour trips to the Modified Project Site would result in a cumulative 2,601 peak-hour vehicle trips, which is below BAAQMD's screening criteria. Therefore, the Modified Project would not generate a CO hotspot at this intersection or other nearby intersections in the Eastside Neighborhood. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Nuisance odors from land uses in the SoCAB are regulated under South Coast AQMD Rule 402, *Nuisance*, which prohibits the discharge of air contaminants cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. The certified EIR identified that the Approved Project would not handle large amounts of solid waste, chemicals associated with heavy industry, or other uses that would generate objectionable odors and that no significant odor impacts would occur. Similarly, the Modified Project would not result in new activities or new land uses that would change the odor evaluation in the certified EIR. Emissions from construction equipment, such as diesel exhaust and from volatile organic compounds

associated with architectural coatings and paving activities, may generate odors. However, these odors would be temporary and intermittent, and are not expected to affect a substantial number of people. In addition, similar to the Approved Project, land uses accommodated under the Modified Project would be subject to South Coast AQMD Rule 402, which would contribute to minimizing odor-related nuisances.

Compared to the land uses considered in the certified EIR, the types of land uses accommodated under the Modified Project would result in similar construction odors. It is not anticipated that the Modified Project would introduce or require any new construction processes that would generate substantial odors compared with what was previously considered in the Certified EIR. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.2.4 Mitigation Measures Identified in the Certified EIR

The following air quality mitigation measure was taken directly from the certified EIR and would be implemented for and applied to the Modified Project. This mitigation measure has been incorporated into the Mitigation Monitoring Program for this Addendum and has been incorporated as follows:

AQ-1 Construction activities at the Project Site shall specify use of off-road equipment that meets the United States Environmental Protection Agency (US EPA) Tier 4 interim emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated that such equipment is not available. In the event the equipment is not available, as demonstrated by the contractor, Tier 3 equipment retrofitted with a California Air Resources Board's (CARB) Level 3 Verified Diesel Emissions Control Strategy (VDECS) shall be used. The following shall be specified in the construction bid:

- Construction contractors shall use engines that meet US EPA Tier 4 Interim emission standards for equipment over 50 horsepower.
- Construction contractors shall maintain a list of all operating equipment in use on the Project Site in use for more than 20 hours for verification by the District. The construction equipment list shall state the makes, models, and number of construction equipment on-site.
- Construction contractors shall ensure that all equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations.
- Construction contractors shall communicate with all sub-contractors in contracts and construction documents that all non-essential idling of construction equipment is restricted to five minutes or less in compliance with CARB Rule 2449. Construction contractors shall be responsible for ensuring that this requirement is met.

Applicability: Compliance with Mitigation Measure AQ-1 would still occur.

4.3 CULTURAL RESOURCES

4.3.1 Thresholds of Significance

C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.

C-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

4.3.2 Summary of Impacts Identified in the EIR

The Certified EIR identified one property at 4343 Park Avenue (Wiley-Williams House) that is eligible for listing in the California Register of Historical Resources (CRHR) and the National Register of Historic Places (NRHP) under Criterion A/1:Event and Criterion A/3; Architecture. The Approved Project would require the demolition, destruction, or relocation of the property; thus, the Certified EIR concluded that the Approve Project would result in a potentially significant impact to historical resources.

Additional historical resources near the Project Site would not require demolition, destruction, or relocation of the properties, including Irving Elementary School Kindergarten Building and the Irving Elementary School Assembly Building (City of Riverside Landmark #96) which are eligible individually for listing in the CRHR and NRHP. However, the Approved Project could alter these buildings or their immediate surroundings. To mitigate impacts to historical resources, the certified EIR implemented Mitigation Measures CUL-1 through CUL-12. However, Option 2 of the Approved Project would not impact these buildings at all.

Mitigation Measures CUL-8 through CUL-12 would be implemented, including documentation, recordation through a historic resources report and photographs, and opportunities to harvest historic materials from the Wiley-Williams House. However, even with the implementation of these measures, the demolition of the historic 4343 Park Avenue property would not be mitigated, resulting in a significant and unavoidable impact to this historic resource.

Although no archaeological resources were identified during the survey and records search, the Project Site contains undeveloped parcels, and many of the constructions occurred before the implementation of CEQA. As a result, there is a possibility of unanticipated and accidental archaeological discoveries during ground-disturbing activities. Thus, the certified EIR would require the implementation of Mitigation Measure CUL-13 to reduce impacts to less-than-significant levels.

In the event of an accidental discovery of human remains, the Approved Project would comply with existing laws that mandate specific procedures be followed, ensuring that impacts on human remains would not be significant. No Mitigation Measures were implemented, and impacts were considered less than significant.

According to the certified EIR, no known paleontological resources have been recorded within the city limits in recent years; however, fossils are known to occur in Pleistocene-age geological formations, and the Project Site and surrounding area have surficial sediments from the late to middle Pleistocene age. Therefore, ground-disturbing activities in these alluvial deposits may yield paleontological resources, necessitating close monitoring and mitigation measures to avoid adverse impacts. Thus, the certified EIR would require the implementation of Mitigation Measure CUL-14 to reduce impacts to less-than-significant levels.

Cumulatively, the Approved Project, along with other projects in the City of Riverside, including the Riverside County Transportation Commission's proposed Riverside Downtown Station Improvement Project, could result in the removal of historical resources within the Eastside Neighborhood. Even with the implementation of mitigation measures, project impacts would result in significant and unavoidable impacts on historic resources. However, for archaeological and paleontological resources, site-specific mitigation measures would reduce impacts to less-than-significant levels, and no cumulatively significant impacts would remain.

4.3.3 Impacts Associated with the Modified Project

Would the Modified Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.

Potentially Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that the Approved Project would result in potentially significant impacts to historical resources. As described above, the Approved Project would require the physical demolition, destruction, or relocation of the property at 4343 Park Avenue (Wiley-Williams House), a historic resource.

Demolition, destruction, or relocation would also be required under the Modified Project. Thus, Mitigation Measures CUL-1 through CUL-12 would still be implemented of the Modified Project, specifically, CUL-8 through CUL-12, which would reduce impacts to the property at 4343 Park Avenue. However, similar to the Approved Project, even with the implementation of CUL-1 through CUL-12, impacts would be significant and unavoidable.

Under the Modified Project, no physical demolition, destruction, or relocation of the Irving Elementary School Kindergarten Building and the Irving Elementary School Assembly Building. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR . The certified EIR determined that no evidence of archaeological materials was observed during the pedestrian survey, done March 3 and March 15, 2021, nor during the records search conducted on February 9, 2021.

However, the Modified Project Site has never been fully assessed for the presence or absence of archaeological remains and impacts were considered potentially significant. Thus, the certified EIR required the implementation of Mitigation Measure CUL-13, to reduce potential impacts to archaeological resource to less-than-significant levels. Mitigation Measure CUL-13 will require the District to retain a construction contractor that would monitor all construction activities. If buried cultural resources are discovered during earth-disturbing activities, operations would stop in the immediate vicinity of the find, and a qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology would be consulted to determine whether the resource requires further study.

To ensure that impacts of the Modified Project remain less than significant, similar to the Approved Project, Mitigation Measure CUL-13 would be implemented. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

c) Disturb any human remains, including those interred outside of dedicated cemeteries.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that in the event of an accidental discovery, the process for investigation of potential human remains found in California Health and Safety Code, Section 7050.5; CEQA Section 15064.5; and PRC Section 5097.98 would be followed. The Modified Project would be required to comply with all state codes and guidelines. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR..

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that no known paleontological resources have been recorded in the recent years within the city limits; however, fossils are known to occur in unknown geologic formation of Pleistocene age, and the surficial sediments at the Modified Project Site and surrounding area are from the late to middle Pleistocene age. Ground-disturbing activities in the Pleistocene age alluvial deposits may yield paleontological resources, and any substantial excavation in these geologic formations shall be monitored closely to recover any fossil remains while not impeding development. Thus, the certified EIR would require the implementation of Mitigation Measure CUL-14. Mitigation Measure CUL-14 will require the District to retain a construction contractor to monitor construction activities for cultural, tribal cultural, and/or paleontological resources and halting work within 50 feet of the discovery.

To ensure that impacts of the Modified Project remain less than significant, similar to the Approved Project, Mitigation Measure CUL-14 would be implemented. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.3.4 Mitigation Measures Identified in the Certified EIR

The following cultural resources mitigation measures were taken directly from the certified EIR and would be implemented for and applied to the Modified Project. These mitigation measures have been incorporated into the Mitigation Monitoring Program for this Addendum and have been modified as applicable to clarify the language and to reflect minor changes caused by the Modified Project. Modifications to the original mitigation measures are identified in ~~strikeout~~ text to indicate deletions and <u>underlined</u> text to indicate additions:

CUL-1 To reduce historical resources impacts from rehabilitation and future use of the Irving Elementary School Kindergarten and Assembly Buildings, the Riverside Unified School District (District), as lead agency, shall appoint a District staff person to be the Project Mitigation Monitor (PMM) while the District undertakes the mitigation measures listed below. The PMM shall notify the President of the Old Riverside Foundation (ORF) and the President of the Riverside County Historical Society (RCHS), by mail and email, of any project activities that would result in a physical change or alteration to the historic buildings at a minimum of 10 business days before such action will occur. The District shall provide ORF and RCHS sufficient information for their review of the proposed actions in adherence to the approved methods of rehabilitation.

CUL-2 Prior to construction, the Riverside Unified School District (District) shall put in place, and maintain protective fencing around the historic buildings to be rehabilitated. The protective fencing shall remain in place at the historic buildings up to and including after the historic buildings have been rehabilitated/renovated and the project Historic Architect/Architectural Historian deems that the fencing can be removed.

CUL-3 Prior to rehabilitation, the Riverside Unified School District shall retain the services of a Historic Architect and/or Architectural Historian who meets the Secretary of the Interior's Standards (SOIS) for Professionals, and has at least 10 years of experience with using the SOIS, to develop a plan for the rehabilitation and/or compatible adaptive reuse of the historic buildings (Irving Elementary School Kindergarten and Assembly Buildings on Lincoln High School). This shall require the use of a historic architect or architectural historian who has experience working with the SOIS to ensure that rehabilitation plans meet the requirements of California Environmental Quality Act.

CUL-4 Prior to undertaking a project to rehabilitate the historic buildings, a Historic Structures Report (HSR) shall be prepared by the project's historic architects or architectural historians to document current conditions of the building (as per National Park Service, Preservation Brief No. 43). An HSR serves to be a working guide for the project holder and rehabilitation team. The HSR can provide a range of rehabilitation concepts (and their costs) that meets Secretary of the Interior's Standards, Historic Building Code, and other life and safety issues based on the building's current conditions.

4. Environmental Analysis

CUL-5 Prior to undertaking a project to rehabilitate the historic buildings, the Riverside Unified School District shall retain the services of a professional photographer, or qualified architectural historian (with experience in documenting historic buildings per National Park Service standards), to create a record of the resource(s) as listed below. Photographs shall be taken to capture a minimum of eight interior and six exterior photographs of each historic resource, and its character-defining features, so that the photographs can be used to document the building(s) in its current condition. The photographic records must be donated to the repositories prior to the alteration, move, or demolition of a historic building.

- Three sets of digital color photographs printed on 5-inch by 7-inch archivally-stable paper. A shot-sheet of the location of where the individual photographs were captured.
- An archivally-stable compact disc (CD) of all digital photographs.
- The photographs shall be labeled in accordance with instructions used for submissions to the Historic American Building Survey program; placed in archivally-stable sleeves; and placed in a binder along with a CD of the digital photographs and shot sheet.
- A history, and physical description of the buildings architecture, shall accompany the photographs in their individual binders.
- Three copies of the photographic record shall be created, with one copy contributed to the Special Collection of UC Riverside Rivera Library, one to the Local History Room at the Main Branch of the City of Riverside Library, and one to the Riverside Metropolitan Museum.

CUL-6 Digital copies of the Historic Structure Report, and all working drawings and plans shall be recorded on CDs, and contributed to the archival repositories named above in Mitigation Measure CUL-5. The digital building records shall be donated to the archival repositories prior to the alteration, move, or demolition of a historic building.

CUL-7 A commemorative brass or aluminum plaque, suitable for noting a building that is eligible for listing in the National Register, shall be set in concrete and embedded in the sidewalk or lawn of the front yard of the building, visible to the public. (Suitable plaques are available from Franklin Bronze Plaques or United State Bronze Plaques.)

CUL-8 To reduce historical resources impacts from demolition of the 4343 Park Avenue property, the Riverside Unified School District (District) shall appoint a District staff person to be the Project Mitigation Monitor (PMM) while RUSD undertakes the mitigation measures listed below. The PMM shall notify the President of the Old Riverside Foundation (ORF) and the President of the Riverside County Historical Society (RCHS), by mail and email, of any project activities that would result in a physical change or alteration to the historic buildings at a minimum of 10 business days before such action will occur. RUSD shall provide ORF and

RCHS sufficient information for their review of the proposed actions in adherence to the approved methods of rehabilitation.

CUL-9 Prior to undertaking a project to demolish the historic building, the project proponents shall retain the services of a professional photographer, or qualified architectural historian (with experience in documenting historic buildings per National Park Service standards), to create a record of the resources. Photographs will be taken to capture a minimum of eight interior and six exterior photographs of each historic resource, and its character-defining features, so that the photographs can be used to document the building(s) in its current condition. Aerial photographs will be captured by drone photography, or from commercially available aerial photography sources, of the historic building within its neighborhood. (Commercially available aerial photographs must have captured the building and its neighborhood within one year of project implementation.) The photographic records shall be donated to the repositories prior to the issuance of any permit for the alteration, move, or demolition of a historic building.

- Three sets of digital color photographs should be printed on 5-inch by 7-inch archivally-stable paper. A shot-sheet of the location of where the individual photographs were captured shall be prepared.
- An archivally-stable compact disc (CD) of all digital photographs shall be created.
- The photographs shall be labeled in accordance with instructions used for submissions to the Historic American Building Survey program; placed in archivally-stable sleeves; and placed in a binder along with a cd of the digital photographs and shot sheet.
- A history and physical description of the building's architecture shall accompany the photographs in their individual binders.
- Three copies of the photographic record shall be created, with one copy contributed to the Special Collection of UC Riverside Rivera Library, one to the Local History Room at the Main Branch of the City of Riverside Library, and one to the Riverside Metropolitan Museum.

CUL-10 Digital copies of the Historic Structure Report, and all working drawings and plans shall be recorded on CDS, and contributed to the archival repositories named above in Mitigation Measure CUL-9. The digital records must be donated to the repositories prior to the issuance of any permit for the alteration, move, or demolition of a historic building.

CUL-11 Prior to historic resources building demolition, interpretive signage or a website shall be created to commemorate the history of the historic resource within its historic context (i.e., history of Wiley-Williams family, history of WPA projects, works of G. Stanley Wilson, Art Moderne architecture, history of Irving School, history of schools in the City of Riverside, and the history of the Eastside Neighborhood). The text and graphic design of the

interpretive sign(s) shall be held by a 24-inch by 36-inch National Park Service quality outdoor, interpretive sign and frame, with text and photographs created by an Architectural Historian. The large sign will be placed in a location where it can be viewed by the general public, possibly along Park Avenue within the boundary of Lincoln Park.

If a website is created it shall be hosted by the Riverside Unified School District for a period no less than 5 years, with search parameters allowing for the public to have access to the information in a simple browser search for history relating to the topics above.

CUL-12 Prior to historic resources building demolition, Old Riverside Foundation (ORF) shall be provided the opportunity to harvest any and all historic material they desire from the building.

CUL-13 During grading and site excavation activities, the construction contractor retained by the Riverside Unified School District (District) shall monitor all construction activities. During earth-disturbing activities, if buried cultural resources are discovered, operations shall stop in the immediate vicinity of the find, and a qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology shall be consulted to determine whether the resource requires further study. The qualified archaeologist shall make recommendations to the District on the measures that shall be implemented to protect the discovered resources, including, but not limited to, the excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the California Environmental Quality Act (CEQA) Guidelines.

Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the archaeological monitor and recommended to the District. Appropriate mitigation measures for significant resources could include avoidance or capping; incorporation of the site in green space, parks, or open space; or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the District approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by District where they would be afforded long-term preservation to allow future scientific study.

CUL-14 During grading and site excavation activities, the construction contractor retained by the Riverside Unified School District (District) shall monitor all construction activities. In the event that cultural, tribal cultural, and/or paleontological resources are discovered, work shall be halted within 50 feet of the discovery, and the construction contractor shall inform the project manager of District, and District shall retain a qualified paleontologist. The qualified

paleontologist shall have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources.

California Public Resources Code Section 5097.5 prohibits unauthorized removal of paleontological remains, and California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources. If the qualified paleontologist determines that a resource constitutes a paleontological resource, the qualified paleontologist shall develop a paleontological monitoring and treatment plan and monitor the remainder of the Project Site. The plan should serve to reduce impacts to the resources and allow construction to proceed.

Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and Society of Vertebrate Paleontology professional standards. Any fossils recovered during mitigation shall be offered to an accredited and permanent scientific institution or other educational institutions for the benefit of current and future generations.

Applicability: Compliance with Mitigation Measures CUL-1 through CUL-14 would still occur.

4.4 GREENHOUSE GAS EMISSIONS

The analysis in Section 4.4, *Greenhouse Gas Emissions,* is based in part on the following technical report:

- Eastside Elementary School Air Quality and Greenhouse Gas Emissions Analysis, PlaceWorks, August 2024. (A complete copy of this report is included in Appendix A).

4.4.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

GHG-2 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.4.2 Summary of Impacts Identified in the EIR

The certified EIR modeled the operational and construction GHG emissions under Options 2 and 3 of the Approved Project[1] and compared these emissions to the emissions of the existing uses at the Project Site. The certified EIR found that the Approved Project would not result in a net increase in GHG emissions that would exceed the South Coast AQMD's bright-line threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$). Therefore, the cumulative contributions to GHG emissions from the Approved Project was determined to be less than significant.

Additionally, the Approved Project was analyzed for consistency with the 2022 CARB Scoping Plan and SCAG's 2020–2045 RTP/SCS (Connect SoCal). The Approved Project would be required to adhere to the applicable air quality regulations that help to implement the 2022 Scoping Plan including the latest CALGreen and Building Energy Efficiency standards. The Approved Project did not propose any actions that would obstruct implementation of the 2022 Scoping Plan and impacts were therefore considered less than significant. Furthermore, the Approved Project was determined to not conflict with the regional strategies of Connect SoCal since it would have less than significant VMT impacts.

4.4.3 Impacts Associated with the Modified Project

Would the Modified Project:

[1] The certified EIR modeled the proposed land uses under Option 3 while modeling the off-road equipment used for daily operations, lighting use, and project-related vehicle trips under Option 2. These respective factors represented the most conservative assumptions among the options under the Approved Project.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that implementation of the Approved Project would not generate GHG emissions that exceed the South Coast AQMD's bright-line threshold of 3,000 $MTCO_2e$ per year. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

Like the Approved Project, the Modified Project would construct a new elementary school at the Modified Project Site. As discussed in Section 4.2, *Air Quality*, the construction activities under the Modified Project would be similar to those of the Approved Project. The Modified Project would experience an increase in soil haul activities when compared to the Approved Project but would also result in less building space constructed. Therefore, similar to the criteria air pollutant emissions, the GHG emissions associated with the construction of the Modified Project are expected to be similar to those of the Approved Project.

Similarly, the operational GHG emissions of the Modified Project associated with area and energy sources, water, and solid waste are anticipated to be similar or less than those of the Approved Project due to the reduction in proposed building space. As discussed in Section 4.2, the Modified Project's increase in vehicle trips would contribute increased mobile source emissions of criteria air pollutants, which would correspond to a similar increase in GHG emissions. Using the Modified Project's 2,040 ADT, mobile source GHG emissions of the Modified Project were estimated to be 2,812 $MTCO_2e$ per year. Table 5.3-5, *Net Operational Phase Greenhouse Gas Emissions*, from the Certified EIR has been reproduced below as Table 5, *Net Operational Phase Greenhouse Gas Emissions*, below, to illustrate how the increase in mobile source emissions under the Modified Project combined with the rest of the operational GHG emissions of the Approved Project would not exceed South Coast AQMD's bright-line significance threshold of 3,000 $MTCO_2e$ per year.

Table 5 Net Operational Phase Greenhouse Gas Emissions

	GHG Emissions ($MTCO_2e$ per Year)			
Sectors	**Existing[1]**	**Proposed Project**	**Percent by Sector Proposed Project**	**Net Change from Existing**
Area	4	<1	<1%	-4
Energy	345	369	~~18%~~ 11%	24
Mobile	867	~~1,573~~ 2,812	~~76%~~ 85%	~~706~~ 1,945
Solid Waste	61	55	~~3%~~ 2%	-5
Water	27	24	1%	-4
30-Year Amortized Construction	N/A	46	~~2%~~ 1%	46
Total Emissions	**1,304**	**3,306**	**100%**	**~~764~~ 2,002**
South Coast AQMD Working Group Bright-Line Threshold				3,000
Exceeds South Coast AQMD Working Group Bright-Line Threshold				**No**

Source: CalEEMod Version 2022.1.1.26; PlaceWorks 2023 (see Table 5.3-5)
[1] The existing uses of the Modified Project Site that were modeled for the Approved Project are assumed to remain the same under the Modified Project.

As shown in Table 5, the increase in mobile source emissions associated with the Modified Project would not generate net annual emissions that exceed the South Coast AQMD Working Group bright-line threshold of 3,000 $MTCO_2e$ per year. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR..

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

Less Than Significant Impact/No Changes or New Information Requiring Preparation of an EIR. The certified EIR identified CARB's 2022 Scoping Plan and SCAG's 2020-2045 Connect SoCal RTP/SCS as applicable plans for reducing the GHG emissions. The certified EIR determined that the Approved Project would not conflict with these plans. In April 2024, SCAG updated its RTP/SCS and adopted Connect SoCal 2024 which outlines SCAG's vision for the region through a horizon year of 2050. However, like the previous Connect SoCal the 2024 update emphasizes similar themes and goals that target the reduction of VMT in Southern California. Like the Approved Project, the Modified Project would not result in a VMT impact since the project is a locally-serving use that would redirect trips from students in the Eastside Neighborhood that currently attend other schools in the District to this new elementary school. The Modified Project would not interfere with SCAG's ability to implement the regional strategies in Connect SoCal 2024.

Similarly, the Modified Project does not involve any changes from the Approved Project that would result in an inconsistency with 2022 CARB Scoping Plan. Like the Approved Project, the Modified Project would comply with statewide GHG emissions reduction measures including the latest CALGreen and Building Energy Efficiency standards. While neither project was/is proposed to incorporate an all-electric design, the Modified Project would be designed to include a photovoltaic system that would offset the electricity demand of the project by 13 percent. This feature of the project would further reduce its energy consumption and emissions, consistent with the GHG emissions reductions strategies of the 2022 Scoping Plan. Therefore, the Modified Project would not obstruct implementation of the 2022 Scoping Plan. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR..

4.4.4 Mitigation Measures Identified in the Certified EIR

The certified EIR did not include mitigation measures for GHG emissions. No new mitigation measures would be required for the Modified Project.

4.5 HAZARDS AND HAZARDOUS MATERIALS

4.5.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-2 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.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.

H-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.

H-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

H-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

4.5.2 Summary of Impacts Identified in the EIR

Impacts from hazards and hazardous materials due to construction activities and other factors were evaluated in the certified EIR.

The Approved Project was not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction of the Approved Project would involve the use of some hazardous materials such as vehicle fuels, lubricants, greases, and transmission fluids in construction equipment, and paints and coatings in building construction. The handling, use, transport, and disposal of hazardous materials during construction, including contaminated soil remediation, would be required to comply with existing regulations of several agencies. Operation of the approved project would involve the use of small amounts of hazardous materials for cleaning and maintenance purposes typical of janitorial staff, and pesticides by school maintenance staff. The use, storage, transport, and disposal of hazardous materials by school staff would be required to comply with existing regulations of several agencies.

Hazards associated with the transport, use, or disposal of hazardous materials through the construction and operation phases of the approved project would not create a significant hazard.

The Approved Project would include parcels in Blocks B and C, and Lincoln Park. Sites identified on hazardous materials websites were within close proximity to the Project Site, such as Lincoln Park, parcels in block B, and parcels in Block C, which revealed detection of hazardous materials. The Project Site boundaries under the Approved Project exclude Lincoln High School but include Lincoln Park and parcels in Blocks B and C. No hazardous conditions were found in Lincoln Park. Therefore, the proposed project could 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.

The approved project would not result in the emissions of hazardous or acutely hazardous materials, substance, or waste within a quarter-mile radius of an existing or proposed school site. An HRA was prepared for the approved project which calculated associated cancer-risk due to hazardous emissions. The HRA did not calculate cancer risk for the school population, who would not be exposed to daily construction emissions outdoors 24 hours a day. Under all three options, the operation of an elementary school would not involve any activities that would emit hazardous emissions or handle hazardous materials and impact would be less than significant.

The Project Site is not listed on any hazardous materials databases. All sites identified near the Project Site are listed as closed. Therefore, no significant hazard to the public or the environment would result from these listed sites.

The Project Site is not near or within two miles of an existing airport or airport land use plan. Therefore, no impact would occur.

The Approved Project would not interfere with an adopted emergency evacuation or emergency response plan. The City of Riverside's EOP identifies city agencies and other agencies that would be involved in emergency responses; threat summaries and assessments; and procedures for responding agencies as well as city agencies that would be involved in coordinating and managing responses. The City also has a local hazard mitigation plan, as well as implements the Riverside County Multi-jurisdictional Local Hazard Mitigation Plan. Therefore, the approved project would have less than significant impact.

The Project Site is not in or near state responsibility areas or land classified as high fire hazard severity zones, And the Project Site is not in proximity to wildland that may be susceptible to wildfire. Therefore, no impact would occur.

4.5.3 Impacts Associated with the Modified Project

Would the Modified Project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Similar to the Approved Project, construction of the Modified Project would involve the use of some hazardous materials such as vehicle fuels, lubricants, greases, and transmission fluids in construction equipment, and paints and coatings in building construction. The handling, use, transport, and disposal of hazardous materials during construction, including contaminated soil remediation, would be required to comply with existing regulations of several agencies—the Environmental Protection Agency (EPA), Riverside County Environmental Health Department (RCEH), Occupational Safety and Health Administration (OSHA), Department of Toxic Substances Control (DTSC), California Governor's Office of Emergency Services, Cal/OSHA, Riverside Fire Department (RFD), and United Stated Department of Transportation (USDOT). Construction activities would be temporary and would cease upon completion of construction phase.

Similar to the Approved Project, operation of the Modified project would involve use of small amounts of hazardous materials for cleaning and maintenance purposes typical of janitorial staff, and pesticides by school maintenance staff. The use, storage, transport, and disposal of hazardous materials by school staff would be required to comply with existing regulations of several agencies, including the DTSC, USEPA, Cal/OSHA, and RFD. Thus, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Similar to the Approved Project, construction of the Modified Project would involve the use of some hazardous materials such as vehicle fuels, lubricants, greases, and transmission fluids in construction equipment, and paints and coatings in building construction. The handling, use, transport, and disposal of hazardous materials during construction, including contaminated soil remediation, would be required to comply with existing regulations of several agencies—the EPA, RCEH, OSHA, DTSC, California Governor's Office of Emergency Services, Cal/OSHA, RFD, and USDOT. Construction activities would be temporary and would cease upon completion of construction phase. As stated in the certified EIR, the presence of hazardous soils is present in many of the parcels in Block B and C, as well as at Lincoln High School contain presence of three OCPs (Chlordane, 4,4'-DDE, 4,4'-DDT), Lead, Dieldrin, along with possible residuals of petroleum and VOCs and other hazardous materials. These hazardous materials would still be present under the modified project and would require mitigation. Therefore, impacts from the routine transport, use, or disposal of hazardous materials are potentially significant. Applicable mitigation measures identified in the certified EIR would include HAZ-1 and HAZ-2, which would still apply under the Modified Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The Modified Project would be implemented alongside Lincoln High School. This school would be the closest school to the Modified Project Site. Similar to the Approved Project, operation of construction equipment and heavy trucks during project construction would generate diesel emissions, which are considered hazardous. As described in Section 4.2, *Air Quality*, the Modified Project would not result in an increase in localized air pollutant concentrations when compared against the Approved Project. Localized air quality impacts from the Modified Project's construction activities would be less than significant. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. California Government Code Section 65962.5 requires CalEPA to develop a list at least (updated at least annually) of hazardous waste and substances release sites, known as the Cortese List or California Superfund. DTSC is responsible for a portion of the information in the Cortese List. The Modified Project Site is not on state and federal hazardous materials sites, except on the HAZNET (Hazardous Waste Information System). HAZNET includes data extracted from the copies of hazardous waste manifests each year by DTSC. The four addressed within the Modified Project Site are listed as follows:

- **Lincoln High School** (4341 Victoria Avenue) had laboratory waste removed and 1.6 tons of asbestos containing waste transported to a disposal facility in 1999.
- **2993 14th Street** – An auto repair shop legally disposed of unspecified oil-containing waste in 2003 and 2008, and disposed of an aqueous solution with total organic residues.
- **4403 Park Avenue** – An auto body repair shop legally disposed of an unspecified waste in 2013 and disposed of an aqueous solution in 2014 and 2015.
- **4307 Park Avenue** – City of Riverside Development Department legally disposed of inorganic solid waste in 2009.

However, these cases are closed, and no significant hazard to the public or the environment would result from these listed sites. Thus, similar to the Approved Project, the Modified Project Site is not included on a list of hazardous materials that would create a significant hazard to the public or the environment. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard or excessive noise for people residing or working in the project area.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Similar to the Approved Project, the Modified Project Site is not located within 2 miles of a public or private airstrip. The closest airport is the Flabob Airport, approximately 2.5 miles west of the Modified Project Site. The project would not result in a new use that would interfere with air traffic patterns, increase traffic levels, or change traffic patterns. New buildings on the proposed campus would be of similar height as the existing buildings on the existing campus and would not interfere with air traffic patterns or create a safety hazard or excessive noise. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Similar to the Approved Project, the Modified Project is in the City of Riverside. The City has adopted an Emergency Operations Plan (EOP), and hazard mitigation plan. The existing school currently has a school safety plan in compliance with the district's "safe school plans." Project construction would not interfere with any other existing emergency response plans or emergency evacuation plans. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Similar to the Approved Project, the Modified Project Site is lot located in or near state responsibility areas or land classified as high fire hazard severity zones. The Modified Project Site is not in proximity to wildland that may be susceptible to wildfire. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.5.4 Mitigation Measures Identified in the Certified EIR

The following hazards and hazardous materials mitigation measures were taken directly from the certified EIR and would be implemented for and applied to the Modified Project. These mitigation measures have been incorporated into the Mitigation Monitoring Program for this Addendum and have been modified as applicable to clarify the language and to reflect minor changes caused by the Modified Project. Modifications to the original mitigation measures are identified in ~~strikeout~~ text to indicate deletions and <u>underlined</u> text to indicate additions:

HAZ-1 Prior to construction, the Riverside Unified School District (District) shall perform a Phase I Environmental Assessment (ESA) or a Preliminary Environmental Assessment (PEA) for all Project Site parcels pursuant to Education Code Sections 17210, 17213.1, and 17213.2 in conformance with the most current requirements adopted by the American Society for Testing

and Materials (ASTM) for Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or meet the requirements of Part 312 (commencing with Section 312.1) of Title 40 of the Code of Federal Regulations, and the guidelines published by the Department of Toxic Substances Control entitled "Preliminary Endangerment Assessment: Guidance Manual," including any amendments that are determined by the Department of Toxic Substances Control to be appropriate to address issues that are unique to school sites. The Phase I ESA or the PEA shall also follow DTSC's Interim Guidance for Evaluating School Sites with Potential Soil Contamination as a result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers dated June 2006.

HAZ-2 Prior to construction at Lincoln High School, where the Phase I Environmental Site Assessment and the Phase I Addendum have been prepared per Mitigation Measure HAZ-1, the Riverside Unified School District (District) shall retain a qualified environmental assessor to perform a Supplemental Site Investigation to delineate the lateral extent of elevated lead concentrations in soil. The Supplemental Site Investigation shall be performed in accordance with guidelines developed by the Department of Toxic Substances Control (DTSC). The District shall not proceed with the construction until DTSC determines that no further action is required.

Applicability: Compliance with Mitigation Measures HAZ-1 and HAZ-2 would still occur.

4.6 NOISE

The analysis in Section 4.6, *Noise,* is based in part on the following technical report:

- Eastside Elementary School Noise Analysis, PlaceWorks, August 2024. (A complete copy of this report is included in Appendix B).

4.6.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

N-1 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.

N-2 Generation of excessive groundborne vibration or groundborne noise levels.

N-3 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

4.6.2 Summary of Impacts Identified in the EIR

Regarding impacts from a temporary increase in ambient noise levels, the Approved Project considered impacts to be less than significant. Under the Approved Project, there would be two types of short-term noise: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul, and (2) stationary-source noise from construction equipment. For the Approved Project, construction was assumed to last approximately 31 months and include equipment such as graders, excavators, tractors, loaders, backhoes, forklifts, air compressors, dozers, and trucks.

The transport of workers and materials to and from the construction site would incrementally increase noise levels along school access roadways, with individual construction vehicle pass-bys potentially creating momentary noise levels of up to approximately 85 dBA L_{max} at 50 feet, but these occurrences would generally be infrequent (approximately five per day) and short-lived during demolition debris hauling, resulting in less than significant noise impacts from construction vehicles and haul trips. Construction vehicles would primarily access the Project Site via 14th Street, Victoria Avenue, and 13th Street, and the additional temporary construction trips would result in a temporary noise increase of 0.1 dBA CNEL along 14th Street, 0.2 dBA CNEL along Victoria Avenue, and 1.7 dBA CNEL along 13th Street, which is less than the allowed 3 dBA increase along 13th Street with existing ambient noise levels below 65 dBA CNEL, leading to less than significant noise impacts from worker and vendor trips. Additionally, noise levels from construction equipment were estimated to reach up to 71 dBA, which would not exceed the 80 dBA L_{eq} threshold at the nearest sensitive receptors, and therefore, off-campus construction noise impacts would be less than significant and on-campus construction noise impacts would be less than significant.

4. Environmental Analysis

Regarding noise impacts from a permanent increase in ambient noise levels, the approved project resulted in potentially significant impacts. Noise related to the approved project's playfields and mechanical equipment for heating, ventilation, and air conditioning (HVAC) equipment associated with new buildings was less than significant for all three options. However, traffic noise for all three options for the approved project was potentially significant.

Thresholds of significance for traffic noise increase include: 1.5 dBA for ambient noise environments of 65 dBA CNEL and higher; 3 dBA for ambient noise environments of 60 to 64 CNEL; and 5 dBA for ambient noise environments of less than 60 dBA CNEL. For Option 1, the road segments for 13th Street between Howard Avenue and Park Avenue and 13th Street between Park Avenue and Victoria Avenue have an existing CNEL of 63 and would increase by 3.1 dBA and 4.5, respectively. For Option 2, the road segments for Howard Avenue between 12th Street and 13th Street and Victoria Avenue between 13th Street and 14th Street have an existing CNEL of 70 and would increase by 2.9 dBA and 1.2 dBA, respectively. Additionally, for Option 2, the road segments for 12th Street between Howard Avenue and Park Avenue and 13th Street between Park Avenue and Victoria Avenue have an existing CNEL of 63 dBA and would increase by 5.9 dBA and 5.6 dBA, respectively. For Option 3, the road segments for 13th Street between Howard Avenue and Park Avenue and 13th Street between Park Avenue and Victoria Avenue have an existing CNEL of 63 dBA and would increase by 3.1 dBA and 4.7 dBA, respectively.

Regarding impacts from groundborne vibration or groundborne noise levels, impacts were considered potentially significant even with the implementation of Mitigation Measure NOI-1. For operational vibration impacts, no impacts would occur. For temporary construction impacts, vibration damage to off-site structures were considered less than significant because of the distance of residences and commercial uses to construction activities. However, under Option 1 and Option 2 of the approved project, building demolition and hardcourt paving would occur within 15 feet of the historical structures and would exceed the historical vibration threshold. Specifically, building demolition and hardcourt paving would occur near the Irvine Elementary School Kindergarten Building and the Assembly Building. Therefore, vibration damage to the on-site historical structures was considered potentially significant. To ensure that any inadvertent damage to the historical buildings associated with vibration would be avoided and/or repaired, Mitigation Measure NOI-1 would be implemented. This would consist of construction vibration monitoring to document conditions at the existing historical buildings prior to, during, and after vibration-generating demolition, grading, building construction, and paving for the purposes of potential post-construction repair. Even with the implementation of Mitigation Measure NOI-1, impacts were potentially significant.

Regarding impacts from a private airstrip or an airport, no impact exists. The nearest airport is Flabob Airport and is 2.5 miles from the Approved Project Site. This would not expose people residing or working in the project area to excessive noise levels.

Cumulative noise impacts from the approved project were potentially significant. Specifically, operational traffic noise was potentially significant. However, cumulative construction activity was less than significant.

4.6.3 Impacts Associated with the Modified Project

Would the Modified Project:

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

Less Than Significant/No Changes or New Information Requiring Preparation of an EIR.

Construction Noise Impacts

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest three pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The expected construction equipment mix was estimated and categorized by construction activity using the Federal Highway Administration Roadway Construction Noise Model (RCNM). Average noise levels from project-related construction activities are calculated by modeling the three loudest pieces of equipment per activity phase. Equipment for grading and site preparation is modeled at spatially averaged distances (i.e., from the acoustical center of the general construction site to the property line of the nearest receptors) because the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors for mobile equipment. Similarly, construction noise from demolition is modeled from the center of the Modified Project Site. Building construction and architectural coating are measured from the edge of the proposed buildings to the nearest sensitive receptors. Additionally, paving is measured from the edge of the nearest paving areas to the nearest sensitive receptors. Results are summarized in Table 6, *Project Related Construction Noise Levels (dBA)*, at the nearest receptors. Construction noise levels at a reference distance of 50 feet would range between 74 dBA and 85 dBA L_{eq} throughout the construction period.

Table 6 Project-Related Construction Noise Levels

	Noise Levels in dBA L_{eq}			
Construction Activity Phase	RCNM Reference Noise Level	Residential Receptors to North	Residential Receptors to East	Residential Receptors to South
Distance in feet	**50**	**210**	**640**	**250**
Demolition	85	72	62	71
Site Preparation	83	70	61	69
Grading	85	72	62	71
Distance in feet	**50**	**180**	**800**	**200**
Architectural Coating	74	63	50	62
Building Construction	82	71	58	70
Distance in feet	**50**	**125**	**600**	**200**
Paving	83	75	61	71

Table 6 Project-Related Construction Noise Levels

Construction Activity Phase	Noise Levels in dBA L_{eq}			
	RCNM Reference Noise Level	Residential Receptors to North	Residential Receptors to East	Residential Receptors to South
Distance in feet	**50**	**100**	**190**	**260**
Utility Trenching	81	75	70	67
Finishing/Landscaping	81	75	70	67
Maximum dBA L_{eq}		75	70	71
Exceeds FTA's 80 dBA L_{eq} Threshold?		**No**	**No**	**No**

Source: FHWA's RCNM software.
[1]Distanced were measured using Google Earth (2024.
dBA L_{eq} = Energy-Average (L_{eq}) Sound Levels.
See Appendix B for construction noise calculations.

The nearest sensitive receptors under the Modified Project include single-family homes, across 13th Street, north of the Modified Project Site boundary. Construction equipment mix is anticipated to be similar to that of the Approved Project and include concrete saws, dozers, excavators, tractors, loaders, backhoes, excavators, graders, air compressors, pavers and paving equipment, and rollers. These items were modeled using RCNM. Noise levels during construction of the Modified Project would range between 50 dBA to 75 dBA L_{eq} at the nearest sensitive receptors throughout the construction phases. Students at Lincoln High School would remain on site during demolition and building construction. Construction noise levels would not exceed the FTA threshold of 80 dBA L_{eq} at residential uses near the Modified Project Site.

Construction activities could occur within 150 feet of existing or new classroom buildings with a noise level of up to 75 dBA L_{eq}. Assuming a 25 dBA reduction due to residential building facades with windows and doors closed condition, construction noise would be reduced to a range of 50 dBA L_{eq} at the interior spaces of the nearest classrooms and would not exceed the speech interference noise level of 60 dBA.

Construction of the Modified Project would be exempted from noise level thresholds within the Riverside Municipal Code under section 7.35.020 (G). Additionally, modified project construction would comply with the exemptions listed City as no construction activities shall be undertaken between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, and between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sundays or a federal holiday. Thus, the Modified Project would not exceed the City noise standards and FTA noise threshold of 80 dBA L_{eq} for construction noise. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Mobile-Source Noise Impacts

The Modified Project would generate an increase in total daily trips compared to Approved project. Traffic volume data for the new trips associated with the Modified Project are provided in the Traffic Impact Analysis (Appendix C). The Modified Project is expected to generate 1,700 daily trips, a net increase of 600 daily trips compared to the 1,100 daily trips of the Approved project. The addition of 600 daily trips geographically distributed onto the roadway network applying directional percentages would result in a maximum increase

ranging from 30 to 120 daily trips on project network roadways. The Modified Project range of daily trip increases represent a 0.1 dBA to 0.5 dBA traffic noise level increase on project network roadways when compared to the Approved Project. With the addition of 600 new trips under the Modified Project, impacts would be consistent with the Approved project; thus, traffic noise impacts for the Modified Project would remain Significant and Avoidable similar to the Approved Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

Stationary Noise

The Modified Project would include rooftop heating, ventilation and cooling (HVAC) equipment for the proposed school buildings. The Modified Project's heating, ventilation, and air conditioning (HVAC) equipment associated with new buildings would be installed on rooftops of new buildings, approximately 260 feet to the nearest noise sensitive receptor, and equipment would not be placed any closer than those analyzed under the approved project. No new buildings would be any closer to sensitive receptors than those proposed under the Approved Project.

The Modified Project would have similar turf playfields and hard courts as the Approved Project, however in a new location. The nearest sensitive receptors to the modified project playfields would be the residences to the north, across 13th Street and to the south across 14th Street at approximately 100 and 115 feet, respectively. Soccer games/practices typically generate noise level of 60 dBA L_{eq} at 15 feet from the soccer field. This noise level is associated with two full soccer teams scrimmaging, coaches and referees, and approximately 40 total spectators. At 100 feet, noise levels would attenuate to approximately 51 dBA to 52 dBA L_{eq} at the nearest northern and southern residences, respectively. This would not exceed the daytime noise standard of 55 dBA during the hours of 7:00 am to 10:00 pm. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

Less Than Significant/No Changes or New Information Requiring Preparation of an EIR. Vibration impacts for the Approved Project were only analyzed for Options 1 and 3 in the certified EIR, not option 2 no construction would occur within 200 feet of the historic buildings, which would be the same under the Modified Project. The analysis of the Modified Project below evaluates vibration damage and annoyance at the nearby off-site sensitive receptors. Potential vibration impacts associated with development projects are usually related to the use of heavy construction equipment during the demolition phase of construction. Construction can generate varying degrees of ground vibration depending on the construction procedures and equipment. Construction equipment generates vibration that spreads through the ground and diminishes with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

4. Environmental Analysis

For reference, a peak particle velocity of 0.20 in/sec PPV is used as the limit for nonengineered timber and masonry buildings (which would apply to the off-site surrounding residential structures) (FTA 2018). Table 7, *Vibration Impact Levels for Typical Construction Equipment*, shows typical construction equipment vibration levels and reference vibration levels at a distance of 25 feet. The nearest construction activity associated with project construction would occur 60 feet of the residential structures to the north and existing school campus structures to the east. At 60 feet, as shown in Table 7, construction vibration levels would be up to 0.056 in/sec PPV or less.

Table 7 Vibration Impact Levels for Typical Construction Equipment

	in/sec PPV			
Equipment	Reference Levels at 25 Feet	Residential Receptors to North at 60 feet	Residential Receptors to East at 410 feet	Onsite Historical Structure at 185 feet
Vibratory Roller	0.210	0.056	0.003	0.010
Large Bulldozer	0.089	0.024	0.001	0.010
Caisson Drilling	0.089	0.024	0.001	0.004
Loaded Trucks	0.076	0.020	0.001	0.004
Jackhammer	0.035	0.009	0.001	0.004
Small Bulldozer	0.003	0.001	0.000	0.004

Source: FTA 2018.
[1] As measured from the edge of construction site using Google Earth Pro.
See Appendix B for vibration calculations.

As shown in Table 7, typical construction equipment, aside from vibratory rollers, produce vibration levels of less than 0.2 in/sec PPV at 25 feet. Assuming construction would occur along the Modified Project Site boundary, the nearest structure to the proposed construction activities would be residential and existing school campus structures approximately 60 feet of the Modified Project Site. Vibration levels attributable to a vibratory roller would attenuate to approximately 0.056 in/sec PPV at a distance of 60 feet. The historical Irvine Elementary School Kindergarten Building and the Assembly Building would be approximately 185 feet from the nearest construction boundary under the Modified Project. As shown in Table 7, construction vibration levels for the Modified Project would not exceed 0.010 in/sec PPV throughout construction phases. The City of Riverside does not have an established threshold for assessing construction vibration impacts. The FTA maximum acceptable vibration standard of 0.2 in/sec PPV for nonengineered timber and masonry buildings and a vibration standard for historical structures of 0.12 in/sec PPV is applied for assessing vibration impacts from project construction-related activities. Construction vibration levels would not exceed the FTA threshold of 0.2 in/sec PPV for nonengineered timber and masonry buildings and 0.12 in/sec PPV for historical buildings at adjacent uses near the Modified Project Site. The Modified Project would not consist of potentially significant impacts and would not require mitigation NOI-1 to be applied. Impacts would be less than significant; mitigation would not be required. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

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

No Impact/ No Changes or New Information Requiring Preparation of an EIR. The nearest airport to the approved project was the Flabob Airport, approximately 2.5 miles to the northwest. The proposed project would not expose people residing or working in the area to excessive noise levels. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.6.4 Mitigation Measures Identified in the Certified EIR

The following biological resources mitigation measures were taken directly from the certified EIR and would be implemented for and applied to the Modified Project. These mitigation measures have been incorporated into the Mitigation Monitoring Program for this Addendum and have been modified as applicable to clarify the language and to reflect minor changes caused by the Modified Project. Modifications to the original mitigation measures are identified in ~~strikeout~~ text to indicate deletions and <u>underlined</u> text to indicate additions:

Impact 4.6.3(b)

Mitigation Measures Considered But Rejected as Infeasible

In compliance with CEQA, "each public agency shall mitigate or avoid the significant effects on the environment of project it carries out or approves whenever it is feasible to do so" (Public Resources Code Section 21002.1(b)). The term "feasible" is defined in CEQA to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Public Resources Code Section 21061.1). A number of measures were considered for mitigating or avoiding traffic noise impacts (Impact 5.5-2).

Special Roadway Paving

Notable reductions in tire noise have been achieved via the implementation of special paving materials, such as rubberized asphalt or open-grade asphalt concrete overlays. For example, the California Department of Transportation (Caltrans) conducted a study of pavement noise along I-80 in Davis (Caltrans 2011) and found an average improvement of 6 to 7 dBA compared to conventional asphalt overlay.

The study found that although this amount of noise reduction from rubberized/special asphalt materials would be sufficient to avoid the predicted noise increase due to traffic in some cases, the potential up-front and ongoing maintenance costs are such that the cost versus benefits ratio[1] may not be feasible and reasonable and would not mitigate noise to a level of less than significant in all cases. In addition, the study found that noise levels increased over time due to pavement raveling, with the chance of noise-level increases higher after a 10-year period. The impacted street rights-of-way are not within the jurisdiction of the District, and the District has no jurisdiction over implementation of these special roadway paving. Considering the size and nature of the proposed project, the cost of providing special roadway paving and maintenance could not be afforded by

[1] Cost versus benefit considerations are in terms of the number of households benefited, per the general methodology employed by Caltrans in the evaluation of highway sound walls.

the District. Taking into account economic, environmental, social, and technological factors, the special roadway paving would be infeasible, therefore, was considered but rejected.

Sound Barrier Walls

With a cursory review of aerial depictions of the impacted segments, the majority (if not all) residences around the project site have direct access (via driveways) to the associated roadway. Therefore, barrier walls would prevent access to individual properties and would be infeasible. Further, these impacted homes are on private property outside of the control of the District, therefore, barrier walls cannot be constructed without the consent of all individual property owners for the impacted roadway segment. Sound barrier walls would not effectively reduce noise, if there is a gap between the walls. Therefore, sound barrier walls as mitigation was considered but rejected as infeasible.

There are no other mitigation to feasibly reduce traffic noise to less than significant.

Impact 4.6.3(b)

As demonstrated under the heading "Mitigation Measures Considered" for Impact 5.5-2, there are no feasible or practical mitigation measures available to reduce project-generated traffic noise to less-than-significant levels for existing residences along the affected roadway. No individual measure and no set of feasible or practical mitigation measures are available to reduce project-generated traffic noise to less-than-significant levels in all cases. Thus, traffic noise would remain a significant and unavoidable impact.

Impact 4.6.3(c)

NOI-1 In the event that demolition, grading, building construction, and paving occurs within the screening distances for historical structures shown in the Draft Environmental Impact Report (EIR) Table 5.5-11, Vibration Levels for Typical Construction Equipment and Screening Distances, construction vibration monitoring shall be conducted to document conditions at the existing historical buildings prior to, during, and after vibration-generating demolition, grading, building construction, and paving. The construction vibration monitoring shall be implemented by an acoustical consultant, licensed historical architect, or licensed Professional Structural Engineer meeting the Secretary of the Interior's Professional Qualification Standards, to include the following tasks:

- Performance of a photo survey, elevation survey, and crack monitoring. Surveys shall be performed prior to and in regular intervals during all vibration-generating activities within the screening distances shown in the Draft EIR Table 5.5-11 to historical buildings (the FTA Historical Structures Screening Distance to 0.12 in/sec PPV).

- Conduct a post-construction survey on the structure following the completion of vibration-generating activities and applicant to make appropriate repairs in accordance with the Secretary of the Interior's Standards where damage has occurred as a result of construction activities.

Applicability: Compliance with Mitigation Measure NOI-1 would not be necessary.

4.7 RECREATION

4.7.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.7.2 Summary of Impacts Identified in the EIR

The impacts on recreation evaluated all three implementation options of the Approved Project. With Option 1 and Option 3 of the Approved Project, the adjacent Lincoln Park would not be impacted through joint use. Uses by the community and residents of the neighborhood would not be impacted during after-school activities and the park's facilities could be used in conjunction with the Civic Center Act and Board policies to offer public uses. Through these two options, the use of the adjacent park would not create increased demands of park use.

Under Option 1 of the Approved Project, the project site would include grass play fields, hardcourts for the elementary school, and grass playfields for the high school, while option 3 would provide grass playfields, kinder playfields, hardcourts for the elementary school and hardcourts for the high school. Under both Options 1 and 3, the existing grass play fields and hardcourts at Lincoln High School would be replaced and would not require construction or expansion of recreational facilities elsewhere that could result in an adverse physical effect on the environment. Environmental impacts from the development of these recreational facilities would not result in additional adverse physical impacts.

Option 2 of the Approved Project would require the demolition of approximately 0.78 acres of the adjacent Lincoln Park located to the north of the project site, encompassing the existing lawn area and kickball/baseball courts with nighttime lighting, a portion of horseshoe field, outdoor fitness equipment, and sidewalks, to allow for joint use. The proposed joint use under Option 2 would include approximately 1.65 acres of greenspace, 0.72 acres of playground area that includes basketball courts (four full courts), blacktop area, and pergola area, and 0.11 acres of walking paths, for a total of 2.48 acres. Restrictions to public park use of the fenced in area would be limited to operating hours from 4:30pm to 10:00pm and this would include joint use of facilities during operating hours. Implementation of Option 2 would require the District to enter into a joint use agreement with the City of Riverside, specifying joint use agreements.

Although operating hours would be limited for the joint use area, 24 percent (0.78-acre) of the existing park would still be open for passive recreation by park users and would not be anticipated to result in increased use of other neighborhood and regional parks or other recreational facilities that could cause substantial physical deterioration.

4.7.3 Impacts Associated with the Modified Project

Would the Modified Project:

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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. Under the Modified Project, encroachment on the adjacent Lincoln Park, located north of the Modified Project Site, would not be required. The existing Lincoln Park would continue to be open to the public even during school operating hours. Daily use is expected to stay consistent and would not impact the surrounding regional parks or recreational facilities. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

b) Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The Modified Project would include recreational facilities on the proposed campus of the elementary school, similar to the Approved Project; and would not require the expansion of any recreational facilities. The eastern portion of the Modified Project Site (east of the vacated Park Avenue) would include hardtop basketball courts, sports fields, and a play area on the east side of the campus that would be shared with Lincoln High School. However, unlike the Approved Project, the Modified Project would no longer require the acquisition of portion of Lincoln Park (approximately 0.78 acres) for joint-use turf playfields. The entirety of Lincoln Park (3.26 acres) would remain open to the public without any access restrictions. No adverse physical effects on the environment are expected. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.7.4 Mitigation Measures Identified in the Certified EIR

The certified EIR did not include mitigation measures for recreation. No new mitigation measures would be required for the Modified Project.

4.8 TRANSPORTATION

The analysis in Section 4.8, *Transportation,* is based in part on the following technical report:

- Traffic Impact Analysis for Eastside Elementary School Modified Project, Garland Associates, August 2024. (A complete copy of this report is included in Appendix C).

4.8.1 Thresholds of Significance

According to CEQA Guidelines Appendix G, a project would normally have a significant effect on the environment if it would:

T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

T-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-4 Result in inadequate emergency access.

4.8.2 Summary of Impacts Identified in the EIR

Regarding the impacts to the City's program, plan, ordinance, or policy addressing the circulation system for the Approved Project, impacts were considered less than significant. The impacts from construction traffic were less than significant because the level of construction would be temporary and would not result in a significant traffic impact on the study area roadway network as it would be negligible compared to the volumes of traffic that would be generated by the Approved Project. The Approved Project would not conflict with the City of Riverside's Circulation and Community Mobility Element policies that encourage reduction of vehicle miles, providing safe routes to school and enhancing pedestrian safety, and maintaining acceptable levels of service (LOS). The Approved Project did not conflict with Riverside County's Congestion Management Program or the Riverside Transit Agency's public transit operation. Additionally, the approved project would not interfere with the City's Affordable Housing & Sustainable Communities (AHSC) + Transformative Climate Communities (TCC) program.

Impacts to CEQA Guidelines Section 15064.3, subdivision (b) (Vehicle Miles Traveled [VMT]), were considered less than significant. The Approved Project is a local-serving project, a K-12 school, and are screened from further VMT analysis consistent with the screening criteria recommended in OPR's Technical Advisory.

Impacts from hazards due to a geometric design feature or incompatible uses, were considered less than significant. Impacts are less than significant because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity and have been accommodating school-related traffic on a daily basis for the existing Lincoln High School. Additionally, the addition of an elementary

school would be compatible with the neighborhood and the Approved Project would not result in any major hazards for vehicular traffic, pedestrians, or bicyclists.

Impacts from inadequate emergency access from the Approved Project were considered to be less than significant. The Approved Project's access and circulation features at the school would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. The Approved Project's access features are subject to and must satisfy the DSA and the City of Riverside design requirements and would be subject to approval by the Fire Department. Additionally, the Approved Project's would have a school safety plan in compliance with the District's "safe school plans" resulting in a less than significant determination.

Cumulative impacts from the Approved Project were considered less than significant and no mitigation measures were proposed to be implemented.

4.8.3 Impacts Associated with the Modified Project

Would the Modified Project:

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

No Impact/ No Changes or New Information Requiring Preparation of an EIR. The Circulation and Community Mobility Element of the City of Riverside General Plan includes various objectives and policies that outline the overall goal of building and maintaining a transportation system that combines a mix of transportation modes and maintains an efficient, safe, and coordinated circulation system that reduces environmental impacts and meets the needs of Riverside's residents and businesses. The proposed school project is consistent with the objectives presented in the Circulation and Community Mobility Element. The project would not conflict with any objectives or policies of the General Plan and it would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities.

Based on the LOS analysis, the discussion of non-motorized transportation and transit, and a review of the Circulation and Community Mobility Element of the City's General Plan, similar to the Approved Project, the Modified Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

No Impact/ No Changes or New Information Requiring Preparation of an EIR. Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular

capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

The CEQA Guidelines state that projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact. Students in the Eastside neighborhood currently attend school at Magnolia Elementary School, Castle View Elementary School, Alcott Elementary School, Pachappa Elementary School, and Longfellow Elementary School. The implementation of the proposed Eastside Elementary School would provide the opportunity for students in the Eastside neighborhood to attend a school that is much closer to their homes, which would result in shorter travel distances and thereby reduce the vehicle miles traveled compared to existing conditions. The Modified Project would, therefore, have a positive impact on VMT and would not have a significant adverse impact.

Furthermore, the City of Riverside's "Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment" states that local-serving K-12 schools would not require a traffic impact analysis that includes VMT. This guideline is based on the finding that projects that are local serving would decrease the number of trips or the trip lengths and are, therefore, VMT-reducing projects. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The Modified Project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Vehicular access to the Modified Project Site would be provided by driveways on the south side of 13th Street between Howard Avenue and Park Avenue. The increased levels of traffic, the increased number of pedestrians, and the increased number of vehicular turning movements at the school driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. The streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing Lincoln High School. The addition of an

elementary school would be compatible with the neighborhood and the Modified Project would not result in any major hazards for vehicular traffic, pedestrians, or bicyclists.

The streets in the vicinity of the Modified Project Site have sidewalks adjacent to the street and the intersections adjacent to the Modified Project Site are equipped with painted crosswalks and pedestrian signals at the signalized intersections. These features would enhance pedestrian safety and facilitate pedestrian access to the school. Thus, the Modified Project would not substantially increase hazards due to a geometric design feature or incompatible uses.. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

d) Result in inadequate emergency access.

No Impact/ No Changes or New Information Requiring Preparation of an EIR. The proposed access and circulation features at the school, including the driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All access features are subject to and must satisfy the District and the City of Riverside design requirements and would be subject to approval by the Fire Department and the California Division of the State Architect. Emergency vehicles would be able to access the school grounds and buildings and all other areas of the school, including the play fields, via on-site travel corridors. Thus, the Modified Project would not result in inadequate emergency access. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.8.4 Mitigation Measures Identified in the Certified EIR

The certified EIR did not include mitigation measures for transportation. No new mitigation measures would be required for the Modified Project..

4.9 TRIBAL CULTURAL RESOURCES

4.9.1 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

TCR-1 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:

i) 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

ii) 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.

4.9.2 Summary of Impacts Identified in the EIR

Regarding the impact to a tribal cultural resource defined in Public Resources Code Sections (PRC) 21074 and 5020.1(k), under the certified EIR, historical resources pertaining to the excellent example of Craftsman style and Art Modern style architecture would be retained but could result in removal of a historically significant building as it relates to early 1920s social and economic history of Riverside (i.e. 4343 Park Avenue [Wiley-Williams House]). Although the proposed project would result in significant and unavoidable impacts to an NRHP- and CRHR-eligible historical resource, the effects are not related to TCR defined in PRC Section 21074 and no impacts would occur.

Regarding impacts to a tribal cultural resource defined in PRC Section 5024.1(c), the NAHC's sacred lands file search result was negative. Four out of thirty tribes that were contacted for information related to the project site responded and include the San Manuel Band of Mission Indians, the Quechan Tribe of the Fort Yuma Reservation, the Rincon Band of Luiseño Indians, and the Agua Caliente Band of Cahuilla Indians (ACBCI). The San Manuel Band of Mission Indians and Quechan Tribe of the Fort Yuma Reservation had no comment, and the Rincon Band recommended an archaeological record search be conducted and requested that a copy sent to the tribe. The ACBCI requested that prior to any development activities, a qualified archaeologist shall conduct a cultural resources inventory of the project area, including obtaining a records search with associated survey reports and site records from the information center, and providing copies of any cultural resource documentation generated for the project.

While the pedestrian survey, cultural records search, and Native American Heritage Commission search did not identify any archaeological resources or sacred lands within the project site, the Phase I Assessment concluded

that previously unidentified archaeological resources and/or tribal cultural resources could be encountered during ground-disturbing activities, potentially causing a substantial adverse change to such resources if not mitigated. Impacts were concluded to be potentially significant, but with Mitigation Measure TCR-1 and CUL-2, impacts were reduced to less than significant. As such, TCR-1 would include the District retaining a construction contractor to monitor all ground-disturbing construction activities and in the event that any pre-contact and/or historic-era cultural resources are inadvertently unearthed, work shall be halted immediately within 60 feet of the discovery and the construction contractor shall inform the project manager of the District. Additionally, the District would disseminate any and all archaeological/cultural documents created as part of the approved project (isolated records, site records, survey reports, testing reports, etc.) to the consulting tribe and the District shall, in good faith, consult with the consulting tribe through the project development with preservation in place (i.e., avoidance) being the preferred manner of treatment.

Regarding cumulative impacts, tribal cultural resources may be found throughout Riverside, but information about them is difficult to obtain as their identification requires coordination with Native American tribes and their locations are often only documented through oral histories. However, each project within the City of Riverside is required to comply with AB 52 and PRC Section 21083.2(i), which addresses accidental discoveries of archaeological sites and resources, including tribal cultural resources, thereby mitigating any discoveries caused by the project or related projects to a less-than-significant level. With mitigation, individual impacts to TCRs would be reduced to a less-than-significant level; therefore, project impacts would not be cumulatively considerable.

4.9.3 Impacts Associated with the Modified Project

Would the Modified Project:

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:

i. 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

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that no impact would occur to tribal cultural resources as defined in PRC Section 21074, which would be the same under the Modified Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource

Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact/ No Changes or New Information Requiring Preparation of an EIR. The certified EIR determined that the Approved Project impacts could be potentially significant; however, implementation of Mitigation Measure TCR-1 would reduce project impacts to less-than-significant levels. During preparation of the certified EIR, a sacred lands file search was conducted with the Native American Heritage Commission (NAHC), and the results were negative. Additionally, thirty tribes were contacted and the District received a response from four tribes. The Rincon Band recommended an archeological record search be conducted and results be sent to the Rincon Band. An archaeological search was conducted through the Eastern Information Center and the result indicated that there are no archaeological records identified for the Approved Project site. Additionally, the Agua Caliente Band of Cahuilla Indians (ACBCI) requested a records search and survey be conducted and any cultural resource documentation be sent to the ACBCI. The District hired a qualified archaeologist to conduct a records search and a pedestrian survey, which did not identify any archaeological resources. Mitigation Measures TCR-1 and CUL-2 were implemented to the Approved Project to reduce potential impacts to less-than-significant levels.

For the proposed project, the project site would be located within the same boundary as the Approved Project, and would also include ground disturbing and construction activities similar to the Approved Project. Thus, the potential to impact cultural resources would still be present with the Modified Project; however, with the implementation of Mitigation Measure TCR-1 and CUL-2, impacts would be reduced to less-than-significant levels, similar to the Approved Project. Therefore, no new impacts would occur beyond those analyzed in the certified EIR; and there would be no changes or new information associated with development of the Modified Project that would require the preparation of a subsequent or supplemental EIR.

4.9.4 Mitigation Measures Identified in the Certified EIR

The following tribal cultural resources mitigation measures were taken directly from the certified EIR and would be implemented for and applied to the Modified Project. These mitigation measures have been incorporated into the Mitigation Monitoring Program for this Addendum and have been modified as applicable to clarify the language and to reflect minor changes caused by the Modified Project. Modifications to the original mitigation measures are identified in ~~strikeout~~ text to indicate deletions and <u>underlined</u> text to indicate additions:

TCR-1 During grading and site preparation activities, the construction contractor retained by the Riverside Unified School District (RUSD) shall monitor all ground-disturbing construction activities. In the event that any pre-contact and/or historic-era cultural resources are inadvertently unearthed, work shall be halted immediately within 60 feet of the discovery and the construction contractor shall inform the project manager of the RUSD. Construction activities may continue in other areas. As detailed in Mitigation Measure CUL-2, the District shall retain a qualified archaeologist that meets the Secretary of the Interior's Standards and Guidelines for Professional Qualifications in Archaeology to analyze the significance of the

discovery. Additionally, the Rincon Band of Luiseño Indians shall be contacted and provided information regarding the nature of the find, so as to provide tribal input with regards to significance and treatment. If the resources are Native American in origin and deemed significant as defined by California Environmental Quality Act Guidelines, a cultural resources monitoring and treatment plan shall be prepared by a qualified archaeologist in coordination with the consulting tribe and all subsequent finds shall be subject to the plan. The plan shall allow for a monitor to be present that represents the consulting tribe for the remainder of the project development, should the consulting tribe elect to place a monitor on-site. The plan will outline the treatment plan for the find to retain it/them in the form and/or manner the consulting tribe deems appropriate for educational, cultural, and/or historic purposes.

The District shall disseminate any and all archaeological/cultural documents created as part of the proposed project (isolated records, site records, survey reports, testing reports, etc.) to the consulting tribe and the District shall, in good faith, consult with the consulting tribe through the project development. Preservation in place (i.e., avoidance) shall be the preferred manner of treatment.

Applicability: Compliance with Mitigation Measure TCR-1 would still occur.

5. Finding

Compared to the Approved Project, the Modified Project would increase the student population on the campus from 800 to 900; increase the square footage of the proposed new school buildings from approximately 61,500 square feet, as described in the certified EIR, to approximately 81,600 square feet; convert 13th Street to a one-way direction street, with parking allowed on the southern portion of the street; and no longer require the acquisition of portion of Lincoln Park (approximately 0.78 acres) for joint-use turf playfields.

As indicated in this Addendum, the impacts of the Modified Project have already been adequately identified and addressed in the certified EIR, and no substantial changes have occurred with respect to the circumstances under which the project is undertaken that would require major revisions to the certified EIR. Analysis of the Modified Project shows that there are no new significant environmental effects and no substantial increase in the severity of previously identified significant effects.

Impacts beyond those identified in the EIR would not be expected to occur as a result of the Modified Project, which would still be subject to all applicable, previously required mitigation measures from the certified EIR, with the exception of Mitigation Measure NOI-1, which would no longer be required. The Modified Project would not result in any new information of substantial importance that would have new, more severe impacts, new mitigation measures, or new or revised alternatives from what was identified in the certified EIR.

Based on the whole of the record, there is no substantial evidence that the Modified Project would result in significant environmental impacts not previously studied in the certified EIR, and accordingly, the project changes would not result in any conditions identified in CEQA Guidelines, Section 15162. Thus, a subsequent EIR is not required for the changes to the project, and the District adopts this Addendum to the Eastside Elementary School Project (State Clearinghouse Number: 2021040779) in accordance with CEQA Guidelines Section 15164.

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Appendices

Appendix A - Air Quality and Greenhouse Gas Emissions Analysis

Air Quality and Greenhouse Gas Appendix

Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Air Quality Regulatory Setting

The Project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the Project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for

sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; µg/m^3: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO_2, SO_X, PM_{10}, $PM_{2.5}$, and Pb. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_X) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; US EPA 2023). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2024a).

Volatile Organic Compounds (VOC) are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, South Coast AQMD has established a significance threshold (South Coast AQMD 2023a). The health effects for ozone are described later in this section.

Nitrogen Oxides (NO_X) are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2024a). On February 21, 2019, CARB's Board approved the separation of the area that runs along the State Route 60 corridor through portions of Riverside, San Bernardino, and Los Angeles counties from the remainder of the SoCAB for state nonattainment designation purposes. The Board designated this corridor as nonattainment.[1] The remainder of the SoCAB is designated in attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2024a).

Sulfur Dioxide (SO_2) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant

[1] CARB is proposing to redesignate SR-60 Near-Road Portion of San Bernardino, Riverside, and Los Angeles Counties in the SoCAB as attainment for NO_2 at the February 24, 2022 Board Hearing (CARB 2024d).

quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2023). The SoCAB is designated as attainment under the California and National AAQS (CARB 2024a).

Suspended Particulate Matter (PM_{10} and $PM_{2.5}$) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤0.002.5 millimeter). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.0001 millimeter) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA and the California Air Resources Board (CARB) have not adopted AAQS to regulate these particulates. Diesel particulate matter is classified by CARB as a carcinogen (CARB 2023e). Particulate matter can also cause environmental effects such as visibility impairment,[2] environmental damage,[3] and aesthetic damage[4] (South Coast AQMD 2005; USEPA 2024a). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2024a).[5]

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2 $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

3 Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

4 Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

5 CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. The EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

Ozone (O_3) is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2023). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2024a).

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2018). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[6] As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2024a). However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's State Implementation Plan (SIP) revision was submitted to the EPA for approval. Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the Project.

Table 2, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

[6] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

Table 2 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	• Increased response to allergens • Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} and $PM_{2.5}$)	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	• Aggravation of respiratory disease (e.g., asthma and emphysema) • Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	• Behavioral and learning disabilities in children • Nervous system impairment	Contaminated soil

Source: CARB 2024b.

Toxic Air Contaminants

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control

technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations

are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

AIR QUALITY MANAGEMENT PLANNING

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2022 AQMP

South Coast AQMD adopted the 2022 AQMP on December 2, 2022, which serves as an update to the 2017 AQMP. On October 1, 2015, the EPA strengthened the National AAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb) (2015 Ozone National AAQS.). The SoCAB is currently classified as an "extreme" nonattainment for the 2015 Ozone National AAQS. Meeting the 2015 federal ozone standard requires reducing NO_x emissions, the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037. The only way to achieve the required NO_x reductions is through extensive use of zero emission (ZE) technologies across all stationary and mobile sources. South Coast AQMD's primary authority is over stationary sources which account for approximately 20 percent of NO_x emissions. The overwhelming majority of NO_x emissions are from heavy-duty trucks, ships and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control. The region will not meet the standard absent significant federal action. In addition to federal action, the 2022 AQMP requires substantial reliance on future deployment of advanced technologies to meet the standard. The control strategy for the 2022 AQMP includes aggressive new regulations and the development of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low-NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies for use in cases where the technology is not currently available. South Coast AQMD is prioritizing distribution of incentive funding in Environmental Justice areas and seeking opportunities to focus benefits on the most disadvantaged communities (South Coast AQMD 2022).

Lead State Implementation Plan

In 2008, EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

South Coast AQMD PM2.5 Redesignation Request and Maintenance Plan

In 1997, the EPA adopted the 24-hour fine $PM_{2.5}$ standard of 65 micrograms per cubic meter ($\mu g/m^3$). In 2006, this standard was lowered to a more health-protective level of 35 $\mu g/m^3$. The SoCAB is designated

nonattainment for both the 65 and 35 μg/m^3 24-hour $PM_{2.5}$ standards (24-hour $PM_{2.5}$ standards). In 2020, monitored data demonstrated that the SoCAB attained both 24-hour $PM_{2.5}$ standards. The South Coast AQMD has developed the 2021 Redesignation Request and Maintenance Plan for the 1997 and 2006 24-hour $PM_{2.5}$ Standards demonstrating that the SoCAB has met the requirements to be redesignated to attainment for the 24-hour $PM_{2.5}$ standards (South Coast AQMD 2021b).

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint), that evaluates the availability and effectiveness of air monitoring technologies and existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

Existing Conditions

CLIMATE/METEOROLOGY

South Coast Air Basin

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less

variability in annual minimum and maximum temperatures than inland areas. The lowest average temperature recorded at Riverside is reported at 46.5°F in December, and the highest average temperature is 84.3°F in August (USA.com 2024).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 14.58 inches per year in the vicinity of the area (USA.com 2023).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the (South Coast AQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 3, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 3 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment[1]
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[2]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2024a.

1 The SoCAB is pending a resignation request from nonattainment to attainment for the 24-hour federal $PM_{2.5}$ standards. The 2021 $PM_{2.5}$ Redesignation Request and Maintenance Plan demonstrates that the South Coast meets the requirements of the CAA to allow US EPA to redesignate the SoCAB to attainment for the 65 µg/m^3 and 35 µg/m^3 24-hour $PM_{2.5}$ standards. CARB will submit the 2021 $PM_{2.5}$ Redesignation Request to the US EPA as a revision to the California SIP (CARB 2021).

2 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas for lead in the SoCAB are unclassified. However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's SIP revision was submitted to the EPA for approval.

EXISTING AMBIENT AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 19: Saddleback Valley. The air quality monitoring station closest to the project is the Riverside-Rubidoux at 5888 Mission Boulevard, which is one of 31 monitoring stations South Coast AQMD operates and maintains within the SoCAB.[7] Data from this station includes NO_2, O_3, PM_{10}, and $PM_{2.5}$. Table 4, *Ambient Air Quality Monitoring Summary*, shows regular violations of the state and federal O_3, state PM_{10}, and federal $PM_{2.5}$ standards in the last five years.

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations[1]		
	2021	2022	2023
Ozone (O_3)			
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	20	30	48
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	57	72	70
Max. 1-Hour Conc. (ppm)	0.117	0.122	0.139
Max. 8-Hour Conc. (ppm)	0.097	0.095	0.107
Nitrogen Dioxide (NO_2)			
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0
Max. 1-Hour Conc. (ppb)	52.0	55.9	54.7
Coarse Particulates (PM_{10})			
State 24-Hour > 50 µg/m^3 (days exceed threshold)	75	5	3
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	1
Max. 24-Hour Conc. (µg/m^3)	76.5	153.6	166.5
Fine Particulates ($PM_{2.5}$)			
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	11	1	2
Max. 24-Hour Conc. (µg/m^3)	82.1	38.5	74.3

Source: CARB 2024c.
Notes: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; * = Data not available
[1] Most recent data available as of August 2024.

MULTIPLE AIR TOXICS EXPOSURE STUDY V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and

[7] Locations of the SRAs and monitoring stations are shown here: http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf.

a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. Diesel particulate matter continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021a).

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

The nearest offsite sensitive receptors are the single-family residences along Park Avenue and 13th Street.

Thresholds of Significance

The analysis of the Project's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993). CEQA allows the significance criteria established by the applicable air quality

management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed though an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

The South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day
Particulates ($PM_{2.5}$)	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2023a.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)
- Linked to lower birth weight in newborns ($PM_{2.5}$) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible for

an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS. Mass emissions thresholds shown in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. These thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed previously. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 4 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions levels presented in Table 4, then those emissions would cumulatively contribute to the nonattainment status of the air basin and would contribute to elevating health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 4, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, because mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited previously.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health to address the issue raised in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978. South Coast AQMD currently does not have methodologies that would provide the City with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a Project's mass emissions.[8] Ozone concentrations are dependent on a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that

[8] In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing Sierra Club v. County of Fresno (2018) 6 Cal.5th 502 ("Friant Ranch") in the review and analysis of Project under CEQA in Sacramento County. Consistent with the expert opinions submitted to the court in Friant Ranch by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast AQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to likely health consequences for people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible. Since this interim memorandum SMAQMD has provided methodology to address health impacts. However, a similar analysis is not available for projects within the South Coast AQMD region.

cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National and California AAQS, and the absence of modeling tools that could provide statistically valid data and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects, it is not possible to link specific health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by the South Coast AQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.[9] As identified in the South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2023).

LOCALIZED SIGNIFICANCE THRESHOLDS

The South Coast AQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 6, *South Coast AQMD Localized Significance Thresholds*.

Table 6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration

[9] The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual NO_2 Standard (CAAQS)	0.03 ppm
24-Hour PM_{10} Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (South Coast AQMD)[1]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (South Coast AQMD)[1]	2.5 µg/m^3

Source: South Coast AQMD 2023a.
ppm – parts per million; µg/m^3 – micrograms per cubic meter
[1] Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These "screening-level" LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with South Coast AQMD's LST methodology, the screening-level construction LSTs are based on the acreage disturbed per day based on equipment use. The screening-level construction LSTs for the project site in SRA 19 are shown in Table 7, *South Coast AQMD Screening-Level Localized Significance Thresholds,* for sensitive receptors within 82 feet (25 meters) for NO_X and CO, and 140 feet (43 meters) for PM_{10} and $PM_{2.5}$.[10]

Table 7 South Coast AQMD Screening-Level Localized Significance Thresholds

	Threshold (lbs/day)[1]			
Acreage Disturbed	Nitrogen Oxides (NO_X)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
≤1.00 Acre Disturbed Per Day	91	696	8.95	3.71
1.31 Acres Disturbed Per Day	103	789	10.68	4.24
2.50 Acres Disturbed Per Day	142	1,128	17.01	6.20
3.50 Acres Disturbed Per Day	164	1,398	22.08	7.77

Source: South Coast AQMD 2008, 2011, and 2023a.
[1] LSTs are based on sensitive receptors within 82 feet (25 meters) for NO_X and CO and residences located 140 ft (43 meters) for PM_{10} and $PM_{2.5}$ in SRA 19. These two distances represent residences at 140 feet, who are assumed to be exposed to construction emissions 24 hours a day, and the employees and students around the park at 82 feet, who would not be exposed to construction emissions for most of the day.

HEALTH RISK

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions

[10] Distances are based on closest receptor at 82 feet, who would not be exposed to daily emissions 24 hours a day, and 140 feet, for residences who are assumed to be exposed to emissions 24 hours a day.

Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 8, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The type of land uses that typically generate substantial quantities of criteria air pollutants and TACs from operations include industrial (stationary sources) and warehousing (truck idling) land uses (CARB 2005). As park and recreational uses do not use substantial quantities of TACs, these thresholds are typically applied to new industrial projects only. Additionally, the purpose of this environmental evaluation is to identify the significant effects of the Project on the environment, not the significant effects of the environment on the Project (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478)).

Table 8 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast AQMD 2023a.

Draft Operational Cumulative Health Risk Thresholds

South Coast AQMD initiated a Working Group to identify cumulative health risk thresholds for development projects in order to address community concerns of health risk impacts of new projects being developed in areas where there is a higher pollution burden. The cumulative health risk threshold methodology first utilizes a screening approach to identify whether projects can qualitatively address cumulative health risk or quantitatively address health risk:

- **Low Cancer Risk Project Types**: Residential, commercial, recreational, educational, and retail.
- **Medium Cancer Risk Project Types**: Truck yards, gas stations, small industrial projects, and linear projects.
- **High Cancer Risk Project Types**. Industrial, major transportation projects (airports, port, railyard, bus/train station), and major planning projects.

For projects with low and medium cancer risks, like the Project, a quantitative analysis is not warranted. On the other hand, for projects that result in potentially high cancer risk impacts, a quantitative is recommended. Additionally, the project-level health risk threshold of 10 in a million is adjusted based on the underlying health risk of the zip code the project is within based on South Coast AQMD's MATES V mapping. MATES V is utilized. MATES V identifies a gradient of the effects of air pollution on cancer risk in the South Coast AQMD Region, which is then used to adjust the project-level cancer risk levels as shown in Table 9, *MATES V Adjusted Cumulative Significant Cancer Risk Thresholds*.

Table 9 MATES V Adjusted Cumulative Significant Cancer Risk Thresholds

Threshold Increment	MATES V Cancer Risk	Adjusted Cumulative Cancer Risk Threshold
A	Most Stringent	≥ 1 in 1 million
B	>90th Percentile	≥ 3 in 1 million
C	90th Percentile to 50th Percentile	≥ 5 in 1 million
D	50th Percentile to 30th Percentile	≥ 7 in 1 million
E	< 30th Percentile	≥ 10 in 1 million

Source: South Coast AQMD 2023b.

South Coast AQMD has also identified that the thresholds in Table 9 should be adjusted if any of the following criteria apply:

- **Criteria #1 – Post-2018 High Volume Diesel-Fueled Mobile Sources**. If there are post-2018 high volume highways or railroad mainlines, then increase the threshold increment by 1 (e.g., from step "D" to "C").
- **Criteria #2 – Post-2018 Projects with High Volume Diesel Fueled Trucks**. Post-2018 projects are not accounted for in MATES V. Therefore, if new warehousing projects along the truck route have been constructed, then increase the threshold increment by 1 (e.g., from D to C).
- **Criteria #3 – Sensitive Receptor Population**. If the project site is within an AB 617 community or within the 80th percentile of CES 4.0, then increase the threshold increment by 1(e.g., from D to C).

As mentioned previously, this type of project would be considered low to medium cancer risks; thus, an operational cancer risk analysis for the Project would not be warranted.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,[11] carbon (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N_2O), sulfur hexafluoride (SF_6),

[11] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[12] The major GHG are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - ***Chlorofluorocarbons (CFCs***) are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

    - ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.

    - ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

[12] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.

- ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2023b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 10, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fifth Assessment Report (AR5) GWP values for CH_4, a project that generates 10 MT of CH_4 would be equivalent to 280 MT of CO_2.[13]

Table 10 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO_2[1]	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO_2[1]	Sixth Assessment Report (AR6) Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	1	1	1
Methane[2] (CH_4)	25	28	30
Nitrous Oxide (N_2O)	298	265	273

Source: IPCC 2007, 2013, and 2023.

Notes: The IPCC published updated GWP values in its Sixth Assessment Report (AR6) that reflect latest information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, GWP values identified in AR5 are used by the 2022 Scoping Plan for long-term emissions forecasting.

1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

GHG Regulatory Setting

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in

[13] The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2 per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 MPG for model year 2026 vehicles (85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annual for model year 2026. Overall, the new CAFE standards require a fleet average of 49 MPG for passenger vehicles and light trucks for model year 2026, which would be a 10 MPG increase relative to model year 2021 (NHTSA 2022).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has developed regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence EO. It officially rescinded the Clean Power Plan rule issued during the Obama Administration and set emissions guidelines for states in developing plans to limit CO_2 emissions from coal-fired power plants. The Affordable

Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The Biden Administration is assessing options on potential future regulations.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, set a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. EO B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in EO S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, "Safeguarding California", in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, set a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later

than 2045, the remaining emissions should be offset by equivalent net removals of CO_2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codified the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent below 1990 levels for anthropogenic GHG emissions. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

2022 Climate Change Scoping Plan

CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State's anthropogenic GHG emissions (CARB 2022a). The Scoping Plan provides updates to the previously adopted 2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC and the measures would achieve 85 percent below 1990 levels by 2045 in accordance AB 1279. CARB's 2022 Scoping Plan identifies strategies as shown in Table 11, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial process towards the State's carbon neutrality goals.

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
VMT Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances .
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing) .
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings) .

Source: CARB 2022a.

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- Transportation Electrification
  - Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.

- VMT Reduction
  - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
  - Does not result in the loss or conversion of the State's natural and working lands;
  - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy (SCS);
  - Reduces parking requirements by:
    - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
    - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or

    - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
  - At least 20 percent of the units are affordable to lower-income residents;
  - Result in no net loss of existing affordable units.
- Building Decarbonization
  - Use all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking (CARB 2022a).

If the first approach to demonstrating consistency is not applicable (such as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net zero GHG emissions. The third approach to demonstrating project-level alignment with state climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted (CARB 2022a).

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 is defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. CARB adopted revised SB 375 targets for the MPOs in March 2018. The updated targets became effective in October2018. All SCSs adopted after

October 1, 2018, are subject to these new targets. CARB's updated SB 375 targets for the SCAG region were an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of "percent per capita" reductions in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018).

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the 2020-2045 RTP/SCS (Connect SoCal) was adopted on September 3, 2020, and is an update to the 2016-2040 RTP/SCS. In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through horizon year 2045 (SCAG 2020). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 percent compared to baseline conditions for that year. Connect SoCal includes a "Core Vision" that centers on maintaining and better managing the transportation network for moving people and goods while expanding mobility choices by locating housing, jobs, and transit closer together and increasing investments in transit and complete streets (SCAG 2020).

Transportation Sector Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the discussion on the

update to the Corporate Average Fuel Economy standards at the beginning of this Section 5.5.2 under "Federal.") In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO_2e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and uses market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the

legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Energy Efficiency Regulations

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

On August 11, 2021, the CEC adopted the 2022 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission in December 2021. The 2022 standards went into effect on January 1, 2023, replacing the existing 2019 standards. The 2022 standards would require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers (CEC 2021).

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design

standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[14] The mandatory provisions of CALGreen became effective January 1, 2011. In 2021, the CEC approved the 2022 CALGreen, which went into effect on January 1, 2023, replacing the existing 2019 standards.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California's Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program

[14] The green building standards became mandatory in the 2010 edition of the code.

to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017a). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017a). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

Existing Conditions

CALIFORNIA'S GREENHOUSE GAS SOURCES AND RELATIVE CONTRIBUTION

In 2022, the statewide GHG emissions inventory was updated for 2000 to 2020 emissions using the GWPs in IPCC's AR4, and reported that California produced 369.2 $MMTCO_2e$ GHG emissions in 2020 (CARB 2022b), which was 35.3 $MMTCO_2e$ lower than 2019 levels and 61.8 $MMTCO_2e$ below the 2020 GHG Limit of 431 $MMTCO_2e$. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. However, since the peak level in 2004, California's GHG emissions have generally followed a decreasing trend. In 2014, statewide GHG emissions dropped below the 2020 GHG Limit and have remained below the Limit since that time. Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 metric tons per person to 9.3 metric tons per person in 2020, a 33-percent decrease (CARB 2022b).

California's transportation sector remains the largest generator of GHG emissions, producing 37 percent of the state's total emissions in 2020. Industrial sector emissions made up 20 percent and electric power generation made up 16 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (4 percent), agriculture and forestry (8.6 percent), high-GWP gases (5.8 percent), and recycling and waste (2 percent) (CARB 2022b).

Transportation emissions continued to decline for the past three consecutive years with the rise of fuel efficiency for the passenger vehicle fleet and an increase in battery electric vehicles. The deployment of renewable and less carbon-intensive resources and higher energy efficiency standards have facilitated the continuing decline in fossil fuel electricity generation. The industrial sector trend has been relatively flat in recent years but saw a decrease of 7.1 $MMTCO_2e$ in 2020. Commercial and residential emissions saw a decrease of 1.7 $MMTCO_2e$. Emissions from high-GWP gases have continued to increase as they replace ozone depleting substance (ODS) that are being phased out under the 1987 Montreal Protocol. Emissions from other sectors have remained relatively constant in recent years. Overall trends in the inventory also continue to demonstrate that the carbon intensity of California's economy (i.e., the amount of carbon pollution per million dollars of gross domestic product [GDP]) is declining. From 2000 to 2020, the carbon intensity of California's economy decreased by 49 percent while the GDP increased by 56 percent (CARB 2022b).

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.[15]

SOUTH COAST AQMD WORKING GROUP

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The South Coast AQMD Working Group (Meeting No. 15) identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

  For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. The South Coast AQMD Working Group identified a screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

  The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan level projects (e.g., program-level projects such as general

[15] The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

plans) for the year 2020.[16] The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

The bright-line screening-level criterion of 3,000 $MTCO_2e/yr$ is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 $MTCO_2e/yr$ threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

[16] It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

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Assumptions Worksheet

CalEEMod Inputs-Eastside Elementary School Modified Project

*Note that no construction emissions modeling was conducted for this analysis. The following construction information was used to support the qualitative analysis of construction air quality impacts within the addendum.

Name:	Eastside Elementary School Modified Project
Project Number:	RIV-40
Project Location:	4341 Victoria Avenue
County/Air Basin:	Riverside County
Climate Zone:	10
Land Use Setting:	Urban
Operational Year:	2027
Utility Company:	Riverside Public Utilities
Air Basin:	South Coast Air Basin
Air District:	South Coast AQMD
SRA:	23 - Metropolitan Riverside County

Project Site Acreage	7.07
Disturbed Site Acreage	3.16

Project Components	SQFT	Amount of Debris
Demolition		
Building Demolition (Tons)	33,000	1,518
Asphalt Demolition (Tons)	50,000	741
TOTAL		**2,259**

Project Components	Number of Stories	SQFT	Building Footprint	Acres
Construction				
Building Area				
1st Floor Classroom Building	2	24,845	12,423	0.29
Circulation	1	8,612	8,612	0.20
2nd Floor Classroom Building	1	22,318	22,318	0.51
Circulation	1	10,304	10,304	0.24
Library	1	5,430	5,430	0.12
MPR	1	10,098	10,098	0.23
TOTAL		**81,607**	**69,185**	**1.59**
Surface Work				
Parking Lot		56,456		1.30
Asphalt Surfaces		137,573		3.16
Landscaping		28,887		0.66
Hardscape		0		0.00
			TOTAL ACREAGE	**6.71**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
School Building	Elementary School	81.607	1000 sqft	1.59	81,607
Parking	Parking Lot	56.456	1000 sqft	1.30	56,456
Parking	Other Asphalt Surfaces	137.573	1000 sqft	3.16	137,573
Parking	Other Non-Asphalt Surfaces (Landscaping)	28.887	1000 sqft	0.66	28,887
	Other Non-Asphalt Surfaces	0.000	1000 sqft	0.00	0
				6.71	

Demolition

Component	Amount to be Demolished	Haul Truck Capacity (Tons)[1]	Haul Distance (miles)	Total Trip Ends	Duration (days)	Trip Ends Per Day
Building (tons)	1,518	20	20	76	15	6
Asphalt (tons)	741	20	20	37	15	3
Total	2,259			113		9

Notes:

[1] CalEEMod Defaults.

[2] Demolition quantities provided by the applicant.

Soil Haul [1]

Construction Activities	Volume (CY)[1]	Haul Truck Capacity (cy)[2]	Haul Distance (miles)[3]	Total Trip Ends	Trip Ends per Day	Duration (days)
Rough Grading Import	7,000	20	20	700	23	30

Notes:

1 Haul volume based applicant's input

2 Haul truck capacity based on applicant's input

3 CalEEMod deafult for haul distance.

Pavement Volume to Weight Conversion

Component	Total SF of Area[1]	Assumed Thickness (foot)[2]	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf)[3]	AC Mass (lbs)	AC Mass (tons)
Asphalt Demolition	50,000	0.333	16,667	89	1,481,481	740.74
Total	50,000					741

[1] Based on aerial image of existing project site.

[2] Gibbons, Jim. 1999. Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System. https://www.uni-groupusa.org/PDF/NEMO_tech_8.pdf

[3] CalRecycle. 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. https://www.delmar.ca.us/DocumentCenter/View/5668/CalRecycle-Conversion-Table

Building Demolition Haul Trip Calculation

*Conversion factors**

0.046	ton/SF	Building Debris
2.0	CY/ton	Building Debris
1.2641662	tons/cy	Soil
20	tons	Truck Capacity in tons
10	CY	Truck Capacity in CY
0.5	CY/ton	Soil

Building	BSF Demo	Tons/SF	Tons	Haul Truck (tons)	Round Trips	Total Trip Ends
Building Demolition	33,000	0.046	1,518	20	76	152
	33,000					

*CalEEMod User's Guide Version 2022, Appendix C

Construction Activities and Schedule Assumptions

* based on schedule provided by the District

		Construction Schedule		
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**Workdays**
Building Demolition		11/3/2025	11/24/2025	15
Building Demolition Debris Haul		11/17/2025	11/24/2025	5
Asphalt Demolition		11/17/2025	11/24/2025	5
Asphalt Demolition Debris Haul		11/3/2025	11/24/2025	15
Site Preparation		11/24/2025	12/15/2025	15
Rough Grading		12/15/2025	1/19/2026	25
Rough Grading Soil Haul		1/19/2026	1/26/2026	5
Fine Grading		1/19/2026	1/26/2026	5
Fine Grading Soil Haul		1/19/2026	1/26/2026	5
Utility Trenching		1/26/2026	2/2/2026	5
Building Construction		2/2/2026	4/28/2027	320
Asphalt Paving		4/28/2027	5/11/2027	10
Architectural Coating		5/11/2027	5/18/2027	5
Finishing/Landscaping		5/18/2027	7/30/2027	50
	Total Days	11/3/2025	7/30/2027	**455**

CalEEMod Inputs-Eastside Elementary School Modified Project

Name:	Eastside Elementary School Modified Project
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Land Use Setting:	Urban
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Utility Company:	Riverside Public Utilities
Air Basin:	South Coast Air Basin
Air District:	South Coast AQMD
SRA:	23 - Metropolitan Riverside County

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational	User Defined Educational	1.000	1000 sqft	0.00	0
				0.00	

Trips - Provided by Garland & Associates

Source: Garland & Associates. 2024, July (Revised). Traffic Impact Analysis for the Riverside Eastside Elementary School Modified Project.

Land Use Type	Average Daily Weekday Trips	Non-Res H-W Trip Length (miles) [2]	Non Res W-O Trip Length (miles) [2]	Non Res O-O Trip Length (miles) [2]
Elementary School[1]	2,040	**16.60**	8.40	**6.90**
Total	**2,040**			

	Trip Type Percentages		
	Non Res H-W Trip (%)	**Non Res W-O Trip (%)**	**Non Res O-O Trip (%)**
Adjusted Trip Type Percentages [3]	65%	30%	5%

Notes:

[1] Assume no trips during the weekend based on operation of the school hours.

[2] CalEEMod trip lengths adjusted to align with trip lengths modeled in Certified EIR.

[3] CalEEMod defatul trip purpose percentages adjusted to align the percentages modeled in Certified EIR.

CalEEMod Operations Model

RIV-40 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	RIV-40
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	6.80
Location	33.97206616476436, -117.36859737361411
County	Riverside-South Coast
City	Riverside
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5406
EDFZ	11
Electric Utility	City of Riverside
Gas Utility	Southern California Gas
App Version	2022.1.1.26

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Educational	1.00	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.3	9.39	7.92	97.1	0.24	0.15	23.2	23.4	0.14	5.89	6.03	0.00	24,893	24,893	0.85	0.83	81.3	25,244
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.72	8.82	8.55	79.8	0.23	0.15	23.2	23.4	0.14	5.89	6.03	0.00	23,212	23,212	0.88	0.87	2.11	23,495
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.90	6.25	6.25	59.2	0.16	0.11	16.5	16.6	0.10	4.19	4.29	0.00	16,754	16,754	0.63	0.63	25.1	16,982
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.26	1.14	1.14	10.8	0.03	0.02	3.02	3.03	0.02	0.76	0.78	0.00	2,774	2,774	0.10	0.10	4.15	2,812

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	10.3	9.39	7.92	97.1	0.24	0.15	23.2	23.4	0.14	5.89	6.03	—	24,893	24,893	0.85	0.83	81.3	25,244

Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	10.3	9.39	7.92	97.1	0.24	0.15	23.2	23.4	0.14	5.89	6.03	0.00	24,893	24,893	0.85	0.83	81.3	25,244
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	9.72	8.82	8.55	79.8	0.23	0.15	23.2	23.4	0.14	5.89	6.03	—	23,212	23,212	0.88	0.87	2.11	23,495
Area	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	9.72	8.82	8.55	79.8	0.23	0.15	23.2	23.4	0.14	5.89	6.03	0.00	23,212	23,212	0.88	0.87	2.11	23,495
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.90	6.25	6.25	59.2	0.16	0.11	16.5	16.6	0.10	4.19	4.29	—	16,754	16,754	0.63	0.63	25.1	16,982
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	6.90	6.25	6.25	59.2	0.16	0.11	16.5	16.6	0.10	4.19	4.29	0.00	16,754	16,754	0.63	0.63	25.1	16,982
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.26	1.14	1.14	10.8	0.03	0.02	3.02	3.03	0.02	0.76	0.78	—	2,774	2,774	0.10	0.10	4.15	2,812
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	1.26	1.14	1.14	10.8	0.03	0.02	3.02	3.03	0.02	0.76	0.78	0.00	2,774	2,774	0.10	0.10	4.15	2,812

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	10.3	9.39	7.92	97.1	0.24	0.15	23.2	23.4	0.14	5.89	6.03	—	24,893	24,893	0.85	0.83	81.3	25,244
Total	10.3	9.39	7.92	97.1	0.24	0.15	23.2	23.4	0.14	5.89	6.03	—	24,893	24,893	0.85	0.83	81.3	25,244
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	9.72	8.82	8.55	79.8	0.23	0.15	23.2	23.4	0.14	5.89	6.03	—	23,212	23,212	0.88	0.87	2.11	23,495
Total	9.72	8.82	8.55	79.8	0.23	0.15	23.2	23.4	0.14	5.89	6.03	—	23,212	23,212	0.88	0.87	2.11	23,495
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	1.26	1.14	1.14	10.8	0.03	0.02	3.02	3.03	0.02	0.76	0.78	—	2,774	2,774	0.10	0.10	4.15	2,812
Total	1.26	1.14	1.14	10.8	0.03	0.02	3.02	3.03	0.02	0.76	0.78	—	2,774	2,774	0.10	0.10	4.15	2,812

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
User Defined Educational	2,040	0.00	0.00	531,857	27,856	0.00	0.00	7,262,509

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Educational	0.00	439	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Educational	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Educational	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.3	annual days of extreme heat
Extreme Precipitation	2.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.71	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.0
AQ-PM	90.2
AQ-DPM	91.1
Drinking Water	77.4
Lead Risk Housing	92.8
Pesticides	0.00
Toxic Releases	55.1
Traffic	75.9
Effect Indicators	—
CleanUp Sites	94.6
Groundwater	84.7

Haz Waste Facilities/Generators	79.4
Impaired Water Bodies	0.00
Solid Waste	52.9
Sensitive Population	—
Asthma	70.3
Cardio-vascular	79.3
Low Birth Weights	77.9
Socioeconomic Factor Indicators	—
Education	88.1
Housing	83.9
Linguistic	60.6
Poverty	81.6
Unemployment	89.2

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	15.82189144
Employed	16.16835622
Median HI	16.65597331
Education	—
Bachelor's or higher	8.520467086
High school enrollment	12.44706788
Preschool enrollment	81.47055049
Transportation	—
Auto Access	17.51571924
Active commuting	40.27973823

Social	—
2-parent households	10.48376748
Voting	2.463749519
Neighborhood	—
Alcohol availability	30.51456435
Park access	47.35018606
Retail density	44.4629796
Supermarket access	28.35878352
Tree canopy	47.38868215
Housing	—
Homeownership	31.64378288
Housing habitability	20.33876556
Low-inc homeowner severe housing cost burden	11.76697036
Low-inc renter severe housing cost burden	37.84165277
Uncrowded housing	13.1271654
Health Outcomes	—
Insured adults	9.149236494
Arthritis	23.1
Asthma ER Admissions	29.0
High Blood Pressure	12.0
Cancer (excluding skin)	74.5
Asthma	5.9
Coronary Heart Disease	13.8
Chronic Obstructive Pulmonary Disease	9.6
Diagnosed Diabetes	7.6
Life Expectancy at Birth	14.5
Cognitively Disabled	74.6
Physically Disabled	73.0

Heart Attack ER Admissions	35.4
Mental Health Not Good	6.5
Chronic Kidney Disease	5.2
Obesity	3.2
Pedestrian Injuries	46.1
Physical Health Not Good	6.0
Stroke	8.8
Health Risk Behaviors	—
Binge Drinking	75.2
Current Smoker	6.5
No Leisure Time for Physical Activity	4.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	36.4
Elderly	64.7
English Speaking	30.2
Foreign-born	65.4
Outdoor Workers	10.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	63.4
Traffic Density	88.7
Traffic Access	57.2
Other Indices	—
Hardship	89.4
Other Decision Support	—
2016 Voting	6.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	99.0
Healthy Places Index Score for Project Location (b)	7.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Trip type info aligned with modeling for Certified EIR
Operations: Fleet Mix	Adjusted fleet mix to align with modeling in Certified EIR

Appendices

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Appendix B - Noise Analysis

CONSTRUCTION NOISE MODELING

RIV-40 Construction Noise Modeling Attenuation Calculations

Levels in dBA Leq

Phase	RCNM Reference Noise Level	Residence to north	Resiences to east	Residences to South
Distance in feet	*50*	*210*	*640*	*250*
Demolition	85	72	62	71
Site Prep	83	70	61	69
Grading	85	72	62	71
Distance in feet	*50*	*180*	*800*	*200*
Architectural Coating	74	63	50	62
Building Construction	82	71	58	70
Distance in feet	*50*	*125*	*600*	*200*
Paving	83	75	61	71
Distance in feet	*50*	*100*	*190*	*260*
Utility Trenching	81	75	70	67
Finish/Landscaping	81	75	70	67

Attenuation calculated through Inverse Square Law: Lp(R2) = Lp(R1) - 20Log(R2/R1)

RIV-40 Vibration Annoyance Attenuation Calculations

Levels in in/sec PPV

Distance in feet	**Vibration Reference Level at *25 feet***	**Residential to north** *60*	**Residential to east** *410*	**Onsite Historical Structure** *185*
Vibratory Roller	0.21	0.056	0.003	0.010
Large Bulldozer	0.089	0.024	0.001	0.010
Caisson Drilling	0.089	0.024	0.001	0.004
Loaded Trucks	0.076	0.020	0.001	0.004
Jackhammer	0.035	0.009	0.001	0.004
Small Bulldozer	0.003	0.001	0.000	0.004

Appendices

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Appendices

Appendix C - Traffic Impact Analysis

TRAFFIC IMPACT ANALYSIS

FOR THE

RIVERSIDE EASTSIDE ELEMENTARY SCHOOL MODIFIED PROJECT

Prepared for

RIVERSIDE UNIFIED SCHOOL DISTRICT
&
PLACEWORKS

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I.
INTRODUCTION AND STUDY METHODOLOGY

This report summarizes the results of a traffic impact analysis that was conducted for a modified project description of Eastside Elementary School, which is proposed by Riverside Unified School District on the north side of 14th Street between Howard Avenue and Victoria Street in the city of Riverside. The new school will be located on parcels of land that are currently occupied by residential properties, commercial businesses, and a church. The project site is west of the existing Lincoln High School.

This report is an updated version of a June 2022 traffic study that was prepared as a component of the EIR for the proposed elementary school. This updated traffic study is a component of an Addendum to the Eastside Elementary School EIR. An addendum is needed because the project description for the new school has been modified by the District. The primary changes are 1) the student population has been increased to 900 students (from 800); 2) the school would not encroach on Lincoln Park, which is located north of the school site; and 3) 13th Street would operate as a one-way westbound street between Howard Avenue and Park Avenue. The closure/vacation of Park Avenue between 13th Street and 14th Street is still proposed as part of the project description.

Two options are under consideration for the development of the elementary school. Option 1 would be to stay within the perimeter of the District's site, and Option 2 would be to use 13th street as one way street, with angled parking spaces along the south side of 13th Street. All other components of the school would be the same for the two site plan options. The site plan for Option 2 is provided in the Appendix.

An updated analysis has been prepared to evaluate the traffic impacts of the Modified Project. The methodology for the traffic study, in general, was to re-evaluate the project's impacts based on the modified project description. The baseline traffic conditions on the streets that provide access to the school site for existing conditions and future baseline traffic conditions for the target year of completion for the Modified Project (year 2027) remain unchanged from what was presented in the previous EIR. So those sections are not repeated in this updated analysis. The analysis addresses the impacts that would change as a result of the new project description scenarios.

The scope of work for the updated traffic analysis is to 1) estimate the levels of traffic that would be generated by the modified school project, 2) estimate the diversion in traffic that would occur as a result of the proposed street closure and one-way street conversion, 3) conduct a comparative analysis of traffic conditions with and without the Modified Project, 4) evaluate non-motorized transportation and transit impacts, and 5) prepare findings relative to the CEQA transportation issues.

The traffic analysis is based on morning peak hour traffic volumes on the roadways and intersections in the project area because traffic that would be generated by the school in the morning generally coincides with the morning commuter peak period. The afternoon peak period was not evaluated because the afternoon peak hour of traffic activity for a school does not typically coincide with the commuter peak hour on the roadway network. The afternoon commuter peak hour generally occurs from approximately 5:00 to 6:00 p.m., while an elementary school generally experiences its peak traffic activity between 1:30 and 2:30 p.m. when the background traffic volumes are relatively light (as compared to the peak hour).

The traffic analysis addresses the impacts at 10 intersections in the vicinity of the school site. The study area intersections, the type of traffic control at each intersection, and the public agency with jurisdictional responsibility for the intersection are listed below in Table 1.

TABLE 1
STUDY AREA INTERSECTIONS

Intersection	***Traffic Control***	***Jurisdiction***
SIGNALIZED INTERSECTIONS		
14th Street/Victoria Avenue	Traffic Signal	City of Riverside
14th Street/Park Avenue	Traffic Signal	City of Riverside
14th Street/Howard Avenue	Traffic Signal	City of Riverside
14th Street/Eastbound 91 Freeway Ramps	Traffic Signal	Caltrans
14th Street/Mulberry Street	Traffic Signal	City of Riverside
UNSIGNALIZED INTERSECTIONS		
13th Street/Victoria Avenue	Stop Signs on 13th Street	City of Riverside
13th Street/Park Avenue	4-Way Stop Signs	City of Riverside
13th Street/Howard Avenue	Stop Sign on 13th Street	City of Riverside
12th Street/Park Avenue	Stop Signs on 12th Street	City of Riverside
12th Street/Howard Avenue	4-Way Stop Signs	City of Riverside

The traffic impact analysis is based on an evaluation of the levels of service at the affected study area intersections. Level of service (LOS) is an industry standard by which the operating conditions of a roadway segment or an intersection are measured. LOS is defined on a scale of A through F with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS A is characterized as having free flowing traffic conditions with no restrictions on maneuvering or operating speeds, where traffic volumes are low and travel speeds are high. LOS F is characterized as having forced flow with many stoppages and low operating speeds.

According to the City of Riverside standards, LOS A through D represents acceptable conditions on arterial and collector streets, while LOS E and F represent congested, over-capacity conditions. For local streets, LOS A through C represents acceptable conditions while LOS D through F represents over-capacity conditions. The levels of service at the study area intersections were determined by using the Highway Capacity Manual methodology, which is consistent with the City of Riverside's traffic impact analysis guidelines.

The levels of service for the intersections in the vicinity of the Modified Project were analyzed for the following scenarios: existing conditions (2021), existing conditions plus the Modified Project, future baseline conditions without the Modified Project for the target year of 2027, and future conditions with the Modified Project. The year 2027 was used for the future target year as that is anticipated to be the year of completion for the Modified Project. The year 2021 was used to represent existing conditions as that was when the traffic study for the project's EIR was prepared.

II.
TRAFFIC IMPACT ANALYSIS

This section summarizes the analysis of the Modified Project's impacts on study area traffic conditions. First is a discussion of project generated traffic volumes. This is followed by an analysis of the impacts of the Modified Project on intersection levels of service. Then the impacts associated with the CEQA thresholds of significance are presented.

Standards of Significance

According to the City of Riverside standards, as stated in the City's "Traffic Impact Analysis Preparation Guide," LOS D is the maximum acceptable threshold for the study intersections and roadways of collector or higher classification. LOS C is to be maintained on local street intersections. For projects in conformance with the General Plan, a significant impact occurs at a study intersection when the peak hour LOS fall below C (for local streets) or D (for arterial and collector streets). For projects that propose uses or intensities above that contained in the General Plan, a significant impact at a study intersection is when the addition of project related trips causes either peak hour LOS to degrade from acceptable (LOS A thru D) to unacceptable levels (E or F) or the peak hour delay to increase as follows:

LOS A/B	By 10.0 seconds
LOS C	By 8.0 seconds
LOS D	By 5.0 seconds
LOS E	By 2.0 seconds
LOS F	By 1.0 second

Objective ENP 10 of the Eastside Community Plan, which is a component of the City of Riverside General Plan, states that one of the planning objectives is to expand educational opportunities and access to educational facilities for the residents of the Eastside Neighborhood. Policy ENP 10.1 states that the City should collaborate with Riverside Unified School District (RUSD) to establish new schools or increase capacity of existing schools in the Eastside neighborhood. As the Modified Project is consistent with this objective and policy, the project is in conformance with the General Plan.

According to the Caltrans standards, Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, however, Caltrans acknowledges that this may not always be feasible. If an existing State highway facility is operating at less than the appropriate target LOS, an acceptable measure of effectiveness (MOE) should be maintained.

With regard to the CEQA thresholds of significance, Appendix G of the CEQA Guidelines states that a project would normally have a significant effect on the environment if the project could:

T-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities,

T-2 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),

T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or

T-4 Result in inadequate emergency access.

Project Generated Traffic

The volumes of traffic expected to be generated by the Modified Project were determined in order to estimate the impacts of the project on the study area roadways and intersections. As the project would result in the displacement of existing land uses at the project site, the net increase in site generated traffic was determined by subtracting the traffic that is generated by the existing uses (i.e., the residential, commercial, and church uses) from the volumes of traffic that are projected to be generated by the new school.

The trip generation rates that were used to calculate the volumes of traffic generated by each land use are shown in Table 2. These trip generation rates are from the Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021). The church is not included in the analysis because the traffic analysis is based primarily on the weekday AM peak hour when the church generates minimal or no vehicular traffic.

TABLE 2
TRIP GENERATION RATES

Land Use	*AM Peak Hour*			*Daily Traffic*
	Total	*Inbound*	*Outbound*	
Elementary School (trips per student)	0.74	54%	46%	2.27
Single Family Residential (trips per unit)	0.70	26%	74%	9.43
Multi-Family Residential (trips per unit)	0.40	24%	76%	6.74
Tire Store (trips per 1,000 sf)	2.61	64%	36%	27.69
Auto Parts & Service (trips per 1,000 sf)	1.91	72%	28%	16.6

The estimated volumes of traffic that would be generated by the proposed elementary school, the volumes of traffic that are generated by the uses that would be eliminated from the site, and the net increase in site generated traffic are shown in Table 3 for the morning peak hour and an average weekday. Although the trip generation rates shown in Table 2 and the traffic volumes shown in Table 3 for the school are based on the number of students, the data represent the total number of vehicle trips generated by the school, including staff/faculty vehicles, drop-off/pick-up activities, visitors, and deliveries.

Table 3 indicates that the proposed elementary school would generate 666 vehicle trips during the morning peak hour (360 inbound and 306 outbound) and approximately 2,040 vehicle trips per day. After deducting the traffic that is generated by the existing land uses that will be eliminated from the project site, the net increase in site generated traffic volumes would be 633 trips during the morning peak hour (341 inbound and 292 outbound) and 1,700 trips per day.

TABLE 3
PROJECT GENERATED TRAFFIC – MODIFIED PROJECT

Land Use	AM Peak Hour			Daily Traffic
	Total	Inbound	Outbound	
NEW TRIPS				
Elementary School (900 students)	666	360	306	2,040
TRIPS ELIMINATED				
Single Family Residential (9 units)	7	2	5	85
Multi-Family Residential (2 units)	1	0	1	15
Tire Store – Johnny's (5,320 sf)	14	9	5	150
Auto Parts & Service – L&M (5,699 sf)	11	8	3	90
Total Trips Eliminated	33	19	14	340
NET INCREASE IN SITE GENERATED TRAFFIC				
Net Increase	633	341	292	1,700

It should be noted that the school-related traffic volumes shown in Table 3 do not necessarily introduce new traffic to the overall street network but instead represent the volumes of traffic that would be re-directed to this school site from existing schools, because the number of students attending school in the District is a function of the school-age population and the demand for educational facilities. Most of the school-related traffic would be traveling on the street network regardless of the status of the Modified Project. It has been assumed for the traffic analysis, however, that the additional site-generated traffic would be new traffic on the street network.

Effects of the Proposed Street Closure and One-Way Street

One of the components of the Modified Project is the closure/vacation of one block of Park Avenue between 13th Street and 14th Street. This street closure is applicable to both project options. In addition, it is proposed that the one block segment of 13th Street would be converted to a one-way street in the westbound direction between Park Avenue and Howard Avenue.

If these street segments were to be vacated and/or converted to a one-way operation, the traffic that currently travels on these blocks would shift to other nearby streets. The traffic impact analysis for the Modified Project incorporates the anticipated shifting of traffic patterns in addition to the impacts of the project generated traffic volumes. The methodology for quantifying the impacts of the street closures was to re-route the existing traffic volumes onto the nearest or most probable alternative travel routes. For example, the southbound traffic on Park Avenue that turns right onto 14th Street would be re-routed onto 13th Street and Howard Avenue and the southbound traffic on Park Avenue that turns left onto 14th Street would be re-routed onto 13th Street and Victoria Avenue.

Currently, the segment of Park Avenue that is proposed to be closed has 60 southbound vehicles and 110 northbound vehicles during the AM peak hour. This traffic would be re-routed onto Howard Avenue and Victoria Avenue if that block of Park Avenue were to be vacated. The segment of 13th Street between Park Avenue and Howard Avenue has 60 westbound vehicles and

30 eastbound vehicles during the AM peak hour. The eastbound traffic would be re-routed onto 12th Street and 14th Street if the street were to be converted to a one-way street (westbound).

Intersection Impact Analysis

To quantify the increase in traffic volumes at each intersection resulting from the Modified Project, the project generated traffic shown in Table 3 was geographically distributed onto the study area roadways based on the layout of the street network, the existing traffic patterns, and the anticipated geographical distribution of the students who would attend the school.

The traffic impact analysis considers two baseline scenarios. One is the project's impacts on existing (2021) conditions and the other is the project's impacts on the projected year 2027 conditions. A traffic impact analysis was conducted for Option 2 of the Modified Project, which would have on-campus parking, diagonal parking on 13th Street, and the conversion of 13th Street to become a one-way street in the westbound direction. The traffic projections for this scenario reflect the impacts of project generated traffic as well as the shifts in traffic patterns associated with the proposed street closure and directional reconfiguration.

The impact analysis for the 10 study area intersections was conducted by comparing the delay values and levels of service (LOS) for the "without project" and "with project" scenarios. For the existing conditions scenario, the analysis compares the existing conditions to the conditions with the Modified Project. Similarly, for the year 2027 scenario, the analysis compares the year 2027 baseline conditions without the Modified Project to the year 2027 scenario with the Modified Project. The year 2027 was used as the target year for future conditions as that is anticipated to be the year that the Modified Project would be completed.

The comparative levels of service at the study area intersections for the existing conditions scenario are summarized in Table 4 for the Modified Project (Option 2). The table shows the before and after delay values and levels of service that would occur at each study area intersection. Also shown are the increases in the delay values that would occur as a result of the Modified Project. The last column in Table 4 indicates if the intersections would be significantly impacted by the project.

The intersection of 14th Street and Victoria Avenue, for example, would operate with an average delay value of 25.2 seconds per vehicle and LOS C for existing conditions and with an average delay value of 33.9 seconds and LOS C for the existing plus project scenario, which represents an increase in average delay of 8.7 seconds per vehicle. This impact would be less than significant according to the criteria outlined above because the intersection would continue to operate at an acceptable LOS C. Table 4 indicates that none of the study area intersections would be significantly impacted by the street closure, the one-way street conversion, and the additional traffic that would be generated by the Modified Project for the existing conditions baseline scenario because all of the intersections would continue to operate at acceptable levels of service. The threshold values shown in the Standards of Significance section are not applicable because the project is consistent with the City of Riverside General Plan.

TABLE 4
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
EXISTING CONDITIONS AS BASELINE – OPTION 2

Intersection	Delay Value & Level of Service		Increase In Delay Value	Significant Impact
	Existing Conditions	Existing plus Project		
SIGNALIZED INTERSECTIONS				
14th Street/Victoria Avenue	25.2 – C	33.9 – C	8.7	No
14th Street/Park Avenue	7.4 – A	7.8 – A	0.4	No
14th Street/Howard Avenue	11.0 – B	20.1 – C	9.1	No
14th Street/Eastbound 91 Freeway Ramps	29.1 – C	29.0 – C	-0.1	No
14th Street/Mulberry Street	27.6 – C	27.8 – C	0.2	No
UNSIGNALIZED INTERSECTIONS				
13th Street/Victoria Avenue	11.8 – B	21.7 – C	9.9	No
13th Street/Park Avenue	7.6 – A	10.1 – B	2.5	No
13th Street/Howard Avenue	9.9 – A	12.6 – B	2.7	No
12th Street/Park Avenue	9.6 – A	12.3 – B	2.7	No
12th Street/Howard Avenue	7.5 – A	10.1 – B	2.6	No

The comparative levels of service at the study area intersections for the year 2027 analysis scenario are shown in Table 5 for the Modified Project. Table 5 indicates that none of the study area intersections would be significantly impacted by the street closure, the one-way street conversion, and the additional traffic that would be generated by the Modified Project for the year 2027 scenario.

TABLE 5
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
YEAR 2027 AS BASELINE – OPTION 2

Intersection	Delay Value & Level of Service		Increase In Delay Value	Significant Impact
	Without Project	With Project		
SIGNALIZED INTERSECTIONS				
14th Street/Victoria Avenue	28.9 – C	42.4 – D	13.5	No
14th Street/Park Avenue	8.2 – A	8.6 – A	0.4	No
14th Street/Howard Avenue	15.2 – B	27.6 – C	12.4	No
14th Street/Eastbound 91 Freeway Ramps	44.8 – D	45.5 – D	0.7	No
14th Street/Mulberry Street	44.0 – D	44.0 – D	0.0	No
UNSIGNALIZED INTERSECTIONS				
13th Street/Victoria Avenue	12.6 – B	25.0 – C	12.4	No
13th Street/Park Avenue	7.7 – A	10.2 – B	2.5	No
13th Street/Howard Avenue	11.1 – B	15.1 – C	4.0	No
12th Street/Park Avenue	9.8 – A	12.8 – B	3.0	No
12th Street/Howard Avenue	8.0 – A	9.0 – A	1.0	No

Tables 4 and 5 indicate that Option 2 would not have a significant impact at any of the study area intersections during the morning peak hour based on the significance criteria presented previously because the intersections would continue to operate at LOS D or better on the arterial and collector

streets and at LOS C or better on the local streets. As there would be no significant impacts, no capacity-related mitigation measures would be required.

Table 6 shows the intersection levels of service for existing (2021) conditions and for the year 2027 baseline scenario for the "without project" scenario, for the project that was previously addressed in the EIR, and for the currently proposed Option 2 to compare the impacts of each design scenario. The levels of service that are shown in bold are the scenarios where the current designs would result in a different LOS than what was shown in the EIR for the previous project design. As shown for the year 2027 baseline scenario, the currently Modified Project would result in LOS C at the 13th Street/Howard Avenue intersection while the previous design would result in LOS A. This is because that intersection would be eliminated for the previous design because the block of 13th Street that intersects with Howard Avenue would have been closed/vacated.

TABLE 6
INTERSECTION LEVELS OF SERVICE
FOR PREVIOUS AND CURRENT DESIGN SCENARIOS

	Levels of Service					
	Existing Conditions as Baseline			***Year 2027 as Baseline***		
Intersection	***Without Project***	***With Previous Project***	***With Current Design***	***Without Project***	***With Previous Project***	***With Current Design***
SIGNALIZED INTERSECTIONS						
14th Street/Victoria Avenue	C	D	**C**	C	D	D
14th Street/Park Avenue	A	A	A	A	A	A
14th Street/Howard Avenue	B	B	**C**	B	C	C
14th Street/EB 91 Freeway Ramps	C	C	C	D	D	D
14th Street/Mulberry Street	C	C	C	D	D	D
UNSIGNALIZED INTERSECTIONS						
13th Street/Victoria Avenue	B	C	C	B	C	C
13th Street/Park Avenue	A	A	**B**	A	A	**B**
13th Street/Howard Avenue	A	A	**B**	B	A	**C**
12th Street/Park Avenue	A	B	B	A	B	B
12th Street/Howard Avenue	A	A	**B**	A	A	A

The overall conclusion of the traffic impact analysis is that Option 2 of the Modified Project would not result in a significant impact at any of the study area intersections. This is the same finding that was presented in the EIR for the previous design proposed for the project.

Non-Motorized Transportation and Transit

The Modified Project would generate a demand for non-motorized travel as some students would travel to and from the school as pedestrians or on bicycles. The streets in the vicinity of the project site have sidewalks along both sides of the street and the signalized intersections along 14th Street are equipped with painted crosswalks and pedestrian crossing signals. Painted crosswalks are in place at the unsignalized intersections of 13th Street at Park Avenue, 13th Street at Victoria Avenue, and 12th Street at Park Avenue. The crosswalks at the four corners of the block where Lincoln High School is located are painted yellow to indicate that they are in a school zone. Bike racks would be provided at the proposed school.

With regard to public transit, Riverside Transit Agency (RTA) operates Route 10 along 14th Steet and on Victoria Avenue south of 14th Street and it operates Route 13 along 14th Street. Both of these bus lines have stops adjacent to the project site. The Modified Project would not adversely affect the performance of these transit or non-motorized transportation facilities and would not conflict with any plans or policies relative to these transportation modes.

The Modified Project would be consistent with policies supporting alternative transportation because busing would be provided, a bus loading/unloading zone would be installed at the school, and bike racks would be provided at the school. The Modified Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Findings Relative to CEQA Transportation Issues

For the transportation analysis, Appendix G of the CEQA Guidelines states that a proposed project could have a significant effect on the environment if the project would:

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

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT),

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), or

d) Result in inadequate emergency access.

The findings regarding each of these issues are presented in the following sections.

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

CEQA Finding: No Impact

The Circulation and Community Mobility Element of the City of Riverside General Plan includes various objectives and policies that outline the overall goal of building and maintaining a transportation system that combines a mix of transportation modes and maintains an efficient, safe, and coordinated circulation system that reduces environmental impacts and meets the needs of Riverside's residents and businesses. The proposed school project is consistent with the objectives presented in the Circulation and Community Mobility Element. The project would not conflict with any objectives or policies of the General Plan and it would not adversely affect the performance of any roadway, transit, or non-motorized (pedestrian and bicycle) transportation facilities.

Based on the LOS analysis, the discussion of non-motorized transportation and transit, and a review of the Circulation and Community Mobility Element of the City's General Plan, the Modified Project would not conflict with a program, plan, ordinance, or policy addressing the

circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Issue: Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT).

CEQA Finding: No Impact

Vehicle delays and levels of service (LOS) have historically been used as the basis for determining the significance of traffic impacts as standard practice in California Environmental Quality Act (CEQA) documents. On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed transportation impact analyses as part of CEQA compliance. SB 743 eliminated auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as the sole basis for determining significant impacts under CEQA. As part of the current CEQA Guidelines, the criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). Pursuant to SB 743, the California Natural Resources Agency adopted revisions to the CEQA Guidelines on December 28, 2018, to implement SB 743. CEQA Guidelines Section 15064.3 describes how transportation impacts are to be analyzed after SB 743. Under the Guidelines, metrics related to "vehicle miles traveled" (VMT) were required beginning July 1, 2020, to evaluate the significance of transportation impacts under CEQA for development projects, land use plans, and transportation infrastructure projects. State courts ruled that under the Public Resources Code Section 21099, subdivision (b)(2), "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment" under CEQA, except for roadway capacity projects.

The CEQA Guidelines state that projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact. Students in the Eastside neighborhood currently attend school at Magnolia Elementary School, Castle View Elementary School, Alcott Elementary School, Pachappa Elementary School, and Longfellow Elementary School. The implementation of the proposed Eastside Elementary School would provide the opportunity for students in the Eastside neighborhood to attend a school that is much closer to their homes, which would result in shorter travel distances and thereby reduce the vehicle miles traveled compared to existing conditions. The Modified Project would, therefore, have a positive impact on VMT and would not have a significant adverse impact.

Furthermore, the City of Riverside's "Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment" states that local-serving K-12 schools will not require a traffic impact analysis that includes VMT. This guideline is based on the finding that projects that are local serving would decrease the number of trips or the trip lengths and are, therefore, VMT-reducing projects.

Issue: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

CEQA Finding: Less Than Significant Impact

The Modified Project would not provide any on- or off-site access or circulation features that would create or increase any design hazards or incompatible uses. Vehicular access to the Modified

Project site would be provided by driveways on the south side of 13th Street between Howard Avenue and Park Avenue. The increased levels of traffic, the increased number of pedestrians, and the increased number of vehicular turning movements at the school driveways and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed to accommodate the anticipated levels of vehicular and pedestrian activity. The streets and intersections have historically been accommodating school-related traffic on a daily basis for the existing Lincoln High School. The addition of an elementary school would be compatible with the neighborhood and the Modified Project would not result in any major hazards for vehicular traffic, pedestrians, or bicyclists.

The streets in the vicinity of the project site have sidewalks adjacent to the street and the intersections adjacent to the project site are equipped with painted crosswalks and pedestrian signals at the signalized intersections. These features would enhance pedestrian safety and facilitate pedestrian access to the school. The Modified Project would not, therefore, substantially increase hazards due to a geometric design feature or incompatible uses.

Issue: Result in inadequate emergency access.

CEQA Finding: No Impact

The proposed access and circulation features at the school, including the driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All access features are subject to and must satisfy the District and the City of Riverside design requirements and would be subject to approval by the Fire Department and the California Division of the State Architect. Emergency vehicles would be able to access the school grounds and buildings and all other areas of the school, including the play fields, via on-site travel corridors. The Modified Project would not, therefore, result in inadequate emergency access.

III.
SUMMARY OF IMPACTS AND CONCLUSIONS

The key findings of the traffic impact analysis are presented below.

- The proposed elementary school project would result in a net increase in site generated traffic of 633 vehicle trips during the morning peak hour (341 inbound and 292 outbound) and 1,700 trips per day.
- The Modified Project includes the closure of Park Avenue between 13th Street and 14th Street, on-campus parking, diagonal parking spaces along one side of 13th Street between Park Avenue and Howard Avenue, and converting this block of 13th Street to a one-way street in the westbound direction.
- An analysis of 10 intersections in the vicinity of the project site indicates that the project generated traffic and the shift in traffic associated with the proposed street closure and the conversion of 13th Street to a one-way street would not result in a significant impact at any of the intersections according to the City of Riverside and Caltrans significance criteria.
- CEQA threshold of significance T-1 asks if the Modified Project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The analysis indicates that the impact would be less than significant because:

  - The level of service thresholds would not be exceeded, and

  - The Modified Project would not adversely affect the performance or safety of any transit or non-motorized transportation facilities (pedestrians and bicycles) and would not conflict with any adopted plans, policies, or programs in the Circulation and Community Mobility Element of the City of Riverside's General Plan.

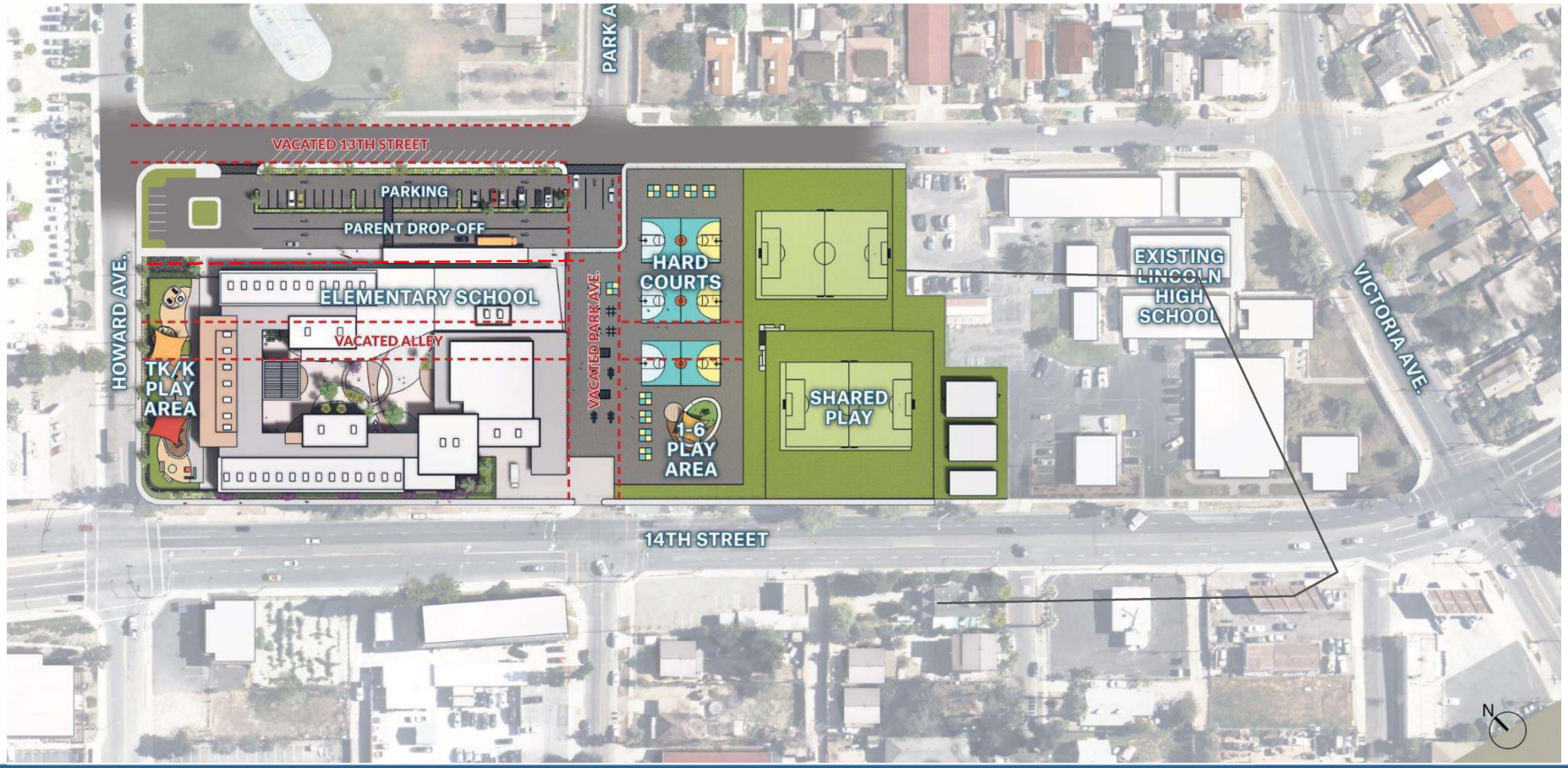
- CEQA threshold of significance T-2 asks if the Modified Project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses vehicle miles traveled (VMT). The analysis indicates that the impact would be less than significant because the Modified Project would result in a reduction in total vehicle miles traveled as the proposed elementary would be closer to most of the homes in the Eastside neighborhood attendance area as compared to the schools where the Eastside students currently attend.

- CEQA threshold of significance T-3 asks if the Modified Project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). The analysis indicates that the streets, intersections, and driveways will be designed to accommodate the anticipated levels of vehicular and pedestrian activity and that the streets have historically been accommodating traffic generated by the existing Lincoln High School. The addition of an elementary school would be compatible with the neighborhood and the Modified Project would not result in any major hazards for vehicular traffic, pedestrians, or bicyclists. So the Modified Project would not substantially increase hazards due to a geometric design feature or incompatible uses.
- CEQA threshold of significance T-4 asks if the Modified Project would result in inadequate emergency access. The proposed access and circulation features at the school, including the

driveways, on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. Emergency vehicles would be able to access the school grounds and buildings and all other areas of the school, including the play fields, via on-site travel corridors. The Modified Project would not result in inadequate emergency access.

APPENDIX

EASTSIDE ELEMENTARY SITE - OPTION 2



Appendices

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