CITY OF RIVERSIDE

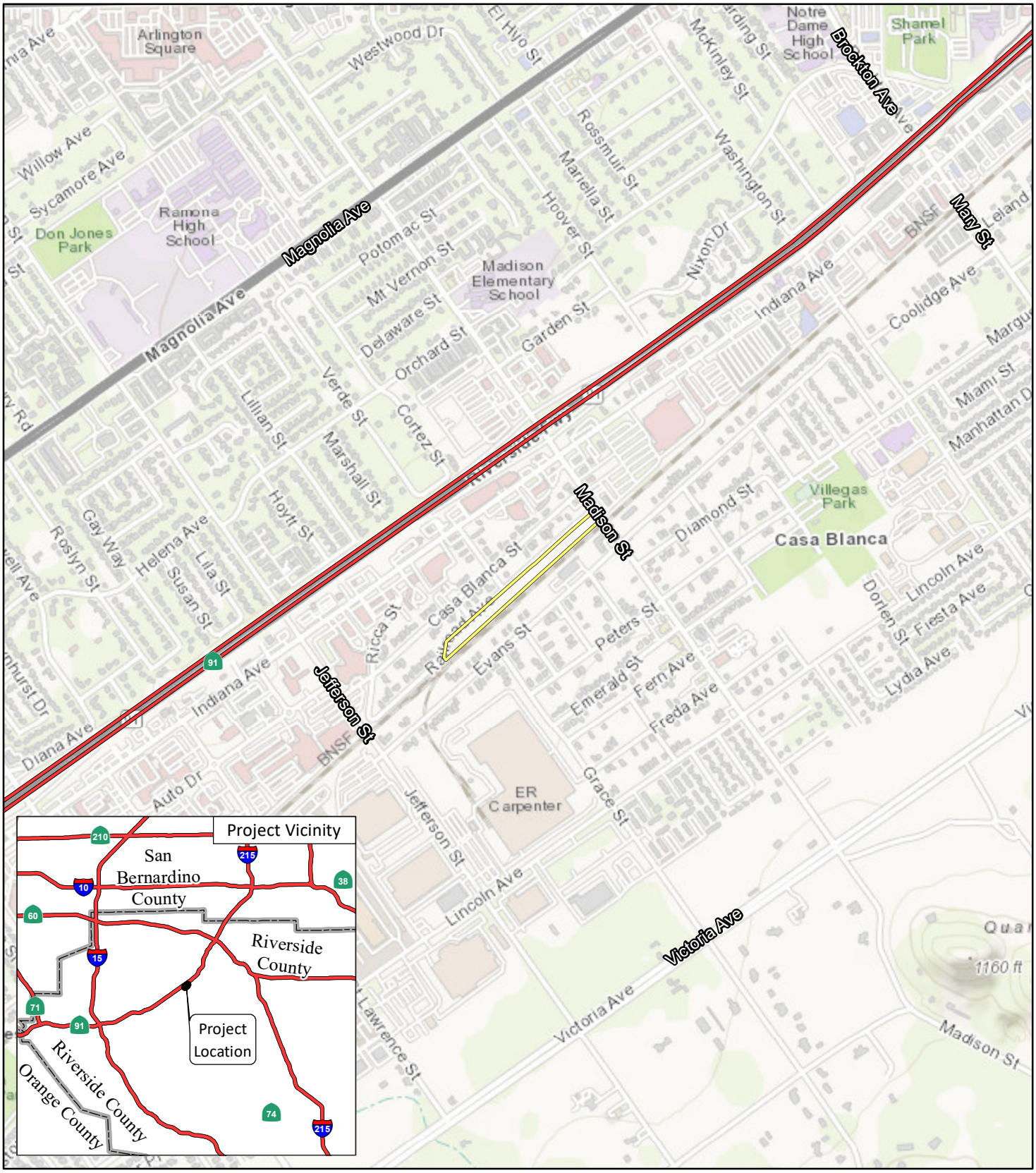
COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT **PLANNING DIVISION**

DRAFT NEGATIVE DECLARATION

1. **Case Number:** PR-2022-001434
2. **Project Title:** Madison Flats Affordable Housing Project
3. **Hearing Date:** Planning Commission: July 20, 2023
4. **Lead Agency:** City of Riverside
   Community & Economic Development Department
   Planning Division
   3900 Main Street, 3rd Floor
   Riverside, CA 92522
5. **Contact Person:** Judy Egüez, Senior Planner
   Phone Number: (951) 826-3969
6. **Project Location:** Southwest corner of Madison Street and Railroad Avenue
7. **Project Applicant/Project Sponsor's Name and Address:**

   Blaise Rastello
   Gilbane Development Company
   7 Jackson Walkway
   Providence, RI 02903
8. **General Plan Designation:** Medium Density Residential (MDR) and Commercial (C)
9. **Zoning:** R-1-7000 – Single Family Residential Zone
10. **Description of Project:**

The proposed Madison Flats Affordable Housing project (proposed project) is located at the southwest corner of Madison Street and Railroad Avenue (Assessor's Parcel Numbers [APNs] 230-253-010, 230-245-013, 230-233-013 and 230-245-015) in the City of Riverside (City), as shown on Figure 1, Regional Project Location. The project site is 3.94 acres and is currently vacant. The proposed project would construct a residential complex with a total of 121 one-, two-, and three-bedroom 100 percent affordable residential dwelling rental units in three, three-story building clusters. Two of the proposed building clusters (identified as Buildings A and B) would be comprised of 76 senior residences, while the remaining building cluster (identified as Building C) would be comprised of 45 multi-family residences. The proposed project overall density would be 30.7 dwelling units per acre. Table 1.A provides details on the unit mix and dimensions of proposed residential buildings, as well as the proposed square footage of senior and family residential uses. Figure 3 (Site Plan) shows the site plan.



LSA

LEGEND

Project Location

FIGURE 1

N

0 580 1160

FEET

SOURCE: Bing Maps (2021)

Madison Flats Affordable Housing Project

Regional Project Location

J:\GBC2201\GIS\MXD\Project_Location.mxd (2/22/2023)

LSA

LEGEND

Project Site

Burlington Northern Santa Fe
(BNSF)/Inland Empire-Orange County

0 250 500

FEET

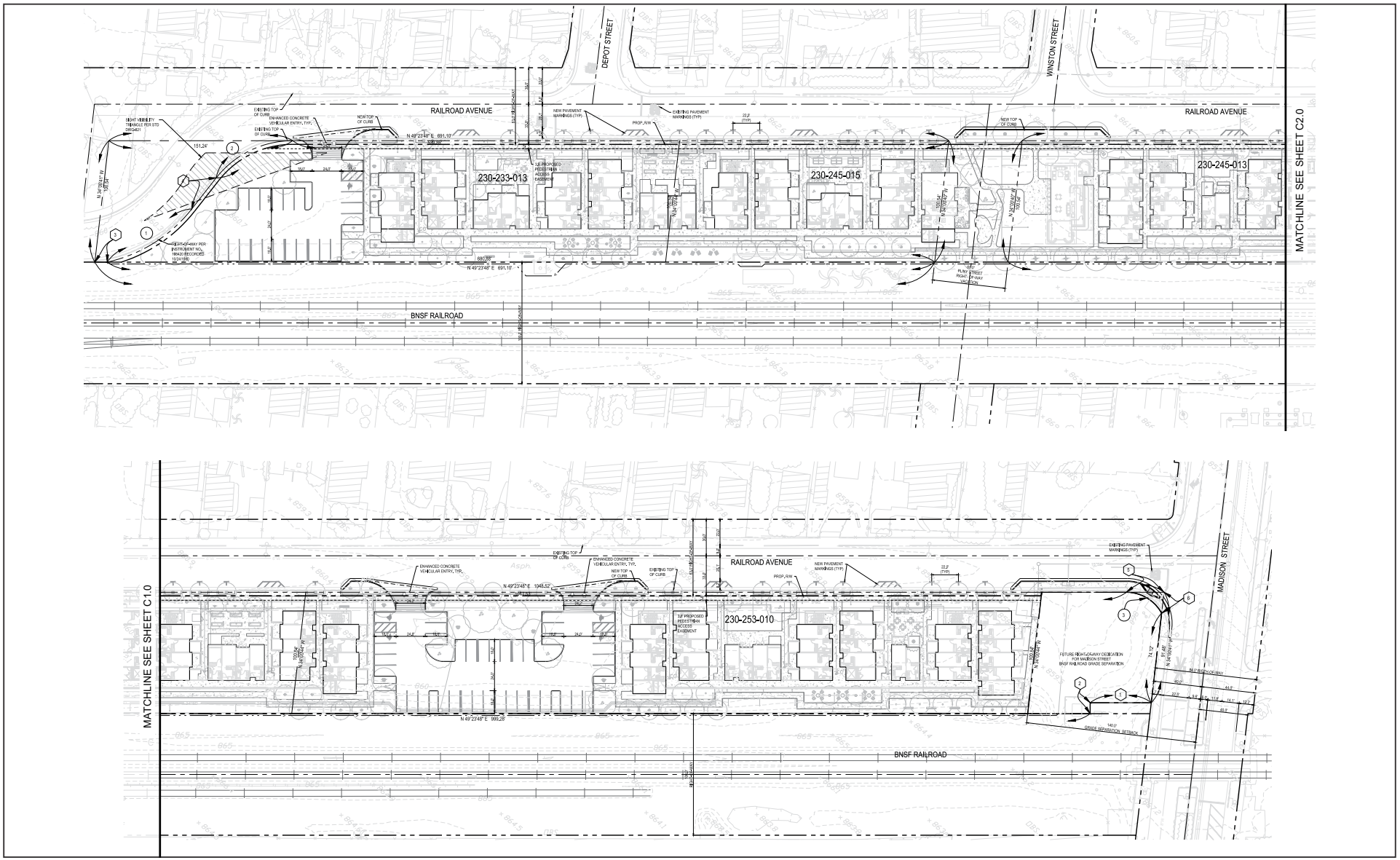
SOURCE: Google Earth 2022

I:\GBC2201\G\Land_Use.ai (2/22/2023)

FIGURE 2

Madison Flats Affordable Housing Project

Project Site and Surrounding Land Uses



LSA

FIGURE 3

N

0 75 150

FEET

SOURCE: PSOMAS

Madison Flats Affordable Housing Project

Site Plan

I:\GBC2201\G\Site_Plan2.ai (2/27/2023)

Table 1.A: Senior and Family Residential Building Details

Senior Residential Buildings A and B					
Unit Type		**Number of Units**	**Percentage of Total Unit Count**	**Unit Area (Square Feet)**	**Subtotal Residential Area (Square Feet)**
A1	1BR+1BA	58	76	643	37,294
A2	1BR+1BA	2	3	667	1,334
B1	2BR+1BA	12	16	810	9,720
B2	2BR+1BA	4	5	829	3,316
Total Buildings A and B		**76**	**100**	-	**51,664**
Family Residential Building C					
A1	1BR+1BA	18	40	643	11,574
A2	1BR+1BA	1	2	667	667
B1	2BR+1BA	6	13	810	4,860
B2	2BR+1BA	4	9	829	3,316
B3	2BR+2BA	4	9	967	3,868
C1	3BR+2BA	12	27	1,207	14,484
Total Building C		**45**	**100**	**-**	**38,769**
Total Project Site		**121**	**-**	**-**	**90,433**

BR=Bedroom
BA=Bathroom

Figures 4 (Building Layout – Level 1), 5 (Building Layout – Level 2), and 6 (Building Layout – Level 3) show the layouts of each floor of Buildings A, B and C. As shown in Figures 7 (Elevations for Building A), 8 (Elevations for Building B), and 9 (Elevations for Building C), the three proposed buildings would have a maximum height of 40 feet.

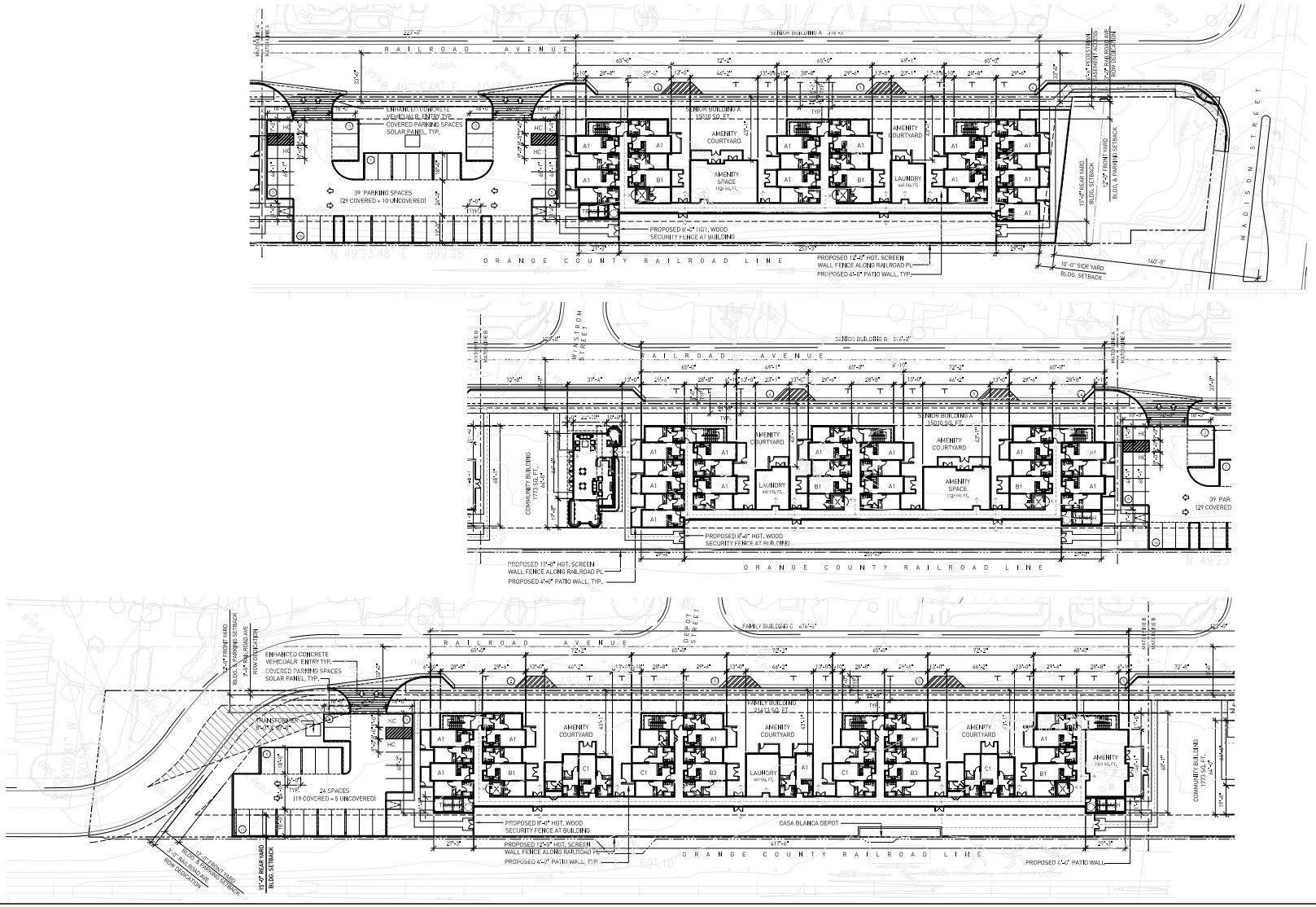
The goals of the project design are to orient residential units away from active railway lines, use the residential corridor as a sound buffer to existing railway traffic noise, focus height and density towards the site interior and away from the single-family neighborhood to the northwest of the site, integrate a 10-minute walk around the community for an active healthy lifestyle, activate a central intergenerational courtyard where residents from the senior and family developments intermix, centralize parking areas for access to residential units and amenity spaces, and group residential units around individual courtyards.

Based on 100 percent of the units being affordable for Low Income households, the project is requesting three concessions to the Development Standards in accordance to Zoning Code Section 19.545.060. The four concession are: 1) to allow for no private open space for 78 of the residential units located on the floors above-grade; 2) to reduce the front yard setback from 15 feet to 12 feet wide; 3) to reduce the landscape setback from 15 feet to 12 feet wide; and 4) to reduce the minimum number of parking spaces.

Access and Circulation
Vehicle access to the project site would be provided via three 24-foot ingress and egress driveways located along Railroad Avenue. Internal vehicle circulation would be limited to the two proposed parking lot areas in the project site and would occur via a network of 24-foot driveways. Pedestrian circulation would occur through a network of internal pedestrian sidewalks and pathways, as well as through a pedestrian sidewalk located along the project frontage with Railroad Avenue.

Parking
The proposed project would provide 63 parking stalls, including 6 American with Disabilities Act (ADA) compliant parking spaces, 48 covered standard parking spaces, and 9 uncovered standard parking spaces.

BUILDING PLAN Level 1



LSA

FIGURE 4

N

0 55 110

FEET

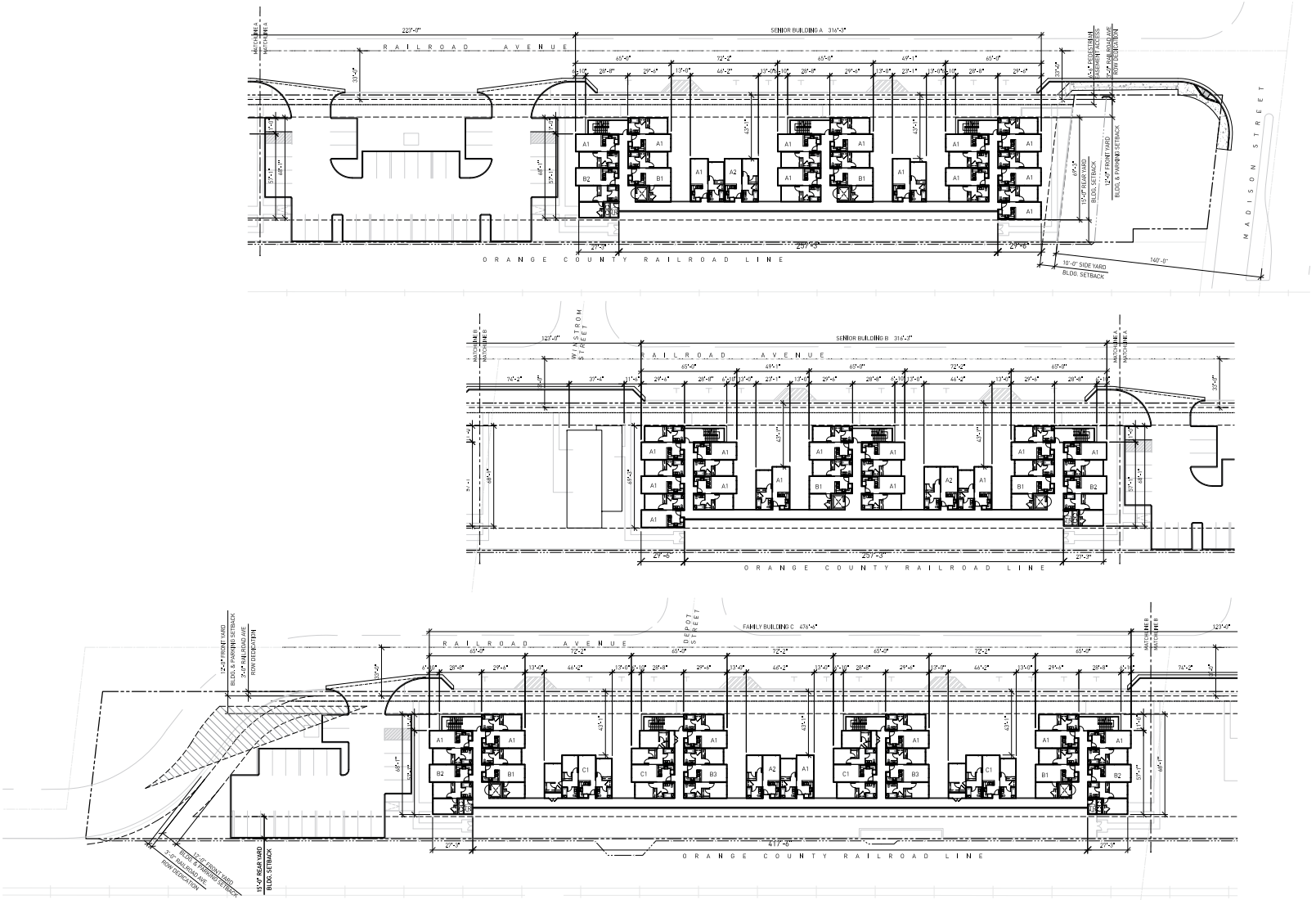
SOURCE: Studioneleven

Madison Flats Affordable Housing Project

Building Layout - Level 1

I:\GBC2201\G\Building_Layout1.ai (2/27/2023)

BUILDING PLAN Level 2



LSA

FIGURE 5

N

0 55 110

FEET

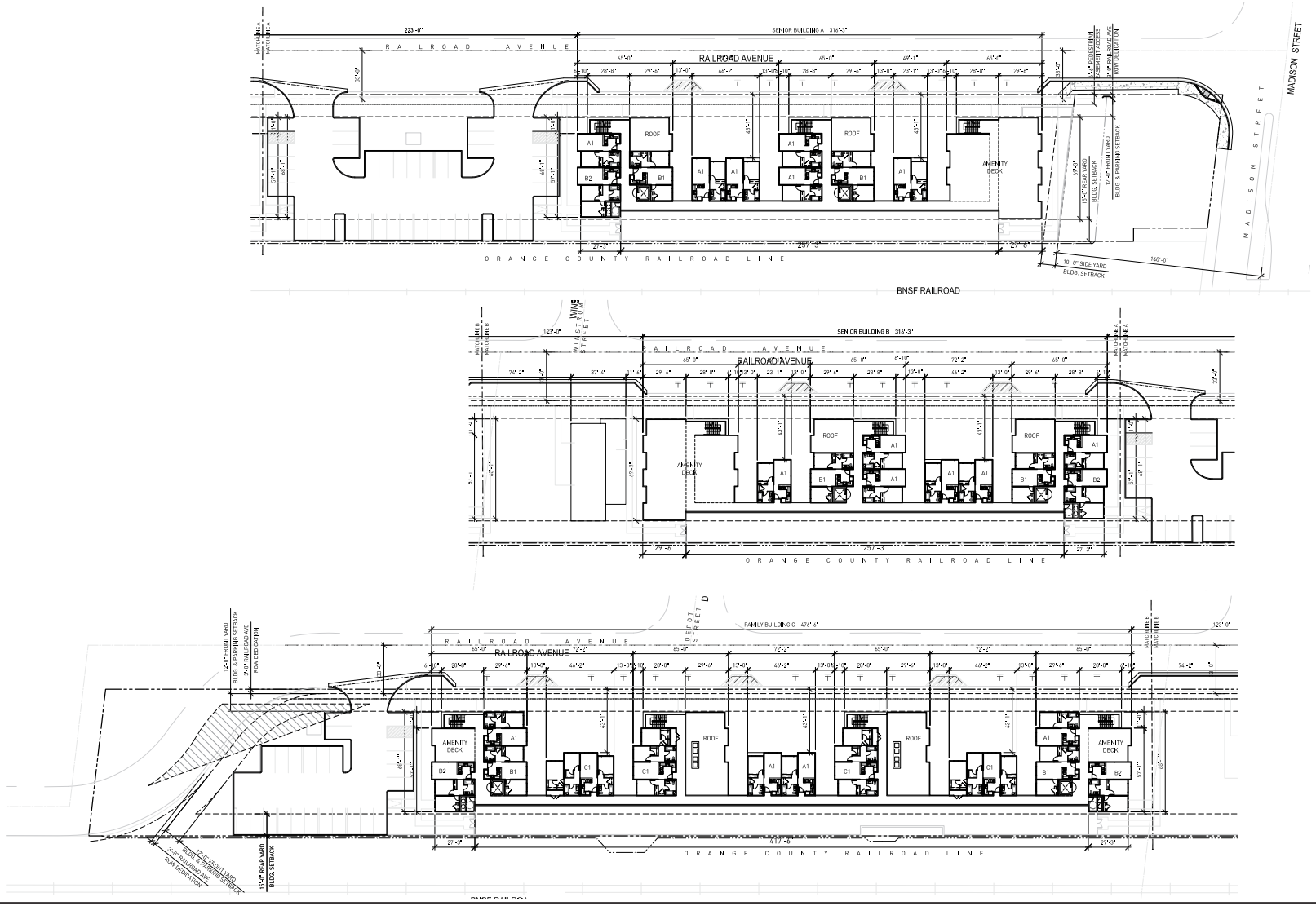
SOURCE: Studioneleven

Madison Flats Affordable Housing Project

Building Layout - Level 2

I:\GBC2201\G\Building_Layout2.ai (2/27/2023)

BUILDING PLAN Level 3



LSA

FIGURE 6

N

0 55 110

FEET

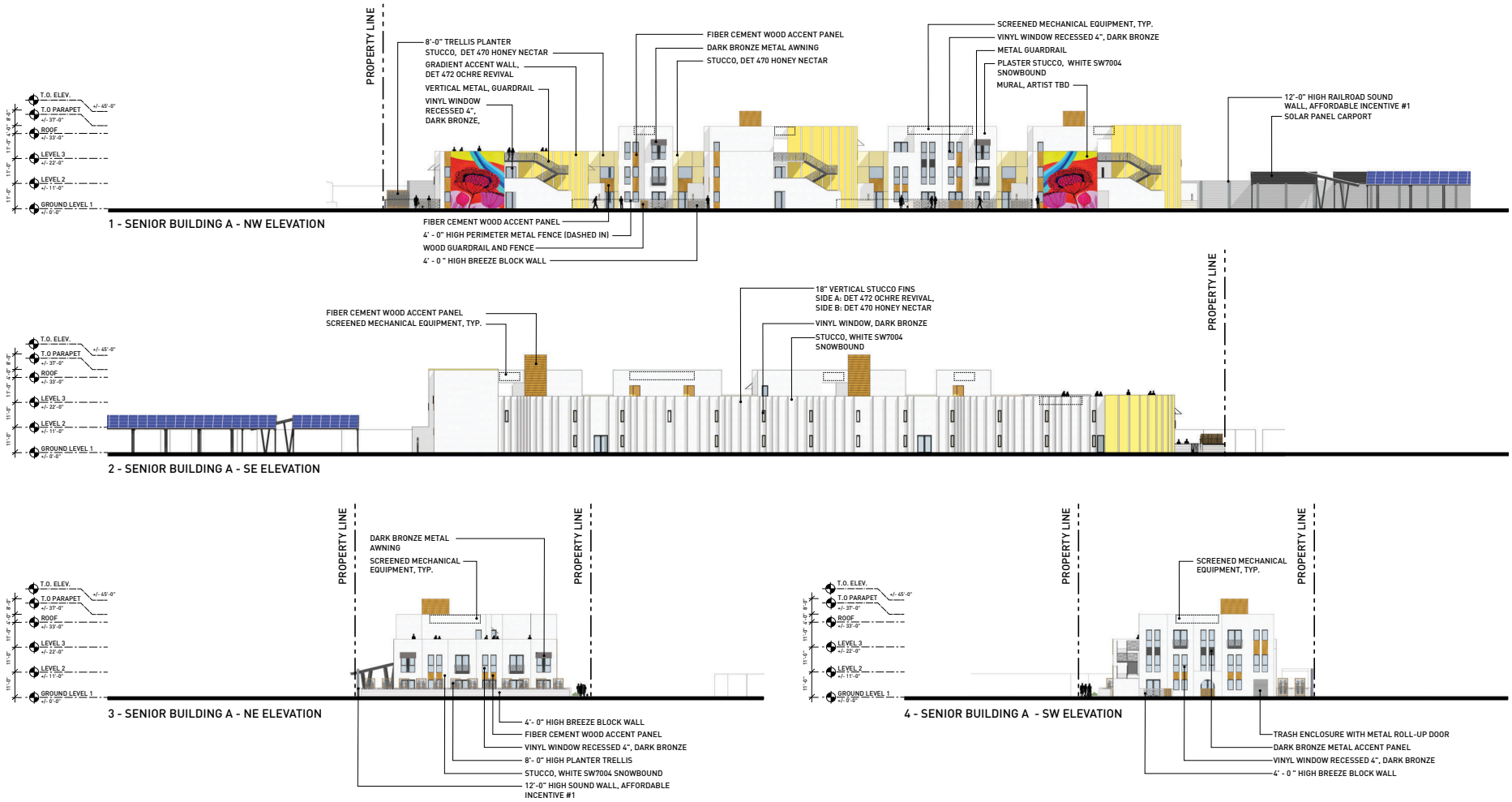
SOURCE: Studioneleven

Madison Flats Affordable Housing Project

Building Layout - Level 3

I:\GBC2201\G\Building_Layout3.ai (2/27/2023)

EXTERIOR ELEVATIONS Senior Building A



LSA

FIGURE 7

0 40 80

FEET

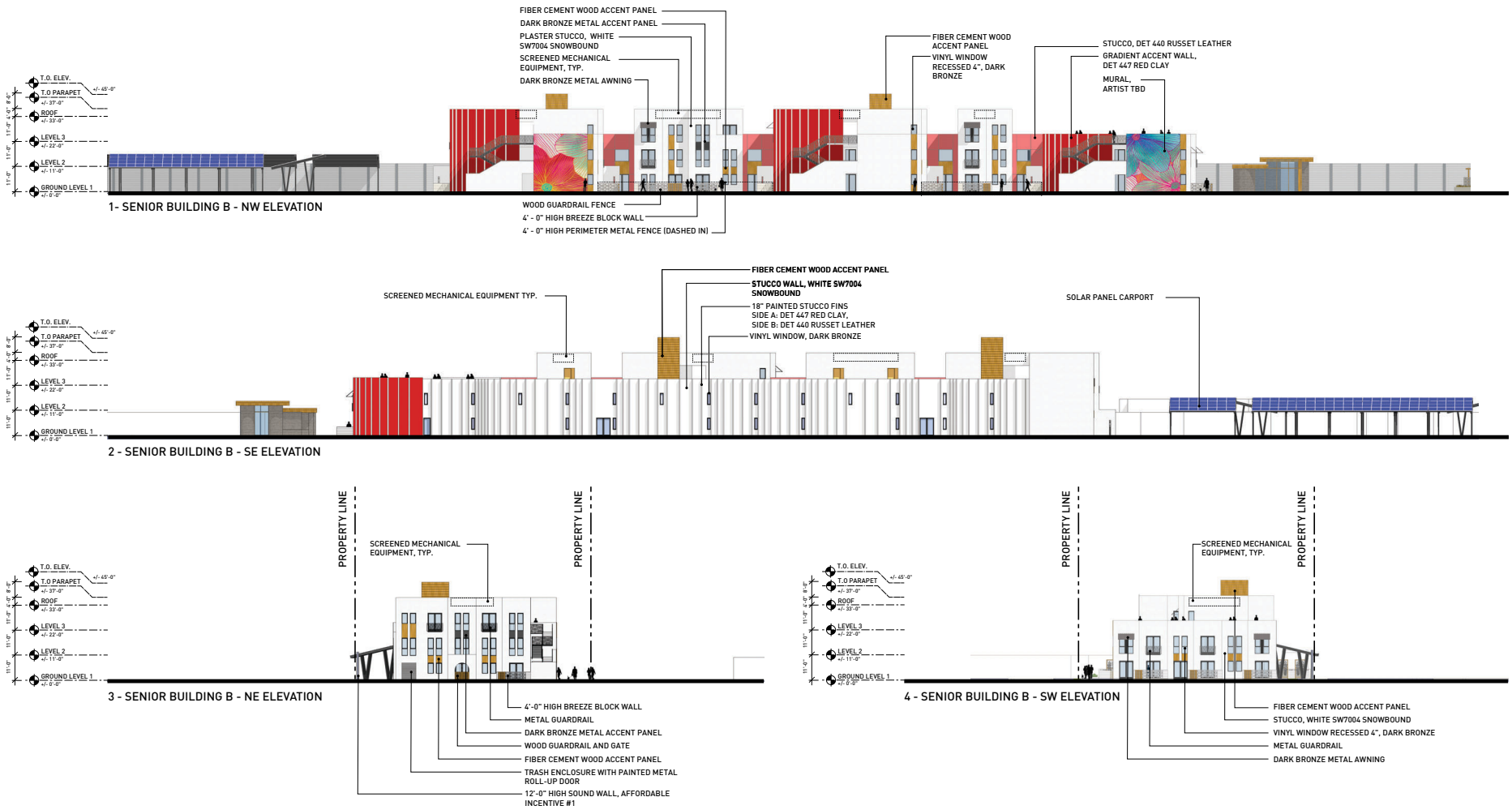
SOURCE: Studioneleven

I:\GBC2201\G\Elevations_A.ai (2/27/2023)

Madison Flats Affordable Housing Project

Elevations for Building A

EXTERIOR ELEVATIONS Senior Building B



LSA

FIGURE 8

0 40 80

FEET

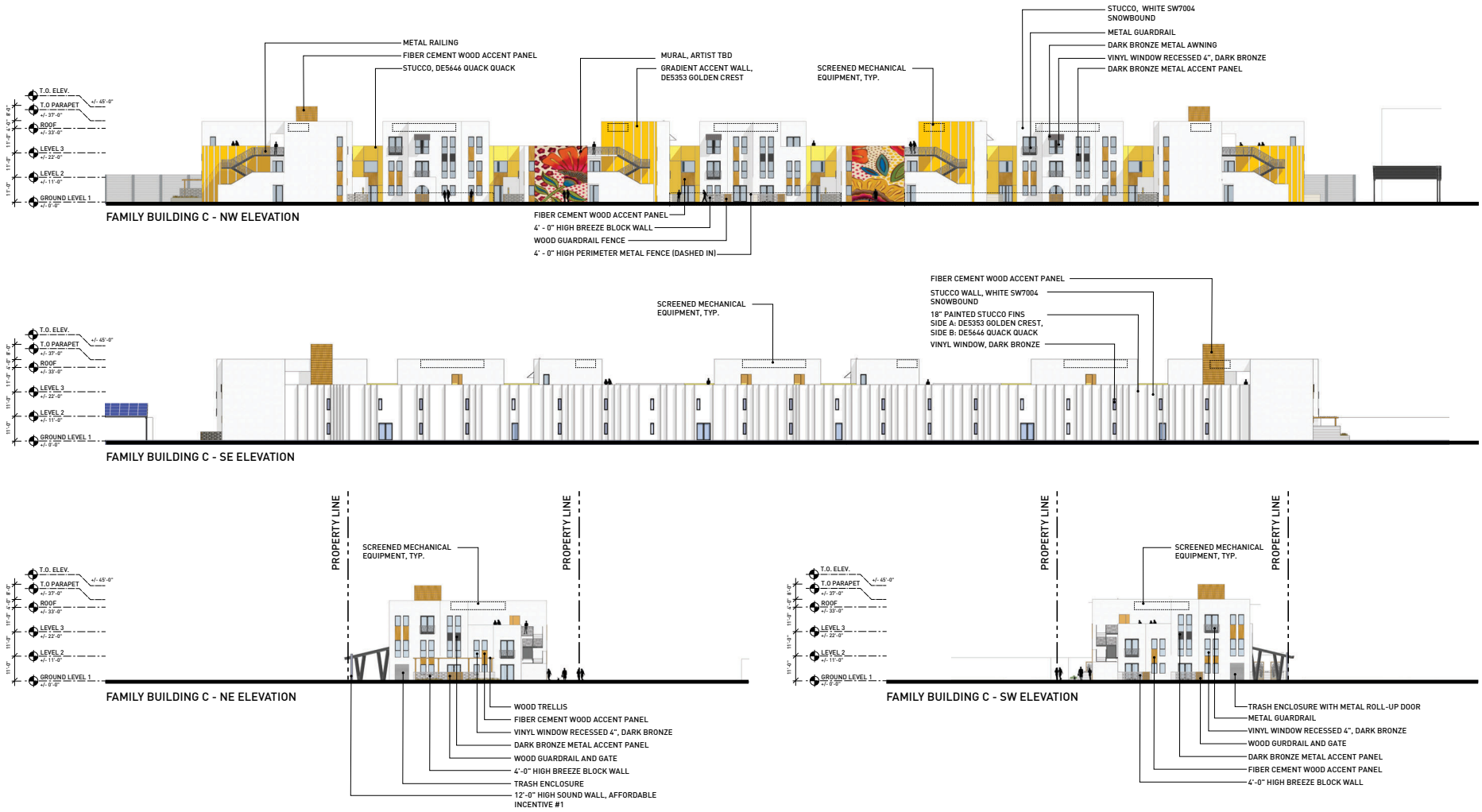
SOURCE: Studioneleven

I:\GBC2201\G\Elevations_B.ai (2/22/2023)

Madison Flats Affordable Housing Project

Elevations for Building B

EXTERIOR ELEVATIONS Family Building C



LSA

FIGURE 9

0 40 80

FEET

SOURCE: Studioneleven

I:\GBC2201\G\Elevations_C.ai (2/22/2023)

Madison Flats Affordable Housing Project

Elevations for Building C

Open Space and Landscaping
The proposed project would include a total of 40,866 square feet of common and private open space on the project site, which would include courtyards, lawns, play areas and other community recreation spaces. The proposed project would include approximately 1.11 acres of landscaping on the project site.

Lighting
The proposed project would include exterior lighting on the project site for safety and building identification purposes.

Walls and Fences
The proposed project would install a 6-foot sound barrier along the southern property line, a 5-foot sound barrier at the 3rd floor amenity spaces, and 4-foot perimeter fences and walls in key locations on the project site.

Utilities and Infrastructure
Water
Public water services would be provided by Riverside Public Utilities. The proposed project would install on-site 2-, 3-, and 4-inch water lines to connect the proposed residential uses to the existing 6-inch water main located in Railroad Avenue.

Wastewater
Wastewater collection and treatment for the project would be provided by the Riverside Public Works Department, and would be treated at the Riverside Water Quality Control Plant (RWQCP). The proposed project would install 6- and 8-inch sanitary sewer lines and a sewer lift station on site, as well as an 8-inch sewer extension along Winstrom Street to connect to an existing 8-inch sewer main in Casa Blanca Street.

Stormwater
Stormwater management would be provided by the Riverside Public Works Department. The proposed project would install on-site drainage infrastructure, including inlets, stormwater settling chambers and dry wells, and storm drain pipelines that would aid in on-site runoff infiltration, as well as in collection and distribution of stormwater from the project site towards storm drain infrastructure along Railroad Avenue and Madison Street.

Solid Waste
Solid waste collection would be provided by the Riverside Public Works Department, Solid Waste Division.

Electricity and Telecommunications
Electricity for the project site would be provided by Riverside Public Utilities. Telecommunication services at the project site would be provided by AT&T and Spectrum. The proposed project would be all-electric and would not include natural gas.

Construction
The proposed project would be constructed in a single phase, beginning in mid-January 2024 and would be complete in 2025. Project construction would include removal of debris, grubbing, grading, excavation, and re-compaction of soils, utility and infrastructure installation, building construction, exterior façade work, and final site work such as paving, coating, finishing, and/or landscaping. During construction, approximately 20 cubic yards of soil would be cut and 12,700 cubic yards would be filled, for a net 12,680 cubic yards of soil to be imported.

11. The following entitlements are required for the proposed project:
- General Plan Amendment (GPA) – to amend the existing General Plan land use designations from C – Commercial and MDR – Medium Density Residential to HDR – High Density Residential
- Zoning Code Amendment (RZ) – to rezone the project site from R-1-7000 – Single Family Residential to R-3-1500 – Multiple Family Residential.
- Design Review – to review design of project plans.
- Summary Vacation – to vacate Pliny Street, Samuels Street, and Cary Street.

12. Surrounding land uses and setting:
The project site is located in an urbanized area of the City of Riverside, and surrounded by a variety of uses, including single-family residential, commercial, and industrial uses. As identified above, single-family residences and a neighborhood services non-profit organization are located north of the project site. Single-family residences and industrial uses are located to the south of the project site across the existing rail line (BNSF/Inland Empire-Orange County Railroad Line). Commercial uses are located to the east of the project site across Madison Street. Single-family residences are located to the west of the project site. The nearest residential uses are located approximately 45 feet north of the project site across Railroad Avenue as well as approximately 80 feet south of the project site beyond the railroad tracks along Evans Street. The nearest schools to the project site include the Learn4Life Casa Blanca Community, Vista Norte Charter School, located approximately 45 feet northwest of the project site, and Casa Blanca School, located approximately 0.22-mile southeast from the project site.

Table 1.B: Existing Land Uses

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant	C – Commercial and MDR – Medium Density Residential	R-1-7000 – Single Family Residential
North	Single – Family Residential and Commercial	C – Commercial and MDR – Medium Density Residential	R-1-7000 – Single Family Residential and CR – Commercial Regional Zone
East	Railway, Single – Family Residential and Commercial	C – Commercial and MDR – Medium Density Residential	RWY – Railway Zone, R-1-7000 – Single Family Residential and CR – Commercial Regional Zone
South	Railway, Single – Family Residential and Commercial	C – Commercial and MDR – Medium Density Residential	RWY – Railway Zone and R-1-7000 – Single Family Residential
West	Single – Family Residential and Commercial	C – Commercial and MDR – Medium Density Residential	R-1-7000 – Single Family Residential and CR – Commercial Regional Zone

13. Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreement.):

a. State Water Resources Control Board (SWRCB)–National Pollutant Discharge Elimination System (NPDES) Construction General Permit/Stormwater Pollution Prevention Plan

b. South Coast Air Quality Management District (SCAQMD) – Dust Control Plan

14. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significant impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

The City of Riverside sent out Assembly Bill (AB) 52 consultation notices to the following tribes to initiate consultation on January 20, 2023: Gabrieleno Band of Mission Indians - Kizh Nation; Soboba Band of Luiseño Indians; Cahuilla Band of Indians; Pechanga Band of Luiseño Mission Indians; Rincon Band of Luiseño Indians; San Manuel Band of Mission Indians; Morongo Band of Mission Indians; Agua Caliente Band of Cahuilla Indians; and San Gabriel Band of Mission Indians. Senate Bill (SB) 18 consultation notices were also sent out on January 20, 2023 to each of the tribes listed above on January 20, 2023 which included the required

90-day time period for tribes to request consultation, which ended on April 20, 2023. Pechanga Band of Luiseño Mission Indians requested consultation with the City of Riverside pursuant to Public Resources Code Section 21080.3.1, which was held on March 17, 2023. In addition, Agua Caliente Band of Cahuilla Indians requested review of this Initial Study. No other tribes responded to consultation notices within the required time period. As such, AB 52 and SB 18 requirements have been fulfilled.

15. Other Environmental Reviews Incorporated by Reference in this Review:

a. City of Riverside General Plan 2025
b. General Plan 2025 Final Program EIR (FPEIR)
c. Municipal Code Title 7, Noise Control
d. Municipal Code Title 16, Building and Construction
e. Municipal Code Title 17, Grading Code
f. Municipal Code Title 19, Zoning Code
g. Municipal Code Title 20, Cultural Resources

16. List of Appendices

- Appendix A – Air Quality/Greenhouse Gas/Energy Impact Analysis (AQ/GHG/Energy Impact Analysis) (LSA, May 2023)
- Appendix B – Health Risk Assessment, Madison Flats Project (Health Risk Assessment) (LSA, May 2023)
- Appendix C – Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report (MSHCP Consistency Analysis and Biology Report) (LSA, November 2022)
- Appendix D – Cultural Resources Study for the Madison Residential Project (APNs 230-233-013, 230-245-013, 230-245-015, and 230-253-010)/Cultural Resources Assessment for the Previous Project on these Parcels in Riverside, Riverside County, California (Cultural Revalidation Assessment) (LSA, October 2022) and Cultural Resources Assessment for Harley Davidson Storage Project, Assessor's Parcel Numbers 230-233-013, 230-245-013, 230-245-015, and 230-253-010, City of Riverside, Riverside County, California (Cultural Resources Study) (LSA, November 2017)
- Appendix E – Geotechnical Investigation for Proposed Madison Flats Multi-Family Residential Development Southwest of Madison Street and Railroad Avenue, Riverside, California (Geotechnical Investigation) (Leighton and Associates, Inc., December 2022)
- Appendix F – Specific Water Quality Management Plan (PSOMAS, December 2022)
- Appendix G – Noise and Vibration Impact Analysis, Madison Flats Project (Noise and Vibration Impact Analysis) (LSA, May 2023)
- Appendix H – Traffic Operational Analysis, Madison Flats Project (Traffic Operational Analysis) (LSA, May 2023)
- Appendix I – Madison Flats Project Vehicle Miles Traveled Analysis Memorandum (LSA Project No. GBC2201) (VMT Analysis Memorandum) (LSA, February 2023)

17. Acronyms

AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily traffic
ALUC	Airport Land Use Commission
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARL	additional reserve lands
Basin	South Coast Air Basin

BMP	Best Management Practice
BNSF	Burlington Northern Santa Fe
C	Commercial
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historical Resources
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
City	City of Riverside
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
DCV	Design Capture Volume
DMA	Drainage Management Area
DOC	(California) Department of Conservation
DPM	diesel particulate matter
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FPEIR	General Plan 2025 Final Program EIR
FTA	Federal Transit Administration
GHG	greenhouse gas
GP 2025	City of Riverside General Plan 2025
GPA	General Plan Amendment
GSP	Groundwater Sustainability Plan
GWh	gigawatt-hours
GWP	global warming potential
HCP	Habitat Conservation Plan
HDM	(Caltrans) Highway Design Manual
HDR	High Density Residential
HFCs	hydrofluorocarbons
HVAC	heating, ventilation, and air conditioning
I-15	Interstate 15
in/sec	inches per second

ITE	Institute of Transportation Engineers
kBTU	thousand British thermal units
kWh	kilowatt hours
L_{dn}	day-night average noise level
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
L_{max}	maximum instantaneous noise level
LOS	Level of Service
LST	localized significance threshold
MDR	Medium Density Residential
mgd	million gallons per day
MLD	Most Likely Descendant
mpg	miles per gallon
MSHCP	Multiple Species Habitat Conservation Plan
MT CO_2e	metric tons of carbon dioxide equivalent
MT CO_2e/yr	metric tons of carbon dioxide equivalent per year
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
Pb	lead
PFCs	perfluorocarbons
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
$PM_{2.5}$	particulate matter less than 2.5 microns in size
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
Project	Madison Flats Affordable Housing Project
RAL	Riverside Municipal Airport
RCALUCP	Riverside County Airport Land Use Commission Plan
RFD	Riverside Fire Department
RMS	root-mean-square (velocity)
RPD	Riverside Police Department
RPU	Riverside Public Utilities
RRG	Riverside Restorative Growthprint
RRG-CAP	Riverside Restorative Growthprint Climate Action Plan
RRG-EPAP	Riverside Restorative Growthprint Economic Prosperity Action Plan
RTA	Riverside Transit Agency
RTP/SCS	Regional Transportation Plan/ Sustainable Communities Strategy
RUSD	Riverside Unified School District
RWQCB	Regional Water Quality Control Board
RZ	Rezone
SB	Senate Bill

SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SMARTS	Stormwater Multiple Application and Report Tracking System
SO_2	sulfur dioxide
SO_x	sulfur oxides
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SR-91	State Route 91
SRA	Source Receptor Area
Subregional CAP	Subregional Climate Action Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TIA	Traffic Impact Analysis
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VdB	vibration velocity decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compounds
WDID	waste discharge identification number
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture & Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation which reflects the independent judgment of the City of Riverside, it is recommended that:

The City of Riverside finds that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

The City of Riverside finds that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

The City of Riverside finds that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

The City of Riverside finds that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

The City of Riverside finds that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ☐

Signature _____ Date _____

Printed Name & Title Judy Egüez, Senior Planner For City of Riverside

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a. **Earlier Analysis Used.** Identify and state where they are available for review.

   b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c. **Mitigation Measures.** For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measure which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

a. the significance criteria or threshold, if any, used to evaluate each question; and

b. the mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

1. AESTHETICS.

Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

1a. Response: ***(Sources: General Plan 2025 Circulation and Community Mobility Element: Figure CCM-4 – Master Plan of Roadways, General Plan 2025 Open Space and Conservation Element; General Plan 2025 FPEIR Section 5.1 – Aesthetics: Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways)***

Less Than Significant Impact. The City's General Plan 2025 (General Plan) policies aim at balancing development interests with broader community preservation objectives. The General Plan identifies hillsides and ridgelines in the City, as well as the City's natural terrain and vegetation, as scenic vistas. The most notable scenic vistas in the City include the La Sierra/Norco Hills, Sycamore Canyon Wilderness Park, and Box Springs Mountain Regional Park. The peaks of Box Springs Mountain, Mount Rubidoux, Arlington Mountain, Alessandro Heights, and the La Sierra/Norco Hills provide scenic views of the City and the region. The project site is located in an urbanized area of the City of Riverside, surrounded by a variety of uses, including single-family residential, commercial, and industrial uses. The proposed project does not constitute hillside development (on slopes greater than 10 percent) where special considerations of the City's natural terrain must be considered for impacts to scenic vistas, as required by Title 17, Grading, and Chapter 19.100, Residential Zones, of the City's Municipal Code. Additionally, the project site is not located on a scenic vista point or contains clear distant views of scenic vistas, as the site is in an urbanized area surrounded by existing industrial, residential and commercial uses. As such, the proposed project would not have a substantial adverse effect on a scenic vista, and direct, indirect, and cumulative impacts to scenic vistas would be **less than significant**. No mitigation is required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

1b. Response: (*Sources: General Plan 2025 Figure CCM-4 – Master Plan of Roadways; General Plan 2025 FPEIR Section 5.1 – Aesthetics: Figure 5.1-1 – Scenic and Special Boulevards, Parkways, Table 5.1-A – Scenic and Special Boulevards, Table 5.1-B – Scenic Parkways; and Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)*

Less Than Significant Impact. There are no trees, rock outcroppings, and/or historic buildings located on or near the project site that have been identified as important scenic resources or would otherwise constitute significant landscape features. Additionally, no officially designated State scenic highways or any eligible State scenic highways currently traverse the City or its Sphere of Influence. The closest eligible state scenic highways include Interstate 15 (I-15) and a portion of State Route 91 (SR-91) in Riverside County, located approximately 8.7 miles from the project site. The City's General Plan has identified special and scenic boulevards and parkways that meet local criteria for designation as scenic routes. However, the proposed project is not located along or within view of any of the identified scenic boulevard, parkway, or special boulevard identified in the City's General Plan. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. There would be **no impact.** No mitigation is required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site the site and its surroundings? (Public views are those that are experienced from a publicly-accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

1c. Response: ***(Sources: General Plan 2025; General Plan 2025 FPEIR; Zoning Code; and Citywide Design and Sign Guidelines)***

Less Than Significant Impact. The proposed project would alter the existing visual character from undeveloped vacant land to construct a residential complex with a total of 121 affordable residential dwelling units. As identified above, the project site is located in an urbanized area of the City of Riverside, surrounded by a variety of uses, including single-family residential, commercial, and industrial uses. Although the proposed project would change the visual characteristics of the project site by developing the site, the design of the project would be consistent with the visual character within the project area. The proposed project would require both General Plan and Zoning Code Amendments to amend the existing general plan land use designations, from C – Commercial and MDR – Medium Density Residential to HDR – High Density Residential and rezone the site from R-1-7000 – Single Family Residential to R-3-1500 – Multiple Family Residential. The proposed project would be subject to a Design Review to ensure that project plans are consistent with established Citywide Design and Sign Guidelines for residential uses. However, the character of the proposed project would be compatible with the surrounding uses in the project vicinity. In addition, the proposed project would comply with residential development standards for R-3-1500 – Multiple Family Residential development outlined in Chapter 19.100.040 of the City's Municipal Code. As such, the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, direct, indirect and cumulative impacts on the visual character and quality of the area are **less than significant impact**. No mitigation is required.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

1d. Response: ***(Sources: General Plan 2025; General Plan 2025 FPEIR Section 5.1 – Aesthetics: Figure 5.1-2 – Mount Palomar Lighting Area, Title 19 – Article VIII – Chapter 19.556 – Outdoor Lighting, Title 19 – Article VIII – Chapter 19.590 – Performance Standards; and Citywide Design and Sign Guidelines)***

Less Than Significant Impact. The project site is located in an urbanized area, which is subject to preexisting exterior lighting from surrounding development and existing street lighting.

Construction of the proposed project would include temporary light and glare resulting from construction activities that could adversely affect day or nighttime views. Sources of construction-related light and glare include usage of construction vehicles and equipment; however, construction activities are anticipated to occur primarily during daylight hours and once construction is completed, light and glare from these activities would cease to occur.

The main sources of daytime glare are generally sunlight reflecting from structures and other reflective surfaces and windows. Implementation of the proposed project would introduce new sources of daytime glare through the construction of new structures and use of automobiles traveling to and from the project site. Building materials (i.e., reflective glass and polished surfaces) are the most substantial sources of glare. The proposed buildings would incorporate a variety of building materials, which would primarily be non-reflective materials (i.e., a variety of materials, such as cement, wood, dark bronze metal accent panels, white stucco, accent murals, and concrete). Therefore, these materials would not have the potential to produce a substantial degree of glare.

In addition, as described in the Project Description, the proposed project would include exterior lighting on the project site for safety and building identification purposes. As such, the proposed project would introduce new sources of light and glare to the area in the form of exterior lighting. As identified above, nearby parcels consist of single-family residential, commercial, and industrial uses; as such, the project area contains many existing sources of nighttime illumination. These include street and parking area lights, landscape lighting, security lighting, and exterior lighting on existing buildings. Therefore, new sources of light and glare associated with the project would not be substantial in the context of existing lighting sources. In addition, all lighting would comply with applicable standards from the City's Municipal Code (Chapter 19.556, Outdoor Lighting and Chapter 19.590, Performance Standards) and California Building Code (Title 24, California Code of Regulations) standards, which would ensure that light and glare impacts from the proposed project would be less than significant. Furthermore, an exterior lighting plan shall be submitted to Design Review staff for review and approval prior to construction of the project. As such, a **less than significant impact** would occur directly, indirectly and cumulatively related to new sources of substantial light and glare which would adversely affect day or nighttime views. No mitigation would be required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

2. AGRICULTURE AND FOREST RESOURCES.

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information complied by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

2a. Response: ***(Sources: General Plan 2025 Open Space and Conservation Element: Figure OS-2 – Agricultural Suitability, California Important Farmland Finder)***

No Impact. The project site is located within an urbanized area of the City, surrounded by single-family residential, commercial, and industrial uses. Based on Figure OS-2 – Agricultural Suitability of the General Plan, the project site is designated as Urban and Built-Up Land. The development of the project site would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. Therefore, the project would have **no impact** directly, indirectly or cumulatively to agricultural uses. No mitigation is required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

2b. Response: ***(Source: General Plan 2025 Open Space and Conservation Element: Figure OS-3 - Williamson Act Preserves)***

No Impact. The project site is zoned within R-1-7000 – Single Family Residential Zone. The project site is not zoned for agricultural use and is not subject to a Williamson Act contract. The development of the proposed project would not be in conflict with existing zoning for agricultural use or a Williamson Act contract. Therefore, the proposed project would have **no impact** directly, indirectly or cumulatively on agricultural land or land within a Williamson Act contract. No mitigation is required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒

2c. Response: ***(Source: GIS Map – Forest Data)***

No Impact. Forest land, as defined in the Public Resources Code section 12220(g)) is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland, as defined in the Public Resources Code section 4526, is land, other than land owned by the federal government,

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. The project site is located in an urbanized location of the City, surrounded by single-family residential, commercial, and industrial uses. The project site is zoned within R-1-7000 – Single Family Residential Zone, and is not zoned as forest land or for timberland production. Additionally, the City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland. Therefore, the proposed project would have **no impact** to forest land or timberland w directly, indirectly or cumulatively. No mitigation is required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

2d. Response: ***(Source: GIS Map – Forest Data)***

No Impact. As described in Response 2c, the project site is not zoned as forest land and as such, development of the project site would not result in loss of forest land or conversion of forest land to a non-forest use. Additionally, the City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland, therefore **no impacts** would occur directly, indirectly or cumulatively. No mitigation is required.

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

2e. Response: (*Sources: General Plan Open Space and Conservation Element: Figure OS-2 – Agricultural Suitability, Figure OS-3 – Williamson Act Preserves; and CAL FIRE GIS Map – Forest Data)*

No Impact. As discussed above, the project is located in an urbanized area of the City and is identified as Urban and Built-up Land, and therefore does not support agricultural resources or operations. The proposed project would not result in the conversion of designated farmland to non-agricultural uses. In addition, there are no agricultural resources or operations, including farmlands within proximity of the subject site. The City of Riverside has no forest land that can support 10-percent native tree cover. As such, the project would not result in the conversion of forest land to non-forest uses. Therefore, **no impacts** would occur directly, indirectly or cumulatively to conversion of Farmland, to non-agricultural use or to the loss of forest land. No mitigation is required.

3. AIR QUALITY.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐

3a. Response: ***(Sources: South Coast Air Quality Management District's 2022 Air Quality Management Plan (AQMP); Southern California Association of Governments' Connect SoCal 2020–2045 RTP/SCS; U.S. Census Bureau; Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The proposed project would construct a residential complex with a total of 121 affordable residential dwelling units and associated parking and open space on an existing vacant site. Therefore, the proposed project is not considered a project of Statewide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities,

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

petroleum and gas refineries, residential development of more than 500 dwelling units, shopping centers or business establishments employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, §15206(b)). Because the proposed project would not be defined as a regionally significant project under CEQA, it does not meet the Southern California Association of Government (SCAG) Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG's Regional Comprehensive Plan Guidelines and the South Coast Air Quality Management District's (SCAQMD) *2022 Air Quality Management Plan* (AQMP). Pursuant to the methodology provided in the SCAQMD *CEQA Air Quality Handbook*, consistency with the South Coast Air Basin's (Basin) 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

1. The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below. Therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standard violation.

2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects. Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. Therefore, the proposed project is not defined as significant. In addition, as described in the Project Description, the proposed project would require a change to the General Plan land use designation from C-Commercial and MDR- Medium Density Residential to HDR- High Density Residential and would be required to rezone the project site from R-1-7000 Single Family Residential to R-3-1500 Multiple Family Residential.

   To determine the proposed project's consistency with the 2022 AQMP, the project must be consistent with the AQMP growth assumptions, which are based, in part, on assumptions made by local planning agencies in SCAG's Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS) regarding population, housing, and growth trends to determine control strategies for regional compliance status. According to SCAG's 2020–2045 RTP/SCS, the City's population, households, and employment are forecast to increase by approximately 70,500 residents, 20,600 households, and 43,300 jobs, respectively, between 2016 and 2045 and would total approximately 395,800 residents, 115,100 households, and 188,700 jobs by 2045.

   The proposed residential development would include 121 dwelling units, which would result in approximately 408 residents based on the estimated 3.38 persons per household in the City of Riverside. An increase of 408 residents would represent a negligible population increase of approximately 0.13 percent in City of Riverside based on existing population (317,261 residents) and would also represent a negligible increase of approximately 0.10 percent in the City's projected 2045 population as presented in the jurisdictional growth forecasts in SCAG's 2020-2045 RTP/SCS. As such, the proposed project would not contribute to substantial or unplanned population growth forecasted by SCAG. Therefore, the proposed project would not increase population growth forecasts and is not expected to alter the demographic projections of SCAG or the AQMP. Therefore, the proposed project is consistent with the growth assumptions in the AQMP.

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP, and direct, indirect and cumulative impacts would be **less than significant**. No mitigation is required.

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?	☐	☐	☒	☐

3b. Response: ***(Source: Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023; Appendix H: Traffic Operational Analysis, LSA, May 2023)***

Less Than Significant Impact. The project site is within the South Coast Air Basin (Basin). The SCAQMD is the regional

government agency that monitors and regulates air pollution within the Basin. The federal Clean Air Act and the California Clean Air Act mandate the control and reduction of specific air pollutants. Under these acts, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for specific "criteria" pollutants, designed to protect public health and welfare. Primary criteria pollutants include carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_X), particulate matter less than 10 microns in size (PM_{10}), sulfur dioxide (SO_2), and lead (Pb). Secondary criteria pollutants include ozone (O_3), and particulate matter less than 2.5 microns in size ($PM_{2.5}$). The ambient air quality standard for each criteria pollutant represents the level that is considered safe to the public and avoids specific adverse health effects associated with each criteria pollutant.

The Basin is in nonattainment for the federal and State standards for O_3 and $PM_{2.5}$, and nonattainment for the State PM_{10} standard. In addition, the Basin is in attainment/maintenance for the federal PM_{10}, CO, SO_2, and nitrogen dioxide (NO_2) standards. The SCAQMD has established project-level thresholds for VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ shown in Table 3.A. The SCAQMD considers any project in the Basin with construction- or operation-related emissions that exceed any of the emission thresholds below to have potentially significant impacts.

Table 3.A: SCAQMD Construction and Operation Thresholds of Significance (lbs/day)

Emission Source	Pollutant Emissions Threshold (lbs/day)					
	VOCs	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Thresholds	75	100	550	150	150	55
Operation Thresholds	55	55	550	150	150	55

Source: South Coast Air Quality Management District (1993).

CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_2 = sulfur dioxide
VOC = volatile organic compounds

In developing thresholds of significance for air pollutants, SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

Construction emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter (PM) emissions (e.g., fugitive dust) generated by excavating, grading, hauling, and paving activities. Emissions from construction equipment are also anticipated and would include CO, NO_X, VOCs, directly emitted $PM_{2.5}$ and PM_{10}, and toxic air contaminants such as diesel particulate matter (DPM).

Construction-related effects on air quality from the proposed project would be greatest during grading, due to construction activity on unpaved surfaces. If not properly controlled, these activities would temporarily generate particulate emissions. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, the silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust at least twice daily, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403, Fugitive Dust Control, which would require the applicant to implement measures that would reduce the amount of PM generated during the construction period (**SCAQMD 2005).**

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the Project Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in

this analysis include:

- Water active sites at least three times daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO_X), NO_X, VOCs, and some soot particulate ($PM_{2.5}$ and $PM1_0$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the proposed project using the California Emissions Estimator Model version 2022.1 (CalEEMod). Construction of the proposed project would start in mid-January 2024 and be completed in 2025, which was included in CalEEMod. During construction, 20 cubic yards of soil would need to be imported and 12,700 cubic yards of soil would be exported for a net total of 12,680 cubic yards of soil exported, which was also included in CalEEMod. This analysis utilizes CalEEMod defaults for construction worker, vendor, haul trips, and construction equipment. Construction-related emissions are presented in Table 3.B. CalEEMod output sheets are included in the AQ/GHG/Energy Impact Analysis (Appendix A).

Table 3.B: Project Construction Emissions

Project Construction	Maximum Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	4	36	34	<1	2	2
Grading	2	35	34	<1	5	2
Building Construction	2	12	21	<1	2	1
Architectural Coating	7	1	3	<1	<1	<1
Paving	1	7	10	<1	1	<1
Maximum	**9**	**36**	**34**	**<1**	**5**	**2**
SCAQMD Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2023).
Assumes that architectural coatings are applied during both the building construction and paving phases.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 3.B, construction emissions associated with the project would not exceed the SCAQMD thresholds for VOC, NO_X, CO, SO_X, $PM_{2.5}$, and PM_{10}. Therefore, construction of the proposed project would not result in a cumulatively considerable increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Therefore, direct, indirect and cumulative impacts would be **less than significant**. No mitigation is required.

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity), and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the proposed project.

PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM_{10} occurs when vehicle tires pulverize small rocks and pavement and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of PM emissions compared with diesel-powered vehicles.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Energy source emissions result from activities in buildings for which electricity is used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity) and the emission factor of the fuel source. The primary sources of energy demand for the proposed project would include building mechanical systems (e.g., heating and air conditioning, lighting) and plug-in electronics (e.g., refrigerators or computers). Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources. As identified in the Project Description, the proposed project would be all-electric and would not include natural gas. Where project-specific data were not available, default assumptions (e.g., energy usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions. CalEEMod output sheets are included in the AQ/GHG/Energy Impact Analysis (Appendix A).

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the project would include emissions from the use of architectural coatings, consumer products, and landscaping equipment. This analysis assumes that the proposed project would not include any wood burning stoves or fireplaces.

Long-term operation emissions associated with the proposed project were calculated using CalEEMod. Trip generation rates used in CalEEMod for the project were based on the project's trip generation estimates, which assume the proposed project would typically generate approximately 610 average daily traffic (ADT). Model results are shown in Table 3.C below.

Table 3.C: Project Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Project Area Sources	4	<1	7	<1	<1	<1
Project Energy Sources	<1	1	<1	<1	<1	<1
Project Mobile Sources	3	3	25	<1	2	<1
Total Project Emissions	**7**	**4**	**32**	**<1**	**2**	**1**
SCAQMD Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2023).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOCs = volatile organic compounds

As shown in Table 3.C, the proposed project would not exceed the SCAQMD significance criteria for daily VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard. Therefore, direct, indirect and cumulative impacts would be **less than significant**. No mitigation is required.

Long-Term Microscale (Co Hot Spot) Analysis. Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited. Under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

projected. Ambient CO levels monitored at the Rubidoux Monitoring Station, the closest station with complete monitored CO data, showed a highest recorded 1-hour concentration of 2.1 parts per million (ppm) (the State standard is 20 ppm) and a highest 8-hour concentration of 1.8 ppm (the State standard is 9 ppm) during the past 3 years. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis.

Given the extremely low level of CO concentrations in the project area, and minor traffic impact increases at affected intersections, project-related vehicles are not expected to contribute significantly to result in the CO concentrations exceeding the State or federal CO standards. Because no CO hot spots would occur, there would be no project-related impacts on CO concentrations. Therefore, direct, indirect and cumulative impacts would be **less than significant**. No mitigation is required.

c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

3c. Response: ***(Source: Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. Sensitive receptors are people who have an increased sensitivity to air pollution or environmental contaminants. The SCAQMD defines structures that house persons (e.g., children, the elderly, persons with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise) or places where they gather (i.e., residences, schools, playgrounds, child-care centers, convalescent centers, retirement homes, and athletic fields) as sensitive receptors.

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008, recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. Localized significance thresholds (LSTs) represent the maximum emissions from a project site that are not expected to result in an exceedance of the national or state ambient air quality standards for CO, NO_2, PM_{10} and $PM_{2.5}$, as shown in Table 3.D. LSTs are based on the ambient concentrations of that pollutant within the project's Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. The project site is in the Metropolitan Riverside County area (SRA 23). The nearest residential property line is located approximately 45 feet north of the project site across Railroad Avenue; however, the nearest residence itself is located approximately 70 feet from the project site.

Table 3.D: Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	36	33	2	1
LSTs	**242**	**1,380**	**11**	**7**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2023).
Note: The Source Receptor Area is Metropolitan Riverside County, 4 acres, receptors at 70 feet.
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
LSTs = localized significance thresholds
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

The SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. SCAQMD LST guidelines specify that the minimum distance to be considered is 25 meters. As identified above, the nearest sensitive receptor is located approximately 70 feet (21 meters) from the project site boundary. The proposed project site is 4.15 acres; however, the construction activities would only take place on portions of the project site on any one day. The SCAQMD recommends assuming that 4 acres would be disturbed in any one day; therefore, LSTs for the 4-acre/25-meter combination were derived by interpolation.

The results of the LST analysis for both construction and operation of the proposed project are summarized in Tables 3.D and 3.E below. As shown in Tables 3.D and 3.E, the proposed project would not result in an exceedance of a SCAQMD LST during project construction or operation. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and direct, indirect and cumulative impacts would be **less than significant**. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 3.E: Operational Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	4	8	<1	<1
LSTs	**242**	**1,380**	**3**	**2**
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2023).
Note: The Source Receptor Area is Metropolitan Riverside County, 4 acres, receptors at 70 feet.
CO = carbon monoxide LSTs = localized significance thresholds
lbs/day = pounds per day $PM_{2.5}$ = particulate matter less than 2.5 microns in size
NO_X = nitrogen oxides PM_{10} = particulate matter less than 10 microns in size

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

3d. Response: ***(Source: Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, the construction activity would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project, and no mitigation measures are required. SCAQMD Rule 402 regarding nuisances states that "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property." The proposed uses are not anticipated to emit any objectionable odors. Therefore, objectionable odors posing a health risk to potential on-site and existing off-site uses would not occur as a result of construction activities. See the Health Risk Assessment (Appendix B).

SCAQMD addresses odor criteria within the ***CEQA Air Quality Handbook***. The district has not established a rule or standard regarding odor emissions. Instead, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact." Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would not fall under any of these categories. City regulations require trash storage areas to be in an enclosed area to limit air circulation, and through adherence to City regulations, odors from the trash storage areas would be minimal. No sources of objectionable odors have been identified for the proposed project. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Therefore, the proposed project would not result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people. Therefore, direct, indirect, and cumulative impacts would be less than significant. No mitigation is required.

4. BIOLOGICAL RESOURCES.

Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

4a. Response: ***(Source: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022)***

Less Than Significant Impact. The *Western Riverside County Multiple Species Habitat Conservation Plan Consistency*

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Analysis and Biology Report (MSHCP Consistency Analysis and Biology Report) was prepared to address compliance with Riverside County's Multiple Species Habitat Conservation Plan (MSHCP) and CEQA to analyze potential impacts to biological resources. The project site is not within the MSHCP Criteria Area; therefore, no cell or criteria analysis is required. In addition, the project site is not within or adjacent to public/quasi-public lands; therefore, no additional public/quasi-public lands analysis is required. It should also be noted that the project site is not located within or adjacent to MSHCP additional reserve lands (ARL) or non-MSHCP conservation easements.

The United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) may list species as threatened or endangered under the Federal and State Endangered Species Acts. The USFWS can designate critical habitat that identifies specific areas, either occupied or unoccupied, that are essential to the conservation of a listed species. Critical habitat areas may require special management considerations or protections. The USFWS and CDFW have issued permits for the take of most threatened and endangered species within the MSHCP Plan Area. The MSHCP covers impacts to these species. However, if a project has the involvement of a federal agency, that agency is required to address impacts to listed species and critical habitat by consulting with the USFWS. The USFWS has indicated in the permit issued for the MSHCP that, in such cases, the consultation will be expedited and that no restrictions will be imposed on the project beyond those specified in the MSHCP.

No threatened or endangered species are expected to occur on the project site. No critical habitat occurs on the project site. Two federal and/or State-listed species have been reported within 1 mile of the project site according to California Natural Diversity Database records: Swainson's hawk *(Buteo swainsoni*) and San Bernardino kangaroo rat (*Dipodomys merriami parvus*).

Other special-status species may occur on the proposed project site. The CDFW, USFWS, local agencies, and special interest groups, such as the California Native Plant Society (CNPS), maintain lists of species that they consider to be in need of monitoring. Legal protection for special-status species varies widely. Special-status species, including white cuckoo bee (*Neolarra alba*), Busck's gallmoth (*Eugnosta busckana*), western yellow bat (*Lasiurus xanthinus*), and pocketed free-tailed bat (*Nyctinomops femorosaccus*) may be expected to occur in the general project vicinity but are not covered under the MSHCP, or are not adequately conserved by the MSHCP at this time. Some of these species have a low potential of occurring on the project site. However, none of these species that may be present is listed as threatened or endangered under State or federal law, and the site does not contain high quality habitat for any of these species. Therefore, any impacts to these species by the project would not be substantial. Neither additional surveys nor additional conservation measures would be required by this project for these species.

There are no native trees present within the project site; however, four palms were observed within the project site such as fan palm (Washingtonia sp.) and date palm (Phoenix sp.).

Because the project site does not contain high quality habitat for any special-status species, any impacts to these species by the project would not be substantial. Furthermore, the field visit conducted at the project site on November 2, 2022, did not report sightings of any special-status species on the project site. Therefore, the proposed project would result in a **less than significant impact** directly, indirectly and cumulatively would occur to federally endangered threatened, or rare species or their habitats. No mitigation is required.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

4b. Response: ***(Source: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022)***

No Impact. Section 6.1.2 of the MSHCP requires assessment of impacts to riparian habitats, riverine areas, and vernal pools, including focused surveys for sensitive riparian bird and fairy shrimp species when suitable habitat is present. The field visit included an assessment for riparian/riverine areas, as well as vernal pools. The assessment also included identification and mapping of plant communities on the site as well as any drainage features and search for depressions, indicators of wetland hydrology, suitable soils, and hydrophytic vegetation and a review of seasonally appropriate aerial photographs from Google Earth. No ponded areas, vernal pools, or riparian/riverine areas were observed during the field visit or during review of historical aerial imagery of the site. Additionally, no other sensitive natural communities were identified on the project site or in the vicinity of the project. Therefore, **no impact** to any riparian habitat or other sensitive natural community identified in

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

local or regional plans, policies, or regulations, or by the CDFW or USFWS would occur directly, indirectly, and cumulatively with implementation of the proposed project. No mitigation is required.

c. Have a substantial adverse effect on state or federally-protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐

4c. Response: ***(Source: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022)***

Less Than Significant Impact. The project is located within an urbanized area surrounded by single-family residential, commercial, and industrial uses. No federally-protected wetlands as defined by Section 404 of the Federal Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) exist on site or within proximity to the project site. As previously discussed in Response 4b, the project site does not contain vernal pools or riparian/riverine areas. An erosional rill feature does exist in the eastern portion of the project site. It originates from a culvert along the BNSF/Inland Empire-Orange County Railroad Line right-of-way that occurs south of the project site. It appears that the erosional rill runs northwest into a storm drain grate on the northwestern portion of the project site for approximately 94 feet and does not connect to any downstream waters. The feature conveys nuisance flows and stormwater runoff from the surrounding unvegetated and bare ground areas of the project site. This type of feature is generally not considered jurisdictional under the Federal Clean Water Act because it occurs in and drains only uplands, does not occur along or in place of a historic drainage, and is ephemeral in nature. Additionally, this feature does not contain CDFW riparian habitat or aquatic resources and is not considered a natural waterway regulated by the CDFW. Therefore, the proposed project would have a **less than significant impact** on jurisdictional waters and wetlands directly, indirectly, and cumulatively. No mitigation is required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

4d. Response: ***(Source: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022)***

Less Than Significant Impact. The project site is located within an urban built-up area, and is not within an MSHCP linkage area. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds. The project site is adjacent to a major road, railway line, interstate highway, and existing development that already restrict wildlife movement in the project vicinity. As such, the project site would not substantially limit existing wildlife movement in the area and direct, indirect and cumulative impacts related to wildlife movement would be **less than significant**.

During the bird breeding season (typically February 1 through August 31), electrical distribution poles and large trees on or adjacent to the project site may be used by hawks, ravens, or other large birds for nesting. Trees, shrubs, and other vegetation may provide nest sites for smaller birds, and burrowing owls may nest in ground squirrel burrows, pipes, or similar features. Most birds and their active nests are protected from "take" (meaning destruction, pursuit, possession, etc.) under the Migratory Bird Treaty Act and/or Sections 3503–3801 of the California Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young, may constitute violations of one or both of these laws. As required as a Standard Condition of Approval, in order to avoid take of nesting bird species covered under the Migratory Bird Treaty Act and/or Sections 3503–3801 of the California Fish and Game Code, if the removal of palm trees and on-site vegetation clearance would occur during nesting season (February 1 through August 31), a field survey would be required so that nesting birds are not disturbed during project construction. As such, the proposed project would not impede the use of native wildlife nursery sites direct, indirect, and cumulative impacts would be **less than significant**. No mitigation is required.

Standard Condition of Approval

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The following standard condition of approval is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to biological resources. The City of Riverside considers this requirement to be mandatory; therefore, it is not a mitigation measure.

- If on-site vegetation clearance occurs during the nesting season (February 1 through August 31), the Project Applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey in accordance with the following:
  - The survey shall be conducted prior to the initiation of clearance/construction work.
  - If preconstruction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required.
  - If active nests of birds are found during the surveys, avoidance measures including but not limited to establishment of buffer zones around active nest site shall be implemented by a qualified biologist.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

4e. Response: ***(Sources: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022; General Plan 2025 Open Space and Conservation Element: Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP))***

Less Than Significant Impact. Implementation of the proposed project would be subject to all applicable federal, State, and local policies and regulations related to the protection of biological resources and tree preservation. In addition, the proposed project would be required to comply with Riverside Municipal Code Section 16.72.040 establishing the MSHCP mitigation fee and Section 16.40.040 establishing the Threatened and Endangered Species Fees. The project site is within the MSHCP area but outside the fee area of any covered species, including the Stephens' Kangaroo Rat.

In addition, any project within the City of Riverside's boundaries that proposes planting a street tree within a City right-of-way must follow the Urban Forestry Policy Manual (City of Riverside 2015). The Manual documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute. Although four palm trees occur on site, they are not subject to any tree removal ordinances, and no permit for removal will be required. Therefore, implementation of the proposed project would have a **less than significant impact** directly, indirectly, or cumulatively related to local policies or ordinances protecting biological resources. No mitigation is required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

4f. Response: ***(Sources: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022; General Plan 2025 Open Space and Conservation Element: Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans)***

Less Than Significant Impact. The proposed project is consistent with the guidelines of MSHCP, including Section 6.1.4, Guidelines Pertaining to the Urban/Wildlife Interface and related policies in the General Plan, including Policy LU-7.4. As well, the project is consistent with the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) and with General Plan Policy OS-5.3. Therefore, impacts associated with potential inconsistencies with the MSHCP and Stephens' Kangaroo Rat HCP would be **less than significant impacts** directly, indirectly, and cumulatively to the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

5. CULTURAL RESOURCES.

Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 of the CEQA Guidelines?	☐	☐	☒	☐

5a. Response: ***(Sources: Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022*; *General Plan 2025 FPEIR Section 5.5 – Cultural Resources)***

Less Than Significant Impact. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]). A "substantial adverse change" to a historical resource, according to PRC Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

The Cultural Resources Assessment for the project site was prepared by LSA Associates, Inc. in November 2017 and the validity of the results of this report were confirmed by LSA Associates, Inc. on October 25, 2022. The Cultural Resources Assessment provides the City of Riverside with the necessary information and analysis to determine, as mandated by CEQA, whether the proposed project would cause substantial adverse changes to any historical resources that may exist in or around the project site.

A cultural resources records search, historic background research, and field survey were conducted for the project. Results of the records search indicate no archaeological or historic resources were identified within the project. The Upper Riverside Canal and three historic-period properties are located within 300 feet north of the project. During the field survey, a historic foundation, four palm trees, and a hydrant valve cover were noted within the project. Historic research indicates that the historic foundation on site is a remnant of the former Casa Blanca Station, which was located within the project until 1966, when it was demolished. The date of the valve cover could not be substantiated and is similar to those currently in use today.

Analysis of the property indicates that the Casa Blanca Station foundation does not meet any of the criteria for listing in the National Register of Historic Places (National Register) or California Register or for local designation. Of the seven elements of integrity, the foundation possesses integrity of location only. Due to the fact that the Casa Blanca Station has been demolished, the elements of design, setting, workmanship, materials, feeling, and association do not meet the thresholds to qualify for listing in any register. Therefore, the foundation is not considered a "historical resource" as defined by CEQA.

No "historical resources," as defined by CEQA, were encountered within the project area. Although there is potential for subsurface artifacts to be uncovered during earthmoving activities, these potential artifacts are not anticipated to be historically significant. As such, the proposed project would have a **less than significant impact** to historical resources. No mitigation is required.

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to § 15064.5 of the CEQA Guidelines?	☐	☒	☐	☐

5b. Response: ***(Sources: Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)***

Less Than Significant With Mitigation Incorporated. CEQA defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) has a

special and particular quality such as being the oldest of its type or the best available example of its type; or (3) is directly associated with a scientifically recognized important prehistoric or historic event or person. (Public Resources Code [PRC] Section 21083.2, subd. (g).). As discussed under Section 5a, a records search and field survey were conducted on the project site. Although the results of the record search did not identify archeological resources in the project site, the Cultural Resources Assessment identified that the project site could have unknown subsurface resources, and it is prudent to recommend limited archaeological monitoring by a qualified archaeologist for initial ground disturbing activities. This includes grubbing, tree removal, grading and trenching within 100 feet of the foundation remnants. In the event any archaeological resources are identified during earthmoving activities, work in the area should be halted until the nature and significance of the find can be assessed by a qualified archaeologist. As such, **Mitigation Measures CUL-1 through CUL-4** shall be implemented to reduce any impacts to archaeological resources that may be uncovered on site during project construction activities. With implementation of **Mitigation Measures CUL-1 through CUL-4**, the project would have a **less than significant impact with mitigation** directly, indirectly, or cumulatively on archeological resources.

Mitigation Measures

Mitigation Measure CUL-1 Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural resources and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

Mitigation Measure CUL-2 **On call Project Archaeologist:** Prior to the issuance of a grading permit, the Property Owner/Developer shall provide a letter from a County certified Archaeologist and Paleontologist stating that the Property Owner/Developer has retained these individuals, and that the Archaeologist and Paleontologist shall be on call during all grading and other significant ground-disturbing activities in native sediments.

Mitigation Measure CUL-3 **Treatment and Disposition of Cultural Resources: Treatment and Disposition of Cultural Resources:** In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

a. Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity;
b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial good and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on human remains and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filled with the City under a confidential cover and not subject to a Public Records Request. The

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Tribe(s) should be able to access these areas in the future through enforceable agreement;

c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;

d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.

Mitigation Measure CUL-4 **Worker's Environmental Awareness Program (WEAP) Training:** The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide conduct mandatory Worker Environmental Awareness Program Training Program (WEAP) training to all construction grading personnel. The training will include a brief review of the cultural sensitivity of the project and the surrounding area, summarize and show examples of the types of resources that could be identified during earthmoving activities and provide notification protocols to be followed in the event suspected cultural resources are identified. Safety protocols would also be discussed to ensure the safety of the monitors and construction crew. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

5c. Response: ***(Sources: Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)***

Less Than Significant Impact. Construction on vacant lands could have the potential to disturb or destroy buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. As required as a Standard Condition of Approval and consistent with federal and State laws protecting these remains, in the event that human remains (or remains that may be human) are discovered at the project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). With compliance with federal and State laws, impacts to human remains, including those interred outside of formal cemeteries would be **less than significant**. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Standard Condition of Approval

The following standard condition of approval is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to biological resources. The City of Riverside considers this requirement to be mandatory; therefore, it is not a mitigation measure.

- In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Native American Heritage Commission shall be contacted within the period specified by law (24 hours). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

  The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98.

  According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

6. ENERGY.

Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐

6a. Response: ***(Source: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. The proposed project would increase the demand for electricity and gasoline compared to the existing condition of the site. As identified in the Project Description, the proposed project would be all-electric and would not include natural gas. The discussion and analysis provided below is based on the data included in the CalEEMod output, which is included in the AQ/GHG/Energy Impact Analysis (Appendix A).

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over approximately 13 months. The proposed project would require site preparation, grading, building construction, architectural coating, and paving during construction.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Construction of the proposed project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the proposed project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

Operational Energy Use. Energy use includes both direct and indirect sources of emissions. Direct use includes on-site electricity usage for heating, lighting, appliances, etc., while indirect sources include electricity generated by off-site power plants. Electricity use in CalEEMod is measured in kilowatt-hours (kWh) per year, the same as State electricity usage data. Assuming the new Riverside ordinance (i.e., Title 16, Chapter 16.24 Electrification of New Buildings) would apply to all the project buildings, CalEEMod was modified to not include any natural gas use, and the electricity use increased based on the energy of 1 kWh equaling 3,412 British thermal units.[1]

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table 6.A shows the estimated potential increased electricity, natural gas, gasoline, and diesel demand associated with the proposed project. The electricity and natural gas rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the Traffic Operational Analysis (Appendix H) in conjunction with United States Department of Transportation (USDOT) fuel efficiency data.

Table 6.A: Estimated Annual Energy Use of the Proposed Project

Land Use	Electricity Use (kWh/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Residential	1,430,278	82,020	58,830
Parking	21,636	0	0

Source: Compiled by LSA (March 2023).
gal/yr = gallons per year
kBTU/yr = thousand British thermal units per year
kWh/yr = kilowatt-hours per year

As shown in Table 6.A, the estimated potential increased electricity demand associated with the proposed project would be 1,430,278 kWh per year. In 2021, Riverside County consumed approximately 16,767.2 gigawatt-hours (GWh) or 16,767,235,877 kWh. Therefore, electricity demand associated with the proposed project would be less than 0.01 percent of Riverside County's total electricity demand.

Furthermore, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups, vans, and sport utility vehicles) in the United States has steadily increased, from about 14.9 miles per gallon (mpg) in 1980 to 22.9 mpg in 2020. The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2022.

[1] United States Energy Information Administration (EIA). n.d. Units and Calculators Explained, Energy Conversion Calculators. Website: www.eia.gov/energyexplained/units-and-calculators/energy-conversion-calculators.php (accessed March 2023).

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Using the USEPA gasoline fuel economy estimates for 2020, the California diesel fuel economy estimates for 2021, and the traffic data from the project traffic analyses, the proposed project would result in the annual consumption of 82,020 gallons of gasoline and 58,830 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel. Therefore, gasoline and diesel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in Riverside County.

In addition, vehicles associated with trips to and from the project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. These statistics do not include the increasing use of electric vehicles. As such, the fuel efficiency of vehicles associated with project operations would increase throughout the life of the proposed project. Therefore, implementation of the proposed project would not result in a substantial increase in transportation-related energy uses.

As described above, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment uses, and transportation. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

6b. Response: ***(Source: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level and because the project's total impacts to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the California Energy Commission's (CEC) 2021 Integrated Energy Policy Report and 2022 Integrated Energy Policy Report Update. In addition, the proposed project would comply with Title 24 and the California Green Building Standards Code (CALGreen), and City of Riverside Ordinance No. 7616 (Title 16, Chapter 16.26 Electrification of New Buildings). Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Impacts would be **less than significant** directly, indirectly and cumulatively. No mitigation is required..

7. GEOLOGY AND SOILS.

Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐

7i. Response: ***(Sources: Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; City Municipal Code Title 16 – Building and Construction, Title 17 – Grading Code; General Plan 2025 Public Safety Element: Figure PS-1 – Regional Fault Zones; and General Plan 2025 FPEIR Section 5.6– Geology and Soils)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact. In the City of Riverside, there are no Alquist-Priolo fault zones. The nearest Alquist-Priolo fault is the Claremont Fault, related to the San Jacinto Fault Zone located approximately 11.1 miles northeast of the project site. Therefore, the potential for ground rupture due to an earthquake beneath the site is considered low.

CCR Title 24, Part 2, the California Building Code (CBC), establishes minimum standards for building design in the State, and it is consistent with or more stringent than Uniform Building Code requirements. Local codes are permitted to be more restrictive than Title 24 but are required to be no less restrictive. The CBC is designed and implemented to improve building safety, sustainability, and consistency, and to integrate new technology and construction methods to construction projects throughout California.

State law requires the design and construction of new structures comply with current CBC requirements, which address general geologic, seismic (including ground shaking), and soil constraints for new buildings. Additionally, General Plan Policy PS1.1 requires the City to ensure all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements. The Geotechnical Investigation prepared for the project includes seismic parameters extracted from the 2019 CBC to be implemented in project design, pursuant to State and local regulatory requirements. Prior to issuance of any building permits, the City would review and approve plans to confirm that the siting, design, and construction of all project components are in accordance with the regulations established in the CBC, Title 16 of the Municipal Code (Buildings and Construction), and/or professional engineering standards appropriate for the project. Additionally, as a Standard Condition of Approval, the proposed project would be required to be in compliance with grading permit application requirements included in the City's Grading Code (Title 17 of the Municipal Code) requires recommendations specified in the project-specific geotechnical report to be incorporated into the design of the grading plan. Compliance with CBC regulations and implementation of recommended measures in the project's Geotechnical Investigation would ensure that project impacts due to earthquake faults would be less than significant directly, indirectly, or cumulatively. No mitigation is required.

Standard Condition of Approval

The following standard condition of approval is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to geology and soils. The City of Riverside considers this requirement to be mandatory; therefore, it is not a mitigation measure:

- Prior to issuance of any building permits, the City would review and approve plans to confirm that the siting, design and construction of project components are in accordance with the regulations established in the California Building Code (CBC), the City's Building Code, and/or professional engineering standards appropriate for the soil types on which such construction may occur.

  All grading operations and construction shall be conducted in conformance with the recommendations included in the Geotechnical Investigation for the project site that has been prepared by Leighton and Associates, Inc. (December 2022). Grading, and construction shall be performed in accordance with the requirements of the City of Riverside's Grading Code and Building Code, and the CBC applicable at the time of grading, subject to review by the City of Riverside's Public Works Department prior to commencement of grading activities.

  Additional geotechnical evaluation may be required once grading plans, development plans, foundation plans, and structural loads become available. Upon further geotechnical evaluation, additional recommendations may be proposed by the geotechnical engineer and implemented into the project.

ii. Strong seismic ground shaking?	☐	☐	☒	☐

7ii. Response: ***(Sources: Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; and Municipal Code Title 16 – Building and Construction, Title 17 – Grading Code)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact. The San Jacinto Fault Zone located in the northeastern portion of the City, or the Elsinore Fault Zone, located in the southern portion of the City's Sphere of Influence, have the potential to cause moderate to large earthquakes that would cause intense ground shaking. As described above in Response 7i, State law requires the design and construction of new structures comply with current CBC requirements, which address general geologic, seismic (including ground shaking), and soil constraints for new buildings. Additionally, General Plan Policy PS1.1 requires the City to ensure all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements. The proposed project would be required to comply with applicable geotechnical recommendations detailed in the project's Geotechnical Investigation, which include CBC design recommendations, and the City's Building and Grading Codes to ensure potential impacts related to seismic ground shaking would be less than significant. Therefore, impacts associated with strong seismic ground shaking would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

7iii. Response: ***(Sources: General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-3 – Generalized Liquefaction Zones; and Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022)***

Less Than Significant Impact. Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged, and the soil densifies within a short period of time. Rapid densification of the soil results in a buildup of pore-water pressure. When the pore-water pressure approaches the total overburden pressure, the soil reduces greatly in strength and temporarily behaves similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations. The project site is located in an area with low potential for liquefaction as depicted in the General Plan FPEIR Generalized Liquefaction Zones – Figure 5.6-3. The Geotechnical Investigation prepared for the project identified that due to the project being mapped in a low liquefaction susceptibility zone, and due to the historical groundwater level at the site being deeper than 50 feet and the relatively dense nature of the underlying soils at the site, liquefaction is not a concern for this site. Additionally, compliance with the project-specific geotechnical recommendations and California Building Code regulations would ensure that impacts related to seismic-related ground failure, including liquefaction would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

iv. Landslides?	☐	☐	☐	☒

7iv. Response: ***(Source: General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-1 – Areas Underlain by Steep Slope)***

No Impact. The project site and its surroundings have generally flat topography and are not located in an area prone to landslides per Figure 5.6-1 of the General Plan FPEIR. Therefore, there will be **no impact** related to landslides directly, indirectly and cumulatively. No mitigation is required. Furthermore, as part of the City's standard review and approval of development projects, any new development must provide a geotechnical study for review and approval by the City Engineer and comply with the requirements of the approved geotechnical report and applicable provisions of the City Building Code and California Building Code. The geotechnical study would include the site- and project-specific design requirements for appropriate cut and fill slopes, excavation characteristics, slope clearance, retaining walls, and general design to avoid the effects of landslides. Compliance with these requirements would ensure that no impacts related to landslides would occur.

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

7b. Response: ***(Sources: General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types; Title 17 – Grading Code; and Storm Water Pollution Prevention Plan)***

Less Than Significant Impact. Erosion and loss of topsoil could occur as a result of the project. State and federal requirements call for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The project must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, the Grading Code (Title 17) also requires the implementation of

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
measures designed to minimize soil erosion. Compliance with State and Federal requirements as well as with Titles 17 and 18 would ensure that soil erosion or loss of topsoil would be a **less than significant impact** directly, indirectly, and cumulatively. No mitigation is required.				
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

7c. Response: ***(Sources: Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; General Plan 2025 Public Safety Element: Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones; General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-5 – Soils with High Shrink-Swell Potential, Figure 5.6-1 - Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, and Table 5.6-B – Soil Types; and Municipal Code Title 17 – Grading Code)***

Less Than Significant Impact. The project site is located within the Peninsular Ranges geomorphic province, which forms a broad, northwest-southeast trending mountain belt that extends from Baja California to the Lost Angeles/San Bernardino basins and terminates against the Transverse Ranges. The project site rests on generally flat terrain underlain by late to middle Pleistocene old alluvial fan soils. Soils at the project site include Arlington fine sandy loam (AoA) and Handford fine sandy loam (HgA), soils which have low to moderate shrink-swell potential. Compliance with the City's existing codes and the policies contained in the General Plan help to ensure that impacts related to geologic conditions are reduced to **less than significant impacts** level directly, indirectly and cumulatively.

- **Landslides:** See Response 7a(iv).
- **Lateral spreading:** Adherence to the City's Grading and Subdivision Codes as well as the California Building Code in the design of this project will prevent lateral spreading. Additionally, the project's Geotechnical Investigation recommends design features to prevent lateral spread, including retaining wall footings with minimum width of 24 inches and embedded at a minimum depth of 18 inches below the lowest adjacent grade.
- **Subsidence:** The Geotechnical Investigation prepared for this project indicates that the soil properties of the subject site have some potential for subsidence. It is estimated that the existing earth material would shrink up to approximately 15 percent (+/- 4) and subside approximately 0.15-foot as in-place soil is moisture-conditioned to receive fill. However, adherence to the recommendations found in the Geotechnical Investigation, including removal of undocumented artificial fill prior to soil excavation and recompaction, and implementation of project-specific moisture conditioning specifications and surface drainage control measures, the impact related to subsidence would be reduced to less than significant levels.
- **Liquefaction:** See Response 7a(iii).
- **Collapse:** Adherence to the City's grading and building requirements would ensure that the property is adequately prepared to prevent the collapse of the graded pad and/or slopes.

As discussed above, as a Standard Condition of Approval, the proposed project would be designed to resist impacts related to unstable geologic units or soils in accordance with current CBC requirements and the City's Building Code (Title 16, Buildings and Construction, of the Municipal Code). As such, the project would comply with CBC regulations that protect habitable structures from unstable geologic units or soils, and direct, indirect, and cumulative impacts associated with unstable geologic units or soils would be **less than significant**. No mitigation is required.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

7d. Response: ***(Sources: Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-4 – Soils, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Figure 5.6-5 – Soils with High Shrink-Swell Potential)***

Less Than Significant Impact. Expansive soil is defined under the CBC and contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Foundations constructed on these soils are subject to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of both building foundations and slabs-on-grade could occur. According to Figure 5.64 – Soils of the General Plan FPEIR, the project site has Arlington and Handford type soils, which have low to moderate shrink- swell potential. Additionally, the Geotechnical Investigation for the project identified that based on results of soil samples collected during exploration drillings at the project site, onsite soils are anticipated to have a very low expansion potential. Therefore, the proposed project is not located on expansive soil, and impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

7e. Response: ***(Source: Project Plans)***

No Impact. Wastewater collection and treatment for the project would be provided by the Riverside Public Works Department, at the Riverside Water Quality Control Plant. Because the project would be served by sewer infrastructure, no septic tanks would be installed. Therefore, the project would have **no impact** directly, indirectly and cumulatively. No mitigation is required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

7f. Response: ***(Sources: General Plan 2025 Policy HP-1.3; General Plan 2025 FPEIR Section 5.5– Cultural Resources; and Municipal Code Title 17–Grading)***

Less Than Significant With Mitigation Incorporated. The General Plan identifies that as of 2004, the area south of Mockingbird Canyon Reservoir, located approximately 2.6 miles southwest of the project site, is the only other portion of the Planning Area considered as a place of paleontological importance. Accordingly, the project site has low potential to yield paleontological resources. However, project construction-related and earth-disturbing actions could still result in the discovery of new, previously unidentified paleontological resources. As with archaeological resources, paleontological resources are generally considered to be historical resources, as defined in *State CEQA Guidelines* Section 15064.5(a)(3)(D). Consequently, damage or destruction to these resources could cause a significant impact.

In accordance with State law, the proposed project would be required to comply with Section 5097.5 of the California PRC and California Administrative Code, Title 14, Section 4307, which state that no person shall remove, injure, deface or destroy any object of paleontological, archaeological, or historical interest or value. Penal Code Section 622.5 establishes as a misdemeanor the willful injury, disfiguration, defacement, or destruction of any object or thing of paleontological interest or value, whether situated on private or public lands. Finally, Section 17.28.010(H)(3) of the City's Municipal Code enables the City to require the Project Applicant to make reasonable effort to preserve or mitigate impacts to any affected significant or unique paleontological resource. Pursuant to Section 17.28.010(H)(3) of the Municipal Code, the City's Community & Economic Development Department may inspect construction activities on site for compliance with project conditions of approval, including protection of paleontological resources. In addition, Mitigation Measure CUL-2 requires an on-call Paleontologist during all grading and other significant ground-disturbing activities in native sediments. With implementation of Mitigation Measure CUL-2, potential to directly or indirectly destroy a paleontological resource or site or unique geological feature would be reduced to a **less than significant impact**.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

8. GREENHOUSE GAS EMISSIONS.

Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

8a. Response: ***(Source: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. Greenhouse gases (GHGs) are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- **Carbon dioxide (CO_2);**
- **Methane (CH_4);**
- **Nitrous oxide (N_2O);**
- **Hydrofluorocarbons (HFCs);**
- **Perfluorocarbons (PFCs); and**
- **Sulfur hexafluoride (SF_6).**

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6 are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

Currently, there is no Statewide GHG emissions threshold that has been used to determine the potential GHG emissions impacts of a project. Threshold methodology and thresholds are still being developed and revised by air districts in California.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group) in 2008. This Working Group proposed a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. The applicable tier for this project is Tier 3, which states that if GHG emissions are less than 3,000 MT of CO_2e per year (MT CO_2e/yr), project-level and cumulative GHG emissions would be less than significant.

Construction Greenhouse Gas Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The SCAQMD does not have an adopted threshold of significance for construction-related GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. SCAQMD recommends amortizing GHG emissions over the life of the project based on the total GHG emissions for construction activities divided by the project life (i.e., 30 years) then adding that number to the annual operational phase GHG emissions.

CalEEMod was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. Construction of the proposed project is anticipated to begin in January 2024 and be completed in 2025. During construction, approximately 20 cubic yards of soil would be cut and 12,700 cubic yards would be filled, for a net 12,680 cubic yards of soil to be imported. This analysis utilizes CalEEMod defaults for construction worker, vendor, haul trips, and construction equipment. Table 8.A presents the estimated GHG emissions by each calendar year and amortized emissions for the proposed project.

Table 8.A: Project Construction Greenhouse Gas Emissions

Construction Phase	GHG Emissions (MT CO_2e)
2024	542
2025	49
Total Project Construction GHG Emissions	**591**
Construction Emissions Amortized over 30 years	**20**

Source: Compiled by LSA (January 2023).
Note: Numbers may appear to not sum correctly due to rounding.
GHG = greenhouse gas
MT CO_2e = metric tons of carbon dioxide equivalent

As indicated in Table 8.A, project construction would result in total emissions of 591 MT CO_2e, which would be amortized to an annual rate of 20 MT CO_2e over 30 years. Since there is no separate GHG significance threshold for construction emissions, project-level and cumulative GHG emissions during construction activities alone would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

Operational Greenhouse Gas Emissions. Long-term operation of the proposed project would generate GHG emissions from area, mobile, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips associated with trips to the proposed project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site, and other sources. Waste source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

CalEEMod was used to calculate the long-term operational emissions associated with the project. Table 8.B shows the calculated GHG emissions for the proposed project. Motor vehicle emissions are the largest source of GHG emissions for the project at approximately 58 percent of the project total. Energy use is the next largest category at approximately 38 percent. Water and waste are each about 2 percent of the total emissions. Area sources are less than 1 percent of the total emissions.

As shown in Table 8.B, the project would result in approximately 1,523 MT CO_2e/yr. This is less than SCAQMD's threshold of 3,000 MT CO_2e/yr. Therefore, the proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 8.B: Operational Greenhouse Gas Emissions

Emission Type	Operational Emissions (MT/yr)				Percentage of Total
	CO_2	CH_4	N_2O	CO_2e	
Area Source	2	<1	0	2	<1
Energy Source	575	<1	<1	576	33
Mobile Source	860	<1	<1	875	64
Waste Source	8	1	0	28	2
Water Source	17	<1	<1	22	2
Total Operational Emissions				1,503	-
Amortized Construction Emissions				20	-
Total Annual Emissions				1,523	-
SCAQMD Threshold				3,000	
Exceeds Threshold?				No	

Source: Compiled by LSA (March 2023).
Note: values may appear incorrect due to rounding.
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse Gas
MT/yr = metric tons per year
N_2O = nitrous oxide
SCAQMD = South Coast Air Quality Management District

b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

8b. Response: ***(Source: Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. The Riverside Restorative Growthprint (RRG) combines two plans: the Economic Prosperity Action Plan (RRG-EPAP) and the Climate Action Plan (RRG-CAP), which work in conjunction to spur entrepreneurship and smart growth while advancing the City of Riverside's GHG emission reduction goals. The RRG includes actions to reduce GHG emissions that align with the City's planning priorities and its vision of a future "green" economy based on sustainable businesses. The RRG-EPAP identifies the measures and strategies in the RRG-CAP with the greatest potential to drive local economic prosperity through clean-tech investment, entrepreneurship, and expansion of local green businesses.

In 2014, Riverside was one of 12 cities that collaborated with the Western Riverside Council of Governments on a Subregional Climate Action Plan (Subregional CAP) that included 36 measures to guide Riverside's GHG reduction efforts through 2020. The RRG-CAP expands upon the Subregional CAP and provides a path for the City to achieve deep reductions in GHG emissions through 2035, while the RRG-EPAP provides a framework for smart growth and low-carbon economic development. The RRG-CAP provides a roadmap for the City to achieve deep GHG emissions reductions through 2035. The RRG-CAP prioritizes the implementation of policies that enable the City to fulfill the requirements of Assembly Bill (AB) 32 and Senate Bill (SB) 375. The following measures from the RRG-CAP are applicable to the project**:**

Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6) Mandatory energy efficiency standards for buildings.

Measure SR-12: Electric Vehicle Plan and Infrastructure Facilitate electric vehicle use by providing necessary infrastructure.

Measure SR-13: Construction & Demolition Waste Diversion to exceed requirement by diverting 90% of C&D waste from landfills by 2035.

Measure E-2: Shade Trees Strategically plant trees at new residential developments to reduce the urban heat island effect.

Measure T-2: Bicycle Parking Provide additional options for bicycle parking.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Measure T-6: Density Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.

Measure T-19: Alternative Fuel & Vehicle Technology and Infrastructure Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.

Measure W-1: Water Conservation and Efficiency Reduce per capita water use by 20% by 2020.

The proposed project would be consistent with the City's RRG-CAP and RRG-EPAP through measures implemented to enhance energy efficiency for transportation and land use, waste reduction, and water conservation as required under the latest California Building Code, which in turn would reduce GHG emissions.

In summary, the development of the proposed project would not hinder the City's goal to meet the targets outlined in the RRG-EPAP and RRG-CAP, and would be below the SCAQMD's GHG threshold of 3,000 MT CO_2e/yr. The proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

9. HAZARDS & HAZARDOUS MATERIALS.

Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

9a. Response: ***(Sources: General Plan 2025 Public Safety Element; General Plan 2025 FPEIR; California Health and Safety Code; and Title 49 of the Code of Federal Regulations)***

Less Than Significant Impact. Construction of the proposed project has the potential to create a hazard to the public or environment through the routine transportation, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other typical materials delivered to construction sites. However, due to the limited quantities of these materials to be used by the proposed project, they are not considered hazardous to the public at large. In accordance with the City's Hazardous Materials policies (General Plan Policy PS-3.3, Section 19.590.030, Hazardous and toxic materials, of the Municipal Code), the transport, use, and storage of hazardous materials during the construction and operation of the site would be conducted pursuant to all applicable local, State, and federal laws, and in cooperation with the County's Department of Environmental Health. Title 49 of the Code of Federal Regulations (CFR) implemented by Title 13 of the CCR describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable local, State, and federal laws related to the transportation, use, and storage of hazardous materials would reduce the likelihood and severity of accidents during transit, use, and storage.

Once operational, the proposed project would consist of a residential complex with 121 affordable residential dwelling units, including senior and multi-family housing. The project site may store small quantities of hazardous materials on private properties on the site. However, due to the limited quantities of these materials to be used once the project is operational, they would not be considered hazardous to the public at large. Therefore, compliance with all applicable local, State, and federal laws, would ensure a **less than significant impact** directly, indirectly, and cumulatively related to the routine transport, use, or disposal of hazardous materials. No mitigation is required.

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?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

9b. Response: ***(Sources: General Plan 2025 Public Safety Element; General Plan 2025 FPEIR Section 5.7 – Hazards and Hazardous Materials: Figure 5.7-1, Hazardous Waste Sites, Tables 5.7 A – D; California Health and Safety Code, Title 49 of the Code of Federal Regulations; Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; and California Building Code)***

Less Than Significant Impact. The project site is currently vacant and disturbed. A building foundation from Casa Blanca Station, a train station that has since been removed from the site, is present, as well as artificial fill consisting of scattered gravel on the surface over very loose to loose silty sands and very stiff sandy silts. The proposed project would remove the onsite foundation and excavate the fill during project construction pursuant to recommendations of the project's Geotechnical Investigation. According to Figure 5.7-1, Hazardous Waste Sites, of the General Plan FPEIR, the project site is not located in a hazardous waste site recorded by the Department of Toxic Substances Control's EnviroStor Database, or on a Superfund site. Additionally, past uses of the project site did not include any uses that involve the handling of substantial quantities of hazardous substances. As such, construction of the project would not accidentally release hazardous materials due to existing conditions on the site. As described above, the project may involve the use of hazardous materials during construction but shall comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to Title 49 of the Code of Federal Regulations implemented by Title 13 of the CCR, which describes strict regulations for the safe transportation of hazardous materials. Furthermore, operation of the proposed project would not involve use, handling or storage of substantial quantities of hazardous substances, as the proposed land use is residential. Compliance with all applicable federal, State, and local laws related to the transportation, use and storage of hazardous materials would ensure that the proposed project would have a **less than significant impact** to the public or the environment through the routine transport, use, or disposal of hazardous materials. directly, indirectly and cumulatively. No mitigation is required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

9c. Response: ***(Sources: General Plan 2025 Public Safety Element; General Plan 2025 FPEIR Section 5.7 – Hazards and Hazardous Materials)***

Less Than Significant Impact. The nearest schools to the project site include the Learn4Life Casa Blanca Community, Vista Norte Charter School, located approximately 45 feet northwest of the project site, and Casa Blanca School, located approximately 0.22-mile southeast from the project site. Although the project would operate within 0.25 mile of a school, the proposed project would consist of a residential complex within senior and multi-family housing. As previously stated, no unusual circumstances are present. The proposed project would not result in the use or emission of substantial quantities of hazardous materials that would pose a human or environmental health risk. In addition, all materials would be handled, stored, and disposed of in accordance with applicable standards and regulations. Therefore, because the proposed project does not involve activities that would result in the emission of hazardous materials or acutely hazardous substances, implementation of the proposed project would result in a **less than significant impact** related to the potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

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

9d. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-5 – Hazardous Waste Sites; General Plan 2025 FPEIR Section 5.7 – Hazards and Hazardous Materials: Tables 5.7-A – CERCLIS Facility Information, Figure 5.7-B – Regulated Facilities in TRI Information and 5.7-C – DTSC EnviroStor Database Listed Sites)***

No Impact. A review of hazardous materials site lists compiled pursuant to Government Code Section 65962.5 found that the project site is not included on any such lists. As a result, no hazards to the public or environment are anticipated, and there would be **no impact** directly, indirectly, and cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐

9e. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-6 – Airport Safety Zones and Influence Areas; RCALUCP: Chapter 2 – Countywide Policies, Chapter 3 – Individual Airport Policies and Compatibility Maps: RI. Riverside Municipal Airport)***

Less Than Significant Impact. The closest airports to the project site are the Riverside Municipal Airport and Flabob Airport, which are respectively located 2.1 miles northwest and 3.8 miles north of the project site. The proposed project is located within Airport Compatibility Zone E as depicted on Figure 5.7-2 of the General Plan Program FPEIR for the Riverside Municipal Airport as noted in the Riverside County Airport Land Use Compatibility Plan (RCALUCP). Within Compatibility Zone E, there is generally no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet above the ground. The proposed project would consist of a residential complex consisting of three building clusters containing 121 dwelling units. The proposed buildings would be 40 feet high, which falls below the threshold for Zone E. Additionally, the project is not located on high ground, and would not introduce stand-alone elements over 35 feet high. Therefore, the proposed project would result in a **less-than-significant impact** related to a safety hazard for people residing or working in the project area directly, indirectly and cumulatively. No mitigation is required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

9f. Response: ***(Sources: General Plan 2025 FPEIR Chapter 5.7 – Hazards and Hazardous Materials; City of Riverside's EOP, 2002, Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1, and Strategic Plan)***

Less Than Significant Impact. The project would not result in closures of local roadways that may have an effect on emergency response or evacuation plans in the vicinity of the project site. Entrance for emergency response services and emergency evacuation from the project site would be available through the proposed three ingress and egress driveways located on Railroad Avenue. Furthermore, construction activities occurring within the project site would comply with all conditions, including grading permit conditions regarding lay-down and fire access, and would not restrict access for emergency vehicles responding to incidents on the site or in the surrounding area. Design of project access, internal circulation system, and fire suppression features would be developed to City of Riverside standards and conditions of approval. Additionally, the Riverside Fire Department (RFD) would also review the proposed development plans prior to project approval to ensure that adequate emergency access and on-site circulation are provided. Therefore, the proposed project would not interfere with the implementation of or physically interfere with any adopted emergency response plans or emergency evacuation plan, and this impact would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

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

9g. Response: ***(Source: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Areas; and CAL FIRE GIS Map Layer VHFSZ)***

No Impact. The proposed project is located in an urbanized area where no wildlands exist and the property is not located within a Very High Fire Severity Zone (VHFSZ) or adjacent to wildland areas or a VHFSZ. Therefore, the proposed project would not expose people or structures to a significant loss, injury or death involving wildland fires and there would be **no impact** either directly, indirectly or cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

10. HYDROLOGY AND WATER QUALITY.

Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

10a. Response: ***(Sources: Appendix E: Geotechnical Investigation, Leighton and Associates, Inc., December 2022; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Any of these pollutants have the potential to be transported via stormwater runoff into receiving waters (i.e., Santa Ana River Reach 1, Santa Ana River Reach 2, and Santa Ana River Reach 3).

The 3.94-acre project site is undeveloped and 100 percent pervious. Because project construction would disturb greater than 1 acre of soil, the proposed project would be subject to the requirements of the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) permit and Waste Discharge Requirements for Discharges of Stormwater Runoff Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, NPDES No. CAS000002) (Construction General Permit). The proposed project would also be required to comply with City Municipal Code Chapter 17.16.010, Grading Permit Application Requirements. Chapter 17.16.010 of the City's Municipal Code prohibits land disturbance or construction activities without first obtaining approval of erosion control measures, including coverage under the State Construction General Permit, development of a Storm Water Pollution Prevention Plan (SWPPP), and implementation of Best Management Practices (BMPs) to ensure that construction practices include measures to address erosion and protect water quality. As required as Standard Conditions of Approval and as required by the Construction General Permit and City Municipal Code, the Construction Contractor would be required to prepare an SWPPP and implement construction BMPs detailed in the SWPPP during construction activities. Construction BMPs would include, but not be limited to, erosion and sediment control, designed to minimize erosion and retain sediment on site, and good housekeeping practices to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

According to the Geotechnical Investigation prepared for the proposed project on December 5, 2022, by Leighton and Associates, Inc. (Appendix E), no groundwater was encountered within the maximum depth of 51.5 feet explored. Excavations during construction would extend approximately 18 feet below existing grade. Therefore, it is unlikely excavation activities would have the potential to encounter groundwater and groundwater dewatering is not anticipated to be required during construction activities.

Implementation of the following Standard Conditions of Approval, which require compliance with the Construction General Permit and Municipal Code requirements respectively, including implementation of construction BMPs, impacts associated with a violation of water quality standards or waste discharge requirements during project construction would be less than significant, and no mitigation is required.

During operation, anticipated pollutants of concern associated with the proposed project include pathogens (bacteria/viruses), nutrients, organic compounds, pesticides/herbicides, sediments/total suspended solids/pH, trash and debris, oxygen-demanding compounds, and oil and grease. The current impairments for Santa Ana River Reach 3 include indicator bacteria, which could be exacerbated by the proposed project. The City of Riverside is a co-permittee under the Santa Ana Regional Water Quality Control Board (RWQCB) National Pollution Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County Within the Santa Ana Region Area-Wide Urban Runoff (Order No. R8-2010-0033, NPDES No. CAS618033) (City's MS4 permit). The City's MS4 Permit requires the preparation of project-specific Water Quality Management Plans (WQMPs) for new development projects, including residential development of 10 or more dwelling units. The proposed project involves the development of a residential complex, consisting of three buildings and a total of 121

dwelling units. Therefore, the proposed project is required to prepare a project-specific WQMP. As required as a Standard Condition of Approval and by the City's MS4 Permit, the proposed project would prepare a Final WQMP. The Final WQMP would specify the Site Design, Source Control, Low Impact Development (LID), and Treatment Control BMPs that would be implemented to capture, treat, and reduce pollutants of concern in stormwater runoff, including bacteria. Site Design BMPs are stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a site. Source Control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff rather than allowing runoff to flow directly to piped or impervious storm drains. Treatment Control BMPs are structural BMPs designed to treat and reduce pollutants in stormwater runoff prior to releasing it to receiving waters.

A Preliminary WQMP has been prepared for the proposed project, which details the following operational BMPs that would be implemented to reduce impacts to water quality from operation of the proposed project: (1) Site Design BMPs, including preserving existing on-site drainage patterns; disconnecting impervious surface areas; and re-vegetating disturbed areas; (2) Source Control BMPs, including storm drain signage and stenciling; containing rooftop equipment with the potential to produce pollutants; final landscape plans that include the following measures to ensure efficient irrigation systems and landscape design: minimizing irrigation and runoff to promote surface infiltration, minimizing the use of fertilizers and pesticides, utilizing plants that are tolerant of saturated soil conditions in areas used to retain stormwater, utilizing pest-resistant plants adjacent to hardscape, and utilizing plants appropriate to site conditions; maintaining and periodically repainting or replacing inlet markings; providing stormwater pollution prevention information to new site owners, lessees, or operators; including language in the lease agreements to prohibit tenants from discharging anything into storm drains; maintaining landscapes with minimum or no pesticides; providing possible roof drain filters and allowing carport runoff to filter through landscaped areas; sweeping plazas, sidewalks, and parking lots to prevent accumulation of litter and debris; and (3) LID BMPs, including storm drain inlets; an on-site 48-inch underground storm drain system, and three injection drywells.

The project site includes three Drainage Management Areas (DMAs) (M1A, M2A, and M3A) to manage stormwater runoff from the entire project site. Each DMA consists of landscaped areas and inlets. Stormwater runoff captured within landscaped areas would infiltrate into the soil. Stormwater runoff from impervious areas on the project site (e.g., concrete, asphalt, and roofs) would be directed to multiple on-site inlets, which would all drain into a single 48-inch storm drain pipe, which would then discharge the stormwater runoff into three injection drywells so that stormwater runoff can infiltrate into the soil. The on-site drainage system has been designed to accommodate the Design Capture Volume (DCV) for DMAs M1A, M2A, and M3A in accordance with the County of Riverside's technical guidance for WQMPs. The DCV is the volume of stormwater runoff that must be captured and treated by stormwater BMPs. Overflows from DMA M1A would discharge into the Municipal storm drain system along Madison Street through a 15-inch storm drain pipe and overflows from DMAs M2A and M3A would discharge into Railroad Avenue, mimicking the existing condition.

To reduce pollutants of concern in stormwater runoff and as required as a Standard Condition of Approval, a Final WQMP would be prepared prior to or during final design, which would include site design, source control, and LID BMPs to ensure that the project design would adequately target pollutants of concern in stormwater runoff in accordance with the City's MS4 Permit.

The proposed project would also be required to comply with City Municipal Code Chapter 14.12.316, Reduction of Pollutants in Stormwater, which requires the proposed project to incorporate stormwater BMPs (e.g., directing runoff to permeable areas) into the project design plans to control stormwater runoff and prevent the deterioration of water quality that would impair subsequent or competing uses of the water. Additionally, all proposed stormwater BMPs are required to be consistent with the project-specific WQMP. As described above, the proposed project includes site design, source control, and LID BMPs that would reduce pollutants in stormwater runoff as required by Chapter 14.12.316 of the City's Municipal Code.

Infiltration of stormwater could have the potential to affect groundwater quality. As previously discussed, the proposed project includes site design, source control, and LID BMPs to reduce pollutants in stormwater runoff before infiltrating into the soil. Furthermore, when stormwater is infiltrated, soil and plants absorb and filter pollutants and reduce the potential for pollutants of concern to reach groundwater.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

With adherence to the City's MS4 Permit, including preparation of a Final WQMP to address pollutants of concern in stormwater runoff, and compliance with the City Municipal Code, project impacts associated with the violation of water quality standards or waste discharge requirements would be less than significant directly, indirectly and cumulatively. No mitigation is required.

Standard Conditions of Approval

The following standard conditions of approval are existing regulations that are applicable to the proposed project and are considered in the analysis of potential impacts related to hydrology and water quality. The City of Riverside considers these requirements to be mandatory; therefore, they are not mitigation measures.

- Prior to issuance of a grading permit, the Project Applicant shall obtain coverage under the State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2022-0057-DWQ, National Pollutant Discharge Elimination System No. CAS000002) (Construction General Permit). This shall include submission of Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTs). The Project Applicant shall provide the Waste Discharge Identification Number (WDID) to the City of Riverside (City), or designee, to demonstrate proof of coverage under the Construction General Permit. Project construction shall not be initiated until a WDID is received from the SWRCB and is provided to the City, or designee. A Stormwater Pollution Prevention Plan (SWPPP) shall be prepared and implemented for the proposed project in compliance with the requirements of the Construction General Permit. The SWPPP shall identify construction best management practices (BMPs) to be implemented to ensure that the potential for soil erosion and sedimentation is minimized and to control the discharge of pollutants in stormwater runoff as a result of construction activities. Upon completion of construction and stabilization of the site, a Notice of Termination shall be submitted via SMARTs.

- Prior to issuance of a grading permit, the Project Applicant shall obtain coverage under the Construction General Permit, develop a Stormwater Pollution Prevention Plan, and submit an erosion control plan to the City for review and approval that incorporates BMPs to prevent erosion and protect water quality during construction activities pursuant to Chapter 17.16.010 of the City Municipal Code.

- Prior to issuance of a grading permit, the Project Applicant shall submit a Final Water Quality Management Plan (Final WQMP) to the City of Riverside (City) for review and approval in compliance with the requirements of the Santa Ana RWQCB's NPDES Permit Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County Within the Santa Ana Region Area-Wide Urban Runoff (Order No. R8-2010-0033, NPDES No. CAS618033) (City's MS4 Permit). The Final WQMP shall specify the BMPs to be incorporated into the project design to target pollutants of concern in stormwater runoff from the project site and the necessary operation and maintenance activity for each BMP. The City shall ensure that the BMPs specified in the Final WQMP are incorporated into the final project design. The proposed BMPs specified in the Final WQMP shall be incorporated into the grading and development plans submitted to the City for review and approval. Project occupancy and operation shall be in accordance with the schedule outlined in the WQMP.

- Prior to issuance of a grading permit, the Project Applicant shall submit applicable project design plans that incorporate the stormwater management requirements outlined in Chapter 14.12.316 of the City of Riverside Municipal Code to the City for review and approval.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

10b. Response: ***(Sources: Riverside Public Utilities, 2020 Urban Water Management Plan, California Department of Water Resources; Geotechnical Investigation, Leighton and Associates, Inc., December 2022; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. According to the Geotechnical Investigation prepared for the proposed project, no groundwater was encountered to an exploration depth of 51.5 feet below ground surface (bgs). During construction, the depth of excavation would not exceed approximately 18 feet below existing grade. Based on depth to groundwater and depth of excavation, groundwater dewatering activities are not anticipated during project construction. Therefore, construction impacts related to a decrease in groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be less than significant directly, indirectly and cumulatively. No mitigation is required.

As discussed in Response 10.a, the project site is undeveloped and 100 percent pervious. Development of the proposed project would result in 2.83 acres of impervious surfaces, an increase of approximately 2.83 acres or 72 percent. The increase in impervious surface area would decrease on-site infiltration. However, as described above in Response 10a, the proposed project includes BMPs to collect and infiltrate stormwater at the project site in accordance with the City's MS4 Permit. Therefore, development of the proposed project would not substantially decrease the amount of stormwater that infiltrates as compared to the existing conditions.

The project site is located within the Upper Santa Ana Valley-Riverside-Arlington Groundwater Basin (Riverside-Arlington Groundwater Basin). As discussed in Response 10e below, the Riverside-Arlington Groundwater Basin is identified by the Department of Water Resources as a very low priority basin and therefore is not required to prepare a Groundwater Sustainability Plan (GSP). Riverside Public Utilities (RPU) would supply water to the project site, which includes local groundwater from five groundwater basins, including the Riverside-Arlington Groundwater Basin. As discussed in Response 19b, the RPU anticipates that sufficient water supplies would be available to serve the proposed project. Therefore, the proposed project's water demand would not substantially decrease groundwater supplies. Impacts related to depletion of groundwater supplies or interference with groundwater recharge in a manner that may impede sustainable groundwater management would be **less than significant**, and no mitigation is required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on-or-off-site?	☐	☐	☒	☐

10i Response: ***(Source: Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. During grading and construction activities, soil would be exposed and disturbed, drainage patterns would be temporarily altered, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As discussed above in Response 10a, the Project Applicant would be required to obtain coverage under the Construction General Permit, which requires preparation of a SWPPP. The SWPPP would detail Erosion Control and Sediment Control BMPs to be implemented during construction to minimize erosion and retain sediment on-site. Compliance with the requirements of the Construction General Permit and implementation of the construction BMPs would ensure that construction impacts related to on- and off-site erosion or siltation would be **less than significant** directly, indirectly, and cumulatively.

As discussed in Response 10b above, implementation of the proposed project would increase the amount of impervious surface area on the project site by 2.83 acres or approximately 72 percent. An increase in impervious surface area increases the rate and volume of runoff during a storm, which can more effectively transport sediments to receiving waters. The 2.83 acres of impervious surface areas on the project site would not be prone to on-site erosion or siltation because there would be no exposed soil. The remaining 1.1acres of pervious surfaces on the project site would be landscaped with vegetation that would stabilize the soil and promote infiltration, thereby minimizing on-site erosion and siltation. Furthermore, the proposed project would be

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

required to prepare a Final WQMP, in compliance with the City's MS4 permit and Municipal Code, and the implementation of Site Design, Source Control, and LID BMPs that minimize stormwater runoff and increase infiltration, which would ensure that operational impacts related to on- or off-site erosion or siltation would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site?	☐	☐	☒	☐

10c (ii) Response: ***(Sources: City of Riverside 2018 Local Hazard Mitigation Plan; City of Riverside 2025 General Plan Public Safety Element; Federal Emergency Management Agency Flood Insurance Rate Map No. 06065C0720G; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. According to the City's Local Hazard Mitigation Plan, the project site is located within a 500-year Flood Zone. Additionally, the City's General Plan Public Safety Element identifies portions of the project site located within the Mary Street Dam inundation area. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06065C0720G (August 28, 2008) indicates the project site is mapped within Flood Zone X, within the 0.2 percent annual chance flood. Zone X areas are defined by FEMA as areas of minimal flood hazard, which are the areas outside of the Special Flood Hazard Area. As discussed in Response 10a, project construction would comply with the requirements of the Construction General Permit and the City Municipal Code and would include the preparation and implementation of a SWPPP. The SWPPP would specify construction BMPs to control and direct on-site surface runoff to ensure that project construction does not increase the rate or amount of surface runoff in manner that would result in on- or off-site flooding. With implementation of a SWPPP and associated BMPs, construction activities would not result in a substantial increase in the rate or amount of surface runoff in a manner that would result in on- or off-site flooding and impacts would be **less than significant** directly, indirectly, and cumulatively.

As stated in Response 10c(i) above, development of the proposed project would result in a total impervious surface area of 2.83 acres, which would increase the volume and rate of stormwater runoff, which could potentially result in flooding. As discussed above, the project site is within a 500-year floodplain and portions of the site are located within the Mary Street Dam inundation area. Therefore, development of the project could increase the rate or amount of surface runoff in a manner which would result in flooding on-or-off-site. However, the proposed stormwater drainage system, which has been designed to be consistent with the requirements of the City's MS4 permit and City Municipal Code, would capture and infiltrate the DCV consistent with the requirements of the City's MS4 Permit and City Municipal Code. Compliance with the City's MS4 Permit and City Municipal Code would ensure that operational activities would not result in a substantial increase in the rate or amount of surface runoff in a manner that would result in on- or off-site flooding and impacts would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐

10iii Response: (Source: ***Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. As discussed in Response 10a above, project construction would comply with the requirements of the Construction General Permit and the City Municipal Code and would include the preparation and implementation of a SWPPP. The SWPPP would specify construction BMPs to control and direct on-site surface runoff to ensure that stormwater runoff from the construction site does not exceed the capacity of the stormwater drainage system and does not discharge polluted runoff during construction activities. With implementation of a SWPPP, construction impacts related to exceeding the capacity of the stormwater drainage system or additional polluted runoff would be **less than significant** directly, indirectly, and cumulatively.

The proposed project would capture and infiltrate stormwater runoff so that excess runoff does not exceed the pre-development conditions and therefore would not exceed the capacity of the existing stormwater system pursuant to the requirements of the City's MS4 Permit and the City Municipal Code. Additionally, as discussed in Response 10a above, the proposed project would include site design, source control, and LID BMPs to address pollutants of concern in stormwater runoff before leaving the project site and entering the Municipal storm drain system in accordance with the City's MS4 Permit and the City Municipal Code. Therefore, the proposed project would not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

iv. Impede or redirect flood flows?	☐	☐	☒	☐

10c (iv) Response: ***(Sources: City of Riverside 2018 Local Hazard Mitigation Plan; City of Riverside 2025 General Plan Public Safety Element; Federal Emergency Management Agency Flood Insurance Rate Map No. 06065C0720G; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. As discussed in Response 10a and Response 10c(ii) above, project construction would comply with the requirements of the Construction General Permit and the City Municipal Code and would include the preparation and implementation of a SWPPP. The SWPPP would specify construction BMPs to control and direct on-site surface runoff to ensure that project construction does not impede or redirect flood flows in manner that would result in on- or off-site flooding. With implementation of a SWPPP and associated BMPs, construction activities would not impede or redirect flood flows in a manner that would result in on- or off-site flooding and impacts would be **less than significant** directly, indirectly, and cumulatively.

As stated in Response 10c(i) and 10c(ii) above, development of the proposed project would result in a total impervious surface area of 2.83 acres, which would increase the volume and rate of stormwater runoff, which could potentially result in flooding. As discussed above, the project site is within a 500-year floodplain and portions of the site are located within the Mary Street Dam inundation area. Therefore, development of the project could impede or redirect flood flows off-site. However, the proposed stormwater drainage system, which has been designed to be consistent with the requirements of the City's MS4 permit and City Municipal Code, would capture and infiltrate the DCV consistent with the requirements of the City's MS4 Permit and City Municipal Code. Compliance with the City's MS4 Permit and City Municipal Code would ensure that operational activities would not impede or redirect flood flows in a manner that would result in on- or off-site flooding and impacts would be **less than significant** directly, indirectly and cumulatively. No mitigation is required.

d. In floor hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐

10d. Response: ***(Sources: City of Riverside 2018 Local Hazard Mitigation Plan; City of Riverside 2025 General Plan Public Safety Element, Federal Emergency Management Agency Flood Insurance Rate Map No. 06065C0720G; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact. As discussed in Response 10c(ii) above, the project site is located within a 500-year flood zone. In addition, portions of the site are located within the Mary Street Dam inundation area; therefore, the release of pollutants from the project site due to inundation from a flood could occur. However, as discussed in Response 10c(ii) above, the proposed stormwater drainage system has been designed to capture stormwater runoff and treat pollutants of concern prior to being discharged off-site consistent with the requirements of the Construction General Permit, City's MS4 Permit, and City Municipal Code.

The project site is approximately 36 miles east of the Pacific Ocean and the Santa Ana Mountains are between the project site and the Pacific Ocean. Based on the distance from the Pacific Ocean and the presence of an intervening mountain range, there is no risk of a release of pollutants from the project site due to inundation from a tsunami.

Seiches are oscillations in enclosed bodies of water that are caused by a number of factors, most often wind or seismic activity. The nearest major water feature is Lake Mathews located approximately 5.6 miles southwest of the project site. Given the distance of large standing bodies of water from the project site, there is no risk of a release of pollutants from the project site due to seiche-related flooding.

The project site is located within a flood hazard zone and a dam inundation area. However, compliance with the Standard Conditions of Approval listed above, which would ensure the rate and volume of stormwater runoff in the post-project condition does not exceed pre-project conditions and include site design, source control and treatment BMPs to reduce pollutants of concern in stormwater runoff, would ensure that the proposed project does not contribute to on- or off-site flooding and would reduce the risk of releasing pollutants due to project site inundation from a flood. Additionally, given the project site's distance from the Pacific Ocean and from closed bodies of water, implementation of the proposed project would not result in a tsunami or seiche and therefore would not risk the release of pollutants due to project site inundation. Impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

10e. Response: ***(Sources: Riverside Public Utilities, 2020 Urban Water Management Plan, California Department of Water Resources; and Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022)***

Less Than Significant Impact. The project site is within the jurisdiction of the Santa Ana RWQCB. The Santa Ana RWQCB adopted a Water Quality Control Plan (i.e., Basin Plan) (January 1995, Updated June 2019) that designates beneficial uses for all surface and groundwater within its jurisdiction and establishes the water quality objectives and standards necessary to protect those beneficial uses. The proposed project would comply with the Construction General Permit and the City's MS4 Permit, which require the preparation of an SWPPP, preparation of a Final WQMP, and implementation of construction and operational BMPs to reduce pollutants of concern in stormwater runoff. Therefore, the proposed project would not result in water quality impacts that would conflict with the Santa Ana RWQCB Water Quality Control Plan (Basin Plan). Impacts related to a conflict with the Basin Plan would be less than significant, and no mitigation is required.

The Sustainable Groundwater Management Act (SGMA) was enacted in September 2014. SGMA requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. SGMA requires the formation of local Groundwater Sustainability Agencies, which are required to adopt Groundwater Sustainability Plans (GSPs) to manage the sustainability of the groundwater basins. The project site is located within the Upper Santa Ana Valley Groundwater Basin, within the Riverside-Arlington Groundwater Subbasin (Riverside-Arlington Groundwater Basin). The Riverside-Arlington Groundwater Basin is identified by the Department of Water Resources as a very low priority basin; therefore, development of a GSP or an approved GSP alternative is not required.

As discussed previously, due to the depth to groundwater, it is not expected that any stormwater that may infiltrate during construction would affect groundwater quality because the groundwater table is deep, and pollutants during project construction and operation would be treated in accordance with the requirements of the Construction General Permit, City's MS4 Permit, and City Municipal Code. In addition, pollutants in storm water are generally removed by soil through absorption as water infiltrates. Therefore, in areas of deep groundwater, there is more absorption potential and, as a result, less potential for pollutants to reach groundwater. Therefore, due to the depth to groundwater, it is not expected that any storm water that may

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

infiltrate during construction or operation would affect groundwater quality because there is not a direct path for pollutants to reach groundwater.

As previously discussed, the project site is currently 100 percent pervious and implementation of the proposed project would increase impervious surface area on the project site by 2.83 acres or 72 percent. Therefore, the proposed project would decrease on-site infiltration. However, as described above in Response 10a, the proposed project includes BMPs to collect and infiltrate stormwater at the project site in accordance with the City's MS4 Permit and Municipal Code. Therefore, development of the proposed project would not substantially decrease the amount of stormwater that infiltrates as compared to the existing conditions and the proposed project would not substantially impact groundwater supplies. Furthermore, the project site is located within a very low priority basin and therefore the SGMA provisions do not apply. Impacts related to a conflict with or obstruction of a water quality control plan or sustainable groundwater management plan would be **less than significant** directly, indirectly, and cumulatively.

11. LAND USE AND PLANNING.

Would the project:				
a. Physically divide an established community?	☐	☐	☒	☐

11a. Response: ***(Source: General Plan 2025; Title 19 – Zoning Code, Title 18 – Subdivision Code)***

Less Than Significant Impact. The project site is located in an urbanized location of the City surrounded by single-family residential, commercial, and industrial uses. The proposed project would construct a residential complex with a total of 121 affordable residential dwelling units that include senior and multi-family housing. The proposed project would require a General Plan Amendment to change the existing land use designations, from C – Commercial and MDR – Medium Density Residential to HDR – High Density Residential and a zone change, from R-1-7000 – Single Family Residential to R-3-1500 – Multifamily Residential. The proposed residential uses would be consistent with existing residential developments directly north of the site across Railroad Avenue and south of the site across the BNSF/Inland Empire-Orange County Railroad Line, and would create continuity in the pattern of residential development of the community. The proposed project would be subject to a Design Review to ensure that project plans are consistent with General Plan policies and the established Citywide Design and Sign Guidelines for residential uses. As discussed in the Project Description, based on 100 percent of the units being affordable for Low Income households, the project is requesting four concessions to the Development Standards in accordance with Zoning Code Section 19.545.060. The four concessions are: (1) to allow for no private open space for 78 of the residential units located on the floors above-grade; (2) to reduce the front yard setback from 15 feet to 12 feet wide, 3) to reduce the landscape setback from 15 feet to 12 feet wide; and 4) to reduce the minimum number of parking spaces. The proposed project would comply with all other residential development standards for R-3-1500 – Multiple Family Residential development outlined in the City's Zoning Code, as well as requirements for development detailed in the Subdivision Code. Therefore, the project impacts related to the community are **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

11b. Response: ***(Sources: General Plan 2025; Title 19 – Zoning Code, Title 18 – Subdivision Code, Title 17 – Grading Code, Title 16 – Buildings and Construction; and Citywide Design and Sign Guidelines)***

Less Than Significant Impact. The project is designed to be consistent with General Plan policies and the established Citywide Design and Sign Guidelines for residential uses, as well as the City's Zoning Code, Subdivision Code, Grading Code and Building Code, which are intended to promote quality, well-designed developments that enhance existing neighborhoods, create identity, and improve the overall quality of life within the City. As identified above, the project site is located in an urbanized area of the City of Riverside, surrounded by a variety of uses, including single-family residential, commercial, and industrial uses. Although the proposed project would increase density on the project site, the proposed residential uses would be consistent with existing residential developments directly north of the site across Railroad Avenue and south of the site across the BNSF/Inland Empire-Orange County Railroad Line, and would create continuity in the pattern of development of the community. The proposed project overall density would be 30.7 dwelling units per acre and would result in approximately

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

408 residents in the City of Riverside, which would be a negligible increase when compared to the City's existing and projected population. Additionally, the proposed project would help the City reach its affordable housing goals as defined in the General Plan. As such, the proposed project would be compatible with the surrounding uses in the project vicinity. The project will have a **less than significant impact** due to conflicts with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No mitigation is required.

12. MINERAL RESOURCES.

Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

12a. Response: ***(Source: General Plan 2025 Open Space and Conservation Element: Figure – OS-1 – Mineral Resources)***

No Impact. The project does not involve extraction of mineral resources. No mineral resources have been identified on the project site and there is no historical use of the site or surrounding area for mineral extraction purposes. The project site is not, nor is it adjacent to, a locally important mineral resource recovery site delineated in the General Plan. Therefore, the project would have **no impact** on mineral resources directly, indirectly, or cumulatively. No mitigation is required.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

12b. Response: ***(Source: General Plan 2025 Open Space and Conservation Element: Figure – OS-1 – Mineral Resources)***

No Impact. The 2025 General Plan FPEIR determined that there are no specific areas with the City of Sphere Area which have locally-important mineral resource recovery sites and that the implementation of the General Plan would not significantly preclude the ability to extract state-designated resources. Therefore, the project would have **no impact** on mineral resources directly, indirectly or cumulatively. No mitigation is required.

13. NOISE.

Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐

Regulatory Settings:

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A decibel (dB) is a unit of measurement that indicates the relative intensity of a sound. Sound levels in dB are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in sound level is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the sound level to attenuate or be reduced, resulting in a 6 dB

reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including the Federal Transit Administration (FTA) and City of Riverside.

Federal Transit Administration. Vibration standards included in the FTA's *Transit Noise and Vibration Impact Assessment Manual* were used in this analysis because the City of Riverside does not have vibration standards. Table 13.A provides the criteria for assessing the potential for interference or annoyance from vibration levels in a building while Table 13.B lists the potential vibration building damage criteria associated with construction activities.

Table 13.A: Interpretation of Vibration Criteria for Detailed Analysis

Land Use	Max L_v (VdB)[1]	Description of Use
Workshop	90	Vibration that is distinctly felt. Appropriate for workshops and similar areas not as sensitive to vibration.
Office	84	Vibration that can be felt. Appropriate for offices and similar areas not as sensitive to vibration.
Residential Day	78	Vibration that is barely felt. Adequate for computer equipment and low-power optical microscopes (up to 20X).
Residential Night and Operating Rooms	72	Vibration is not felt, but ground-borne noise may be audible inside quiet rooms. Suitable for medium-power microscopes (100X) and other equipment of low sensitivity.

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] As measured in 1/3-octave bands of frequency over the frequency range of 8 to 80 hertz.
FTA = Federal Transit Administration
Max = maximum
L_V = velocity in decibels
VdB = vibration velocity decibels

Table 13.B: Construction Vibration Damage Criteria

Building Category	PPV (in/sec)	Approximate L_V (VdB)[1]
Reinforced concrete, steel, or timber (no plaster)	0.50	102
Engineered concrete and masonry (no plaster)	0.30	98
Nonengineered-timber and masonry buildings	0.20	94
Buildings extremely susceptible to vibration damage	0.12	90

Source: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).

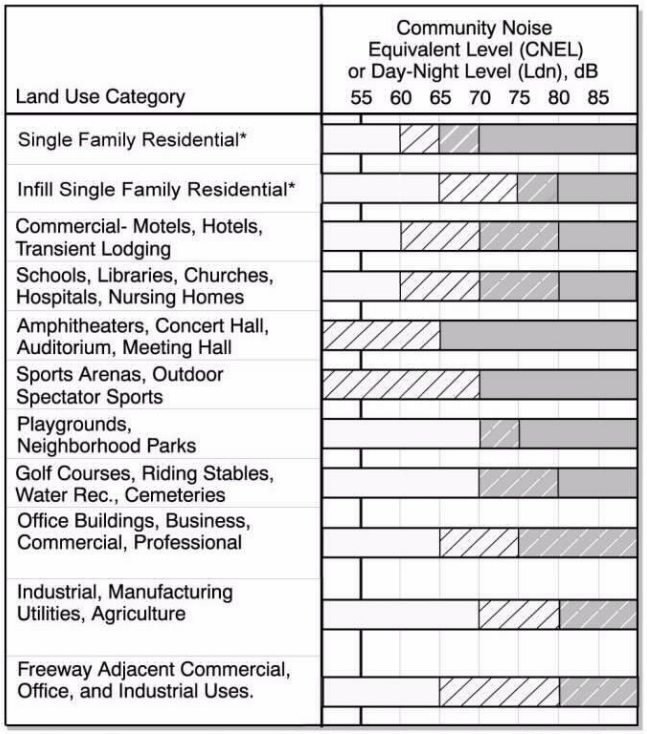
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.

µin/sec = microinches per second
FTA = Federal Transit Administration
in/sec = inches per second
L_V = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

City of Riverside General Plan Noise Element. The City's General Plan Noise Element has established noise/land use compatibility standards shown in Table 13.C to ensure the compatibility of new development. In addition, the City's General Plan Noise Element includes policies that avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted-living facilities, group homes, schools, and day care centers) within the high noise impact areas (over 60 dBA CNEL) for

Table 13.C: City of Riverside Noise/Land Use Noise Compatibility Criteria



Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

Normally Acceptable
Specific land use is satifactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Conditionally Unacceptable
New construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

* For properties located within airport influence areas, acceptable noise limits for single family residential uses are established by the Riverside County Airport Land Use Compatibility Plan.

Riverside Municipal Airport and Flabob Airport in accordance with the Riverside County Airport Land Use Compatibility Plan.

City of Riverside Municipal Code. Sections 7.25.010 and 7.30.015 of the City's Municipal Code establish the maximum permissible noise level that may intrude into a neighbor's property. Table 13.D provides the City's maximum noise standards based on the type of land use, the location of the noise (exterior/interior), and the time period. The noise metric used for stationary sources is defined as noise levels that cannot be exceeded for certain percentages of time, or L_n.

Section 7.35.020(G) of the City's Municipal Code exempts noise sources associated with construction, repair, remodeling, or grading of any real property from the noise limits specified in Sections 7.25.010 and 7.30.015 of the City's Municipal Code, provided the following requirements are met:

a. A permit has been obtained from the City as required; and
b. Activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday.

Table 13.D: City of Riverside Maximum Noise Level Standards

Type of Land Use	Exterior/ Interior	Time Period	L_{50} (30 min)[1]	L_{25} (15 min)[2]	L_8 (5 min)[3]	L_2 (1 min)[4]	L_{max} (Anytime)[5]
Residential	Exterior	7:00 AM to 10:00 PM	55–60	60	65	70	75
		10:00 PM to 7:00 AM	45–50	50	55	60	65
	Interior	7:00 AM to 10:00 PM	—	—	45–50	50	55
		10:00 PM to 7:00 AM	—	—	35–40	40	45
School	Interior	7:00 AM to 10:00 PM (while school is in session)	—	—	45–50	50	55
Hospital	Interior	Anytime	—	—	45–50	50	55
Office/Commercial	Exterior	Anytime	65–70	70	75	80	85
Industrial	Exterior	Anytime	70–75	75	80	85	90
Community Support	Exterior	Anytime	60–65	65	70	75	80
Public Recreation Facility	Exterior	Anytime	65–70	70	75	80	85
Nonurban	Exterior	Anytime	70–75	75	80	85	90

Source: City of Riverside Municipal Code (2022).

[1] L_{50} (exterior) = The exterior noise standard plus up to 5 dBA for a cumulative period of more than 30 minutes in any hour.
[2] L_{25} (exterior) = The exterior noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour.
[3] L_8 (exterior) = The exterior noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour.
L_8 (interior) = The interior noise standard plus up to 5 dBA for a cumulative period of more than 5 minutes in any hour.
[4] L_2 (exterior) = The exterior noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour.
L_2 (interior) = The interior noise standard plus 5 dBA for a cumulative period of more than 1 minute in any hour.
[5] L_{max} (exterior) = The exterior noise standard plus 20 dBA or the maximum measured ambient noise level for any period of time.
L_{max} (interior) = The interior noise standard plus 10 dBA or the maximum measured ambient noise level for any period of time.
dBA = A-weighted decibel
L_{max} = maximum instantaneous noise level
min = minutes

Existing Settings:

Overview of the Existing Noise Environment. The primary existing noise sources in the project area are transportation facilities. Traffic on State Route 91 (SR-91), Railroad Avenue, Madison Street, and other local streets contribute to the ambient noise levels in the project vicinity. The BNSF/Inland Empire-Orange County Railroad Line, which also carries Amtrak trains, is immediately south of the project. Both freight and passenger train operations contribute to the existing noise environment. Other sources of noise in the project area include commercial and industrial activity.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Land Uses in the Project Vicinity. Land uses in the vicinity of the project area include single-family residences, commercial, and industrial uses. Single-family residences and a neighborhood services non-profit organization are located north of the project site. Single-family residences and industrial uses are located to the south of the project site across the existing rail line (BNSF/Inland Empire-Orange County Railroad Line) Commercial uses are located to the east of the project site across Madison Street. Single-family residences are located to the west of the project site.

Ambient Noise Measurements. Six long-term (24-hour) noise level measurements were conducted from December 20 to December 21, 2022, using six Larson Davis Spark 703+, 705+ and 706RC dosimeters. Table 13.E summarizes the results of the long-term noise level measurements along with a description of the measurement locations and noise sources that occurred during the measurements. As shown in Table 13.E, the daytime noise levels ranged from 50.7 to 74.9 dBA L_{eq}, and the nighttime noise levels ranged from 57.8 to 72.9 dBA L_{eq}. The daytime maximum instantaneous noise levels ranged from 63.2 to 95.5 dBA and the nighttime instantaneous noise level ranged from 65.5 to 89.8 dBA. Also, the calculated CNEL levels from the long-term noise level measurements at monitors LT-1 through LT-6 range from 69.4 to 75.7 dBA. The long-term noise monitoring locations are shown in Figure 3 of the Noise and Vibration Impact Analysis (Appendix G).

Table 13.E: Long-Term Ambient Noise Monitoring Results

Monitor No.	Location	Noise Level (dBA)					Noise Sources
		Daytime		Nighttime		CNEL	
		L_{eq}	L_{max}	L_{eq}	L_{max}		
LT-1	3303 Madison Street. On a utility pole at the southern property boundary of the Farmer Boys Restaurant near the BNSF/Inland Empire-Orange County Railroad Line, approximately 65 ft from Madison Street centerline.	65.7-74.8	82.9-95.4	62.0-71.0	73.0-89.8	74.1	Train noise and traffic noise on Madison Street.
LT-2	7555 Evans Street. Industrial property south of the project site and south of the BNSF/Inland Empire-Orange County Railroad Line near the chain-linked fence.	57.0-70.4	70.7-92.4	59.6-68.2	65.5-87.2	70.9	Train noise and traffic noise on Evans Street.
LT-3	On a palm tree on the project site. Near Winstrom Street and Railroad Avenue, approximately 130 ft from Railroad Avenue centerline.	56.5-68.9	72.0-84.2	62.2-69.0	73.5-85.2	72.3	Train noise and traffic noise on Railroad Avenue.
LT-4	7695 Evans Street. Attached to a bush in the backyard of the residence.	50.7-64.9	63.2-80.6	57.8-67.4	68.0-77.0	69.4	Train noise and traffic noise on Evans Street.
LT-5	7760 Casa Blanca Street. On a utility pole near the backyard, approximately 20 ft from Railroad Avenue centerline.	61.3-74.9	76.6-95.5	63.9-72.9	74.0-82.2	75.7	Train noise and traffic noise on Railroad Avenue.
LT-6	7552 Casa Blanca Street. On a utility pole near the backyard, approximately 20 ft from Railroad Avenue centerline.	58.8-71.7	78.8-93.4	61.1-68.5	72.3-85.6	72.0	Train noise and traffic noise on Railroad Avenue.

Source: Compiled by LSA (2023).
Note: Long-term (24-hour) noise level measurements were conducted from December 20, 2022, to December 21, 2022.
CNEL = Community Noise Equivalent Level
dBA = A-weighted decibels
ft = foot/feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level

Existing Train Noise. The BNSF/Inland Empire-Orange County Railroad Line is immediately south of the project site. The train crossing data from the Federal Railroad Administration Office of Safety Analysis show there are approximately 60 freight and passenger trains per day. Based on a review of the noise monitoring gathered, noise generated from train operations was captured during the long-term noise level measurements.

Existing Train Vibration Measurements. To assess the vibration levels generated by train pass-bys, vibration measurements were gathered on March 31, 2023, at the location of the closest proposed building façade to the existing train tracks. A measurement of a freight train pass-by lasting approximately 2 minutes and a measurement of a passenger train pass-by lasting

approximately 15 seconds were gathered consistent with the methodologies presented in the FTA Manual. The 1/3 octave band data of each pass-by is presented in Appendix A of the Noise and Vibration Impact Analysis (Appendix G). Figure 3 of the Noise and Vibration Impact Analysis (Appendix G) shows the location of the vibration measurements.

Existing Traffic Noise. The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions along roadway segments in the project vicinity. This model requires various parameters (including traffic volumes, vehicle mix, vehicle speed, and roadway geometry) to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resulting noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The existing average daily traffic (ADT) volumes were obtained from the Traffic Operational Analysis for the project (Appendix H). The standard vehicle mix for Southern California roadways was used for roadways in the project vicinity. Table 13.F lists the existing traffic noise levels on roadways in the project vicinity. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and the model printouts are provided in the Noise and Vibration Impact Analysis (Appendix G).

Table 13.F: Existing Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 CNEL (ft)	Centerline to 65 CNEL (ft)	Centerline to 60 CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane
Railroad Avenue West of Winstrom Street	385	< 50	< 50	< 50	46.6
Railroad Avenue Between Winstrom Street and Madison Street	460	< 50	< 50	< 50	47.4
Madison Street between Indiana Avenue and Railroad Avenue	12,186	< 50	61	123	63.5
Madison Street Between Railroad Avenue and Evan Street	12,221	< 50	61	123	63.6

Source: Compiled by LSA (2023).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

13a. Response: ***(Source: Appendix G: Noise and Vibration Impact Analysis, LSA, May 2023)***

Less Than Significant Impact.

Construction Noise Impact. Two types of short-term noise impacts could occur during construction on the project site. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site and would incrementally raise noise levels on roadways leading to the site. The pieces of construction equipment for construction activities would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 feet would generate up to a maximum of 84 dBA), the effect on longer-term ambient noise levels would be small because the number of daily construction-related vehicle trips is small compared to existing daily traffic volume on Madison Street and Railroad Avenue. Project construction would generate a maximum of 240 trips per day based on CalEEMod. Roadways that would be used to access the project site are Madison Street and Railroad Avenue. Based on Table 13.F, Railroad Avenue and Madison Street have estimated existing daily traffic volumes of 12,186 and 385, respectively, near the project site. Based on the information above, construction-related traffic would increase noise by up to 2.1 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term construction-related impacts associated with worker commutes and transport of construction equipment and material to the project site would be **less than significant**. No mitigation measures are required.

The second type of short-term noise impact is related to noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The

proposed project anticipates site preparation, grading, building construction, paving, and architectural coating phases of construction. These various sequential phases change the character of the noise generated on a project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 13.G lists the L_{max} recommended for noise impact assessments for typical construction equipment included in the FHWA Highway Construction Noise Handbook, based on a distance of 50 feet between the equipment and a noise receptor.

Table 13.G lists the anticipated construction equipment for each construction phase based on the CalEEMod results contained in the AQ/GHG/Energy Impact Analysis, LSA, March 2023. Table 13.H shows the combined noise level at 50 feet from all of the equipment in each phase as well as the L_{eq} noise level for each equipment at 50 feet based on the quantity, reference instantaneous maximum (L_{max}) noise level at 50 feet, and the acoustical usage factor. As shown in Table 13.H, construction noise levels would reach up to 89.8 dBA L_{max} (87.3 L_{eq}) at a distance of 50 feet.

Table 13.G: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor[1]	Maximum Noise Level (L_{max}) at 50 ft[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flatbed Truck	40	84
Forklift	20	85
Front-End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder	40	73

Source: Table 9.1, *FHWA Highway Construction Noise Handbook* (FHWA 2006).
Note: The noise levels reported in this table are rounded to the nearest whole number.
[1] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.
[2] Maximum noise levels were developed based on Spec 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.
CA/T = Central Artery/Tunnel ft = foot/feet
FHWA = Federal Highway Administration L_{max} = maximum instantaneous noise level

Table 13.H: Summary of Construction Phase, Equipment, and Noise Levels

Construction Phase	Construction Equipment	Quantity	Reference Noise Level at 50 ft (dBA L_{max})	Acoustical Usage Factor[1] (%)	Noise Level at 50 ft (dBA)			
					L_{max}	L_{eq}	Combined (L_{max})	Combined (L_{eq})
Site Preparation	Bulldozers	3	85	40	89.8	85.8	91.3	87.3
	Front-End Loaders	4	80	40	86.0	82.0		
Grading	Excavator	1	85	40	85.0	81.0	91.0	87.0
	Grader	1	85	40	85.0	81.0		
	Bulldozer	1	85	40	85.0	81.0		
	Front-End Loaders	3	80	40	84.8	80.8		
	Crane	1	85	16	85.0	77.0	92.4	86.5

Building Construction	Forklifts	3	85	20	89.8	82.8		
	Generator	1	82	50	82.0	79.0		
	Front-End Loaders	3	80	40	84.8	80.8		
	Welders	1	73	40	73.0	69.0		
Paving	Pavers	2	80	20	83.0	76.0	92.7	86.9
	Paving Equipment	1	85	50	85.0	82.0		
	Pavement Scarafier	2	85	20	88.0	81.0		
	Rollers	2	85	20	88.0	81.0		
	Front-End Loaders	1	80	40	80.0	76.0		
Architectural Coating	Air Compressors	1	80	40	80.0	76.0	80.0	76.0

Source: Compiled by LSA (2023).
[1] The acoustical usage factor is the percentage of time during a construction noise operation that a piece of construction equipment operates at full power.
dBA = A-weighted decibels L_{eq} = equivalent continuous sound level
ft = foot/feet L_{max} = maximum instantaneous noise level

The closest residential property line is located approximately 85 feet from the center of the project site and may be subject to short-term construction noise reaching 88.1 dBA L_{max} (82.7 dBA L_{eq}) generated by construction activities in the project area. Construction noise is temporary and would stop once project construction is completed. Compliance with the City's permitted hours of construction pursuant to Section 7.35.010 of the City's Municipal Code would minimize construction-related noise and ensure construction noise would not be generated during the more sensitive nighttime hours. Therefore, construction noise impacts would be **less than significant**. No mitigation measures are required.

Traffic Noise Impact. The FHWA Highway Traffic Noise Prediction Model was used to evaluate traffic-related noise conditions along street segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resulting noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The Existing (2022), Opening Year (2025), and Cumulative (2045) ADT volumes were obtained from the Traffic Operational Analysis. The standard vehicle mix for Southern California roadways was used for roadways in the project vicinity. Tables 13.I, 13.J, and 13.K list the traffic noise levels for the Existing (2022), Opening Year (2025), and Cumulative (2045) Without and With Project scenarios, respectively. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. The specific assumptions used in developing these noise levels and the model printouts are provided in the Noise and Vibration Impact Analysis (Appendix G).

Tables 13.I, 13.J, and 13.K show that the proposed project would result in a project-related traffic noise increase of up to 1.4 dBA, except for Railroad Avenue between Winstrom Street and Madison Street, which would result in a project-related traffic noise increase of up to 3.4 dBA. Residences along Railroad Avenue between Winstrom Street and Madison Street are approximately 25 feet from the Railroad Avenue centerline and would be exposed to traffic noise levels up to 58.1 dBA CNEL. The overall project-related traffic noise increase would be 0.2 dBA when factoring the ambient noise level of 72 dBA CNEL at LT-6 because rail noise from the BNSF/Inland Empire-Orange County Railroad Line and traffic noise on Madison Street and other roadways dominate the existing noise environment in this area. This noise level increase is below 3 dBA and would not be perceptible to the human ear in an outdoor environment. Therefore, off-site traffic noise impacts would be **less than significant**. No mitigation measures are required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 13.I: Existing (2022) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Railroad Avenue west of Winstrom Street	385	< 50	< 50	< 50	46.6	537	< 50	< 50	< 50	48.0	1.4
Railroad Avenue between Winstrom Street and Madison Street	460	< 50	< 50	< 50	47.4	1,010	< 50	< 50	< 50	50.8	3.4
Madison Street between Indiana Avenue and Railroad Avenue	12,186	< 50	61	123	63.5	12,614	< 50	62	126	63.7	0.2
Madison Street between Railroad Avenue and Evan Street	12,221	< 50	61	123	63.6	12,343	< 50	61	124	63.6	0.0

Source: Compiled by LSA (2023).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

Table 13.J: Opening Year (2025) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Railroad Avenue west of Winstrom Street	408	< 50	< 50	< 50	46.8	560	< 50	< 50	< 50	48.2	1.4
Railroad Avenue between Winstrom Street and Madison Street	488	< 50	< 50	< 50	47.6	1,038	< 50	< 50	< 50	50.9	3.3
Madison Street between Indiana Avenue and Railroad Avenue	12,977	< 50	63	128	63.8	13,405	< 50	64	131	64.0	0.2
Madison Street between Railroad Avenue and Evan Street	13,014	< 50	63	128	63.8	13,136	< 50	64	129	63.9	0.1

Source: Compiled by LSA (2023).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 13.K: Cumulative (2045) Traffic Noise Levels Without and With Project

Roadway Segment	Without Project Traffic Conditions					With Project Traffic Conditions					
	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	ADT	Centerline to 70 dBA CNEL (ft)	Centerline to 65 dBA CNEL (ft)	Centerline to 60 dBA CNEL (ft)	CNEL (dBA) 50 ft from Centerline of Outermost Lane	Increase from Baseline Conditions
Railroad Avenue west of Winstrom Street	445	< 50	< 50	< 50	47.2	597	< 50	< 50	< 50	48.5	1.3
Railroad Avenue between Winstrom Street and Madison Street	532	< 50	< 50	< 50	48.0	1,082	< 50	< 50	< 50	51.1	3.1
Madison Street between Indiana Avenue and Railroad Avenue	14,115	< 50	66	135	64.2	14,543	< 50	67	138	64.3	0.1
Madison Street between Railroad Avenue and Evan Street	14,150	< 50	66	135	64.2	14,272	< 50	67	136	64.2	0.0

Source: Compiled by LSA (2023).
Note: Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic dBA = A-weighted decibels
CNEL = Community Noise Equivalent Level ft = foot/feet

Stationary Noise Impact. The proposed project includes on-site rooftop heating, ventilation, and air conditioning (HVAC) units for the 121 residential units and amenity buildings. It is estimated that the proposed project would have a total of 129 HVAC units on site and could potentially operate 24 hours per day. The HVAC equipment would generate a sound power level (SPL) of 76 dBA, which would be equivalent to 44.4 dBA L_{eq} at 50 ft. The specifications of typical HVAC equipment are provided in the Noise and Vibration Impact Analysis (Appendix G). The parapet and roofline would provide a minimum noise reduction of 5 dBA.

Table 13.L shows the noise levels generated by HVAC equipment at the property line of the closest off-site land use along with the total number of HVAC units, range of distances from the equipment to the property line, range of distance attenuation, and shielding from the roofline and parapet. As shown in Table 13.L, noise levels generated from on-site HVAC units would not exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) 30-minute (L_{50}) noise standards of 60 dBA and 50 dBA, respectively, for residential uses. Also, noise levels generated from on-site HVAC units would not exceed the City's exterior 30-minute (L_{50}) noise standards of 70 dBA and 75 dBA for commercial and industrial uses, respectively. The detailed HVAC noise analysis is provided in the Noise and Vibration Impact Analysis (Appendix G). Therefore, off-site noise impacts from on-site HVAC equipment would be **less than significant**. No mitigation measures are required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 13.L: HVAC Noise Levels

Land Use	Direction	HVAC Unit Total	Distance[1] (ft)	Distance Attenuation (dBA)	Shielding[2] (dBA)	Noise Level[3] (dBA L_{eq})
Residential (3245 Depot Street)	North	129	88-1,300	4.9-28.3	5	47.4
Commercial (3303 Madison Street)	East	129	166-1,613	10.4-30.2	5	41.6
Residential (7715 Evans Street)	South	129	129-1,314	8.2-28.4	5	46.0
Industrial (7555 Evans Street)	South	129	127-919	8.1-25.3	5	45.7

Source: Compiled by LSA (2023).
[1] Distance from the equipment to the property line.
[2] Noise reduction from roofline and parapet.
[3] The composite noise level at the property line.
dBA = A-weighted decibels HVAC = heating, ventilation, and air conditioning
ft = foot/feet L_{eq} = equivalent continuous sound level

Standard Condition of Approval

The following standard condition of approval is an existing regulation that is applicable to the proposed project and is considered in the analysis of potential impacts related to noise. The City of Riverside considers this requirement to be mandatory; therefore, it is not a mitigation measure.

- The construction contractor shall limit construction activities to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays pursuant to Section 7.35.010 of the City's Municipal Code. Construction is prohibited outside these hours or at any time on Sundays and federal holidays.

b.	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

13b. Response: ***(Source: Appendix G: Noise and Vibration Impact Analysis, LSA, May 2023)***

Less Than Significant Impact.

Short-Term Construction Vibration Impacts. This construction vibration impact analysis discusses the level of human annoyance using vibration levels in vibration velocity decibels (VdB) and assesses the potential for building damage using vibration levels in peak particle velocity (PPV) (inches per second [in/sec]). Vibration levels calculated in root-mean-square (RMS) velocity are best for characterizing human response to building vibration, whereas vibration levels in PPV are best for characterizing damage potential.

Table 13.M shows the reference vibration levels at a distance of 25 feet for each type of standard construction equipment from the FTA's *Transit Noise and Vibration Impact Assessment Manual*. Outdoor site preparation for the proposed project is expected to require the use of a large bulldozer and loaded trucks, which would generate groundborne vibration of up to 87 VdB (0.089 PPV [in/sec]) and 86 VdB (0.076 PPV [in/sec] when measured at 25 feet, respectively.

Table 13.M: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/L_V at 25 ft	
	PPV (in/sec)	L_V (VdB)[1]
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.170	93
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer[2]	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks[2]	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
[2] Equipment shown in bold is expected to be used on site.
µin/sec = microinches per second
in/sec = inches per second
RMS = root-mean-square
ft = foot/feet
L_V = velocity in decibels
VdB = vibration velocity decibels
FTA = Federal Transit Administration
PPV = peak particle velocity

The greatest vibration levels are anticipated to occur during the site preparation and grading phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts normally occur within the buildings.

The formula for vibration transmission is provided below:

$L_v dB\ (D) = L_v dB\ (25\ ft) - 30\ Log\ (D/25)$
$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

Table 13.N lists the projected vibration levels from various construction equipment expected to be used on the project site in the active construction area to the nearest buildings in the project vicinity. As shown in Table 13.N, the closest residential, commercial, and industrial buildings are approximately 85 feet, 195 feet, and 115 feet, respectively, from the active project construction area near the center of the project site would experience vibration levels of up to 71 VdB, 60 VdB, and 67 VdB, respectively. These vibration levels would not result in community annoyance because they would not exceed the FTA community annoyance threshold of 84 VdB for commercial and industrial uses because they are not as sensitive to vibration and 78 VdB for daytime residences. Other building structures that surround the project site would experience lower vibration levels because they are farther away.

Table 13.N: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/Activity	Reference Vibration Level (VdB) at 25 ft	Distance to Structure (ft)[1]	Vibration Level (VdB)
Residential	North	Large bulldozers	87	85	71
		Loaded trucks	86	85	70
Commercial	East	Large bulldozers	87	195	60
		Loaded trucks	86	195	59
Residential	South	Large bulldozers	87	105	68
		Loaded trucks	86	105	67
Industrial	South	Large bulldozers	87	115	67
		Loaded trucks	86	115	66

Source: Compiled by LSA (2023).
Note: The FTA-recommended annoyance threshold of 84 VdB for offices (and other similar areas not as sensitive to vibration), and 78 VdB for daytime residences was used to assess potential construction vibration annoyance.
[1] Distance from the active construction area near the center of the project site to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
VdB = vibration velocity decibels

Similarly, Table 13.O lists the projected vibration levels from various construction equipment expected to be used on the project site at the project construction boundary to the nearest buildings in the project vicinity. As shown in Table 13.O, the closest residential, commercial, and industrial buildings are approximately 65 feet, 90 feet, and 85 feet, respectively, from the project construction boundary and would experience vibration levels of up to 0.021 PPV (in/sec), 0.013 PPV (in/sec), and 0.014 PPV (in/sec), respectively. Vibration levels at the closest residential building would not result in building damage because the residential, commercial, and industrial buildings would be constructed equivalent to or better than non-engineered timber and masonry and vibration levels would not exceed the FTA vibration damage threshold of 0.20 PPV (in/sec). Other building structures that surround the project site would experience lower vibration levels because they are farther away and would be constructed equivalent to or better than non-engineered timber and masonry. Therefore, vibration impacts from project construction activities would be less than significant. No mitigation measures are required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 13.O: Potential Construction Vibration Damage

Land Use	Direction	Equipment/ Activity	Reference Vibration Level (PPV [in/sec]) at 25 ft	Distance to Structure (ft)[1]	Vibration Level (PPV [in/sec])
Residential	North	Large bulldozers	0.089	65	0.021
		Loaded trucks	0.076	65	0.018
Commercial	East	Large bulldozers	0.089	90	0.013
		Loaded trucks	0.076	90	0.011
Residential	South	Large bulldozers	0.089	80	0.016
		Loaded trucks	0.076	80	0.013
Industrial	South	Large bulldozers	0.089	85	0.014
		Loaded trucks	0.076	85	0.012

Source: Compiled by LSA (2023).
Note: The FTA-recommended building damage threshold is 0.20 PPV [in/sec]) at the receiving non-engineered timber and masonry building.
[1] Distance from the project construction boundary to the building structure.
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity
VdB = vibration velocity decibels

Long-term Operational Vibration Impacts. Once operational, the proposed project would not generate vibration. In addition, vibration levels generated from project-related traffic on the adjacent roadways (i.e., Madison Street and Railroad Avenue) would be unusual for on-road vehicles because the rubber tires and suspension systems of on road vehicles provide vibration isolation. Therefore, vibration impacts from project-related traffic on the adjacent roadways would be **less than significant**. No mitigation measures are required.

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?	☐	☐	☐	☐

13c. Response: ***(Source: Appendix G: Noise and Vibration Impact Analysis, LSA, May 2023)***

No Impact. The closest airports to the project site are the Riverside Municipal Airport (RAL) and Flabob Airport, which are respectively located 2.1 miles northwest and 3.8 miles north of the project site. Based on the Riverside County Airport Land Use Compatibility Plan, the project site is outside the 55 dBA CNEL noise contours of Riverside Municipal Airport and Flabob Airport. There are no private airstrips located within the vicinity of the project site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels. **No impacts** would occur. No mitigation measures are required.

14. POPULATION AND HOUSING.

Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

14a. Response: ***(Sources: General Plan 2025, Southern California Association of Governments Connect SoCal 2020–2045 RTP/SCS; and U.S. Census Bureau)***

Less Than Significant Impact. The project site is located in an urbanized location of the City of Riverside surrounded by single-family residential, commercial, and industrial uses. The proposed project would construct a residential complex with a total of 121 affordable residential dwelling units that include senior and multi-family housing. The proposed project would

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

require a General Plan Amendment to change the existing land use designation from C – Commercial and MDR – Medium Density Residential to HDR – High Density Residential and a zone change, from R-1-7000 – Single Family Residential to R-3-1500 – Multiple Family Residential. The Project Applicant would comply with applicable City requirements and payment of applicable fees for rezoning and General Plan Amendment.

The additional 121 dwelling units would result in approximately 408 residents based on the estimated 3.38 persons per household in the City of Riverside. An increase of 408 residents would represent a negligible population increase of approximately 0.13 percent in City of Riverside based on existing population (317,261 residents) and would also represent a negligible increase of approximately 0.10 percent in the City's projected 2045 population as presented in the jurisdictional growth forecasts in SCAG's 2020-2045 RTP/SCS (estimated to be 395,800 residents). Additionally, the proposed project would help the City reach its affordable housing goals as defined in the General Plan. As such, the proposed project would not result in substantial unplanned population growth, and impacts would be **less than significant** directly, indirectly, or cumulatively. No mitigation is required.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

14b. Response: ***(Source: Project Plans)***

No Impact. The project site is currently vacant, and as such, the proposed project would not displace existing housing. Additionally, the proposed project would add 121 dwelling units to the project site, providing housing in the City. As such, the proposed project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. Therefore, there will be **no impact** on existing housing either directly, indirectly, or cumulatively. No mitigation is required.

15. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐

15a. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Area; General Plan 2025 FPEIR Section 5.13 – Public Services: Table 5.13-B – Fire Station Locations, Table 5.13-C – Riverside Fire Department Statistics and Ordinance 5948 Section 1, Title 19 – Zoning Code)***

Less Than Significant Impact. The City of Riverside Fire Department provides fire protection service to the project site. Fire Station 10, located at 2590 Jefferson Street, approximately 0.8 mile southeast of the project site would be the closest fire station serving the proposed project. The City's Fire Department policy states that stations would be located and staffed in such that an effective response force of 4 units with 12 personnel minimum shall be available to all areas of the City within a maximum of 10 minutes (total response time). The project site and project vicinity are not located in a local or State responsibility Very High Fire Hazard Severity Zone (VHFHSZ) mapped by the California Department of Forestry and Fire Protection (CAL FIRE), as shown in Figure PS-7 of the General Plan.

Implementation of the proposed project would add approximately 408 residents to the City of Riverside, which would represent a negligible population increase of approximately 0.13 percent in City of Riverside based on existing population (317,261 residents) and would also represent a negligible increase of approximately 0.10 percent in the City's projected 2045 population as presented in the jurisdictional growth forecasts in SCAG's 2020-2045 RTP/SCS (estimated to be 395,800

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

residents). Based on this negligible population increase compared to the anticipated population growth, with the approval of GPA and rezone requests, and payment of applicable fees, the City's Fire Department would continue to provide adequate service as the City develops to its buildout potential. As such, although implementation of the proposed project would generate an incremental increase in the demand for fire protection service, based on the negligible increase in population, the proposed project would not demand an increase in fire service such that new or expanded facilities would be needed.

The proposed project would implement General Plan policies pertaining to fire protection, comply with existing codes and standards (California Fire Code and Riverside Municipal Code Section 16.32.10) and comply with Chapter 16.52.010 of the City's Municipal Code pertaining to the payment for development fees to be utilized for the purchase of land for and the construction of fire stations and the acquisition of equipment and furnishings to equip fire stations. The proposed project's final development plan would also be reviewed and approved by the City's Fire Prevention Bureau. With these standard measures implemented, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. The proposed project would generate a less than significant impact on Riverside's fire protection services directly, indirectly, or cumulatively. No mitigation is required.

b. Police protection?	☐	☐	☒	☐

15b. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-8 – Neighborhood Policing Centers; General Plan 2025 FPEIR Section 5.13 – Public Services, Project Plans)***

Less Than Significant Impact. The Riverside Police Department (RPD) provides law enforcement services to the City of Riverside and the project site. The Magnolia Neighborhood Policing Center, opened in 2006 at 10540-B Magnolia Avenue, approximately 3.6 miles southwest of the project site, is the base of operations for Central and West Neighborhood Policing Center Field Operations, Central and Special Investigations, Special Operations, Central and Special Investigations, Special Operations, Policing, Training, and the Record Bureau. The RPD currently employs 394 sworn officers and 236 civilian personnel. As part of the Riverside Renaissance Initiative, a new Public Safety Administrative building, 911 Dispatch and Data Center and Neighborhood Police Center are proposed in the future. Incoming calls requesting police services are assigned by urgency. Priority 1 calls are typically of a life-threatening nature, such as a robbery in process or an accident involving bodily injury; police officers strive to respond within 7 minutes to Priority 1 calls. Officers will respond to less-urgent Priority 2 calls within 12 minutes. The RPD policy has determined that units will be located and staffed such that an effective response force of 4 units with 12 personnel minimum shall be available to all areas of the City within a maximum of 10 minutes (total response time).

Residential development, such as proposed, typically generates calls for law enforcement service due to residential break-ins, vehicle burglaries and break-ins, and general disturbances. Implementation of the proposed project would add approximately 408 residents to the existing population of the City, which would represent a negligible population increase. Based on this negligible population increase compared to the anticipated population growth, with the approval of GPA and rezone requests, and payment of applicable fees, the RPD would continue to provide adequate service as the City develops to its buildout potential. As such, although implementation of the proposed project would generate an incremental increase in the demand for police protection service, based on the negligible increase in population, the proposed project would not demand an increase in police services service such that new or expanded facilities would be needed. In addition, the design of the proposed project would include security features such as perimeter fencing, exterior building lighting, and street lighting to reduce on-site crime incidence and thus reduce law enforcement calls of service to the project site.

Although an incremental increase in law enforcement calls to the project site could occur, such calls would be consistent to the types of calls RPD responds to at similar residential developments within the City. The General Plan policy PS-7.5 strives to provide minimum response times of seven minutes on all Priority 1 calls and twelve minutes on all Priority 2 calls. In addition, policy PS-7.7 continues to implement and annually update the Police Department's Strategic Plan by utilizing strategic planning and informed decision-making. Implementation of the proposed project would not degrade the RPD's performance to the point that a new facility or expansion of an existing facility would be needed. With implementation of General Plan policies, compliance with existing codes and standards, and through Police Department practices, there would

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

be a less than significant impact on the demand for additional law enforcement facilities of services either directly, indirectly, or cumulatively. No mitigation is required.

c. Schools?	☐	☐	☒	☐

15c. Response: ***(Sources: General Plan 2025 FPEIR Section 5.13 – Public Services: Figure 5.13-2 – RUSD Boundaries, Table 5.13-D – RUSD, Table 5.13-G – Student Generation for RUSD and AUSD By Education Level; California Department of Education Data Quest – Riverside Unified Report (33-67215), RUSD School Locator)***

Less Than Significant Impact. The proposed project is located within the Riverside Unified School District (RUSD), which had a 2021–2022 total enrollment of 40,247 students. The following schools within the RUSD would provide education services to students of the proposed project:

- Madison Elementary School is located at 3635 Madison Street, approximately 0.4-mile northwest of the project site. This school had a 2021–2022 enrollment of 592 students.
- Sierra Middle School is located at 4950 Central Avenue, approximately 1.2 miles northwest of the project site. This school had a 2021–2022 enrollment of 792 students.
- Arlington High School is located at 2951 Jackson Street, approximately 1.5 miles southwest of the project site. This school had a 2021–2022 enrollment of 1,922 students.

Additionally, Vista Norte Charter School, which does not belong to the RUSD, is located approximately 45 feet northwest of the project site. According to the General Plan FPEIR, RUSD contains many schools that are near or over capacity and are located in areas where vacant land to expand is not available. The school district is in need of new elementary and high school sites to meet the needs of the projected student population within its district as the City of Riverside reaches full buildout. Table 5.13-G of the General Plan FPEIR, indicates that the maximum development buildout of land within the RUSD boundary would generate 136,716 students. The proposed project would introduce 121 dwelling units to the project site, 76 of which would be senior housing and not expected to generate demand for RUSD services; therefore, only the remaining 45 multi-family residential units are expected to require RUSD services. Based on the student generation factor of RUSD included in Table 5.13-D of the General Plan FPEIR, the proposed project is estimated to generate approximately 32 students (0.70 × 45 residential units) who would attend schools within RUSD. The Project Applicant would be required to pay RUSD impact fees for new residential construction and, pursuant to Government Code Section 65995, such impact fee payment would offset potentially significant impacts to school facilities resulting from project implementation. Therefore, project impacts would be **less than significant** directly, indirectly, and cumulatively, and no mitigation is required.

d. Parks?	☐	☐	☒	☐

15d. Response: ***(Sources: General Plan 2025 Parks and Recreation Element: Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities; General Plan 2025 FPEIR Section 5.14 – Recreation: Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Title 19 – Zoning Code)***

Less Than Significant Impact. The City of Riverside has 48 developed parks totaling approximately 2,517 acres and plans for 11 additional parks which when constructed will add approximately 297 acres for a total approximately 2,814 acres. The closest parks to the project site include Don Jones Park at 3995 Jefferson Street, a 5.77-acre neighborhood park located approximately 0.9-mile northwest of the site, and Shamel Park at 3650 Arlington Avenue, a 9.84-acre community park located approximately 0.9-mile northeast of the project site. Don Jones Park contains lighted softball and soccer fields, picnic tables, restrooms and a snack bar, while Shamel Park contains lighted ball fields and tennis court, a covered picnic area, horseshoe courts, pool, picnic tables, a barbeque area, restrooms and on-site parking.

The General Plan FPEIR indicates that the City currently has a parkland to population ratio standard of 3 acres per 1,000 population. The proposed project would develop 121 residential units and, if fully occupied, would house approximately 408 residents. The City of Riverside, through the Zoning Code, requires residential development projects zoned in the R-3-1500 zone to provide common-use park/open space areas equating to 200 square feet per planned residential unit (121 units x 200 square feet). Additionally, the Zoning code requires that 100 square feet of private-use park/open space area be provided per

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

ground residential unit (41 units x 100 square feet). As such, the proposed project would be required to provide 28,300 square feet of open space. The proposed project would provide 40,866 square feet of open space that would include park, lawn and garden areas with a variety of amenities, including picnic areas, a tot play area, walking paths and turf play areas. As discussed in the Project Description, based on 100 percent of the units being affordable for Low Income households, the project is requesting four concessions to the Development Standards in accordance to Zoning Code Section 19.545.060. The four concession are: 1) to allow for no private open space for 78 of the residential units located on the floors above-grade; 2) to reduce the front yard setback from 15 feet to 12 feet wide; 3) to reduce the landscape setback from 15 feet to 12 feet wide; and 4) to reduce the minimum number of parking spaces. As such, since the proposed project would provide 40,866 square feet of open space, which would exceed the required 2,8300 square feet of open space, the proposed project would exceed the park requirement standards as set forth by the City of Riverside development standards.

The population generated by proposed project has the potential to incrementally increase the use of off-site nearby parks; however, such use would be nominal due to the fact that the project would provide parkland as part of its design. Furthermore, the Project Applicant would be required to pay for its fair share of parkland development impact fees for future regional parks, local parks, and other recreational facilities improvements to ensure that adequate parkland is provided to residents in the City of Riverside. The proposed project would not, therefore, generate the need to develop new parks or expand existing parks within the City. Impacts would be less than significant directly, indirectly and cumulatively, and no mitigation is required.

e. Other public facilities?	☐	☐	☒	☐

15e. Response: ***(Sources: General Plan 2025, General Plan 2025 FPEIR Section 5.13 – Public Services: Figure 5.13-5 - Library Facilities, Figure 5.13-6 - Community Centers, Table 5.3-F – Riverside Community Centers, Table 5.13-H – Riverside Public Library Service Standards)***

Less Than Significant Impact. The City of Riverside provides library services to its residents through a Main Library located at 3581 Mission Inn Avenue and six branch libraries (Arlington Neighborhood Library, Casa Blanca Family Learning Center, Marcy Branch, La Sierra Neighborhood Library, Orange Terrace Library, and Eastside Library and Cybrary) located throughout the City. The City of Riverside Public Library System provides over 600,000 books and other library materials to residents in the City. The Casa Blanca Family Learning Center at 2985 Madison Street (approximately 0.3-mile southeast of the project site) is the closest library that would serve future residents occupying the project site.

Community centers, senior centers, and service centers are other public facilities provided by the City to provide various services to residents. The centers offer a wide range of services that include computer training, English as a second language classes, fitness and wellness programs, early childhood programs, aquatics, social recreation programs, specialty classes, sports programs, field trips, and a variety of cultural and holiday activities. Ysmael Villegas Center, located at 7260 Marguerita Avenue, is the closest community center that would serve project residents; Janet Goeske Senior Center, located at 5257 Sierra Avenue, is the closest senior center that would serve residents of the project site; and the Cesar Chavez Center, located at 2060 University Avenue, is the closest service center that would serve project residents.

The General Plan was designed to accommodate anticipated growth under the typical development scenario by providing adequate services, access and infrastructure. The population increase generated by the proposed project would result in an incremental increase in the use of public libraries and other public facilities. However, the project would represent a negligible population increase of approximately 0.13 percent in City of Riverside based on existing population. Through the payment of necessary development impact fees, project impacts would be **less than significant** directly, indirectly, and cumulatively, and no mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

16. RECREATION.

a. Would the project 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?	☐	☐	☒	☐

16a. Response: ***(Sources: General Plan 2025 Parks and Recreation Element: Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Parks Master Plan; General Plan 2025 FPEIR Section 5.14 – Recreation: Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Table 5.14-D – Inventory of Existing Community Centers, Riverside Municipal Code Chapter 16.60 - Local Park Development Fees)***

Less Than Significant Impact. The closest parks to the project site include Don Jones Park at 3995 Jefferson Street, a 5.77-acre neighborhood park located approximately 0.9-mile northwest of the site, and Shamel Park at 3650 Arlington Avenue, a 9.84-acre community park located approximately 0.9-mile northeast of the project site. Don Jones Park contains lighted softball and soccer fields, picnic tables, restrooms and a snack bar, while Shamel Park contains lighted ball fields and tennis court, a covered picnic area, horseshoe courts, pool, picnic tables, a barbeque area, restrooms and on-site parking. As detailed in Figure 5.14-2 Trails Map of the General Plan FPEIR, the closest trail to the project site is located along Victoria Avenue and is designated a City of Riverside Trail. As population increases in the City of Riverside, the need for park and other recreational facilities rises due to the additional strain on upkeep and maintenance that is required from the City.

The proposed project would provide 40,866 square feet of open space that would include park, lawn and garden areas with a variety of amenities, including picnic areas, a tot play area, walking paths and turf play areas. Even with the requested concessions to Development Standards as described above, the amount of park space provided would exceed the required 28,300 square feet of open space/recreational facilities space. The proposed project features would help in reducing increased uses and deterioration of existing City recreational amenities as residents would have higher desire to use the on-site facilities. In addition, as a condition of approval, the Project Applicant would be required to pay parkland development impacts fees for regional parks, local parks, and other recreational facilities, which would help in maintaining recreation amenities within the City.

As the proposed project would include on-site recreational amenities and pay parkland development impact fees as a condition of approval, implementation of the proposed project would not increase the use or deterioration of the City's recreational amenities. Direct, indirect, or cumulative impacts would be **less than significant,** and no mitigation is required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

16b. Response: ***(Sources: General Plan 2025 Parks and Recreation Element: Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Parks Master Plan; General Plan 2025 FPEIR Section 5.14 – Recreation: Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative)***

Less Than Significant Impact. The proposed project would include the development 40,866 square feet of open space that would include park, lawn and garden areas with a variety of amenities, including picnic areas, a tot play area, walking paths and turf play areas. Even with the requested concessions to Development Standards as described above, the amount of open space provided would exceed the required 28,300 square feet of usable open space/ recreational facilities space. As the proposed project includes recreational amenities within the on-site park that would be used by the project residents, the use of off-site City-owned recreational facilities would be minimal compared to existing conditions, and would not necessitate expansion solely due to project implementation. Additionally, the project would represent a negligible population increase of approximately 0.13 percent in City of Riverside based on existing population, and therefore, would not substantially increase demand for existing recreational facilities in the City. Direct, indirect, and cumulative project impacts would be **less than significant**, and no mitigation is required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

17. TRANSPORTATION

Would the project result in:				
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐

17a. Response: ***(Sources: General Plan 2025 Circulation and Community Mobility Element; General Plan 2025 FPEIR Section 5.15 Transportation/ Traffic, Active Transportation Plan; Appendix H: Traffic Operational Analysis, LSA, May 2023)***

Less Than Significant Impact. A Traffic Operational Analysis was prepared for the proposed project. While Levels of Service (LOS) analysis is no longer a criterion of significance for traffic impacts under CEQA, the City of Riverside General Plan includes policies that utilize LOS to determine project conditions of approval. As such, this analysis includes LOS impacts while vehicle miles traveled (VMT) impacts are discussed in Response 17b below.

Study intersections and roadway segments analyzed in this report are under the jurisdiction of the City of Riverside. The City uses LOS D as its minimum level of service criterion for intersections of Collector or higher classification streets. For all other intersections, the City uses LOS C as its minimum level of service criterion. As such, an operational deficiency would occur when project trips cause intersection LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E or F) or the peak hour delay to increase at intersections to increase from "without project" LOS to "with project" 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; and
- LOS F by 1.0 second.

For roadway segments operational deficiencies would occur when the addition of project-related trips causes the roadway segment LOS to degrade from acceptable (LOS A through D) to unacceptable levels (LOS E or F) or when the addition of project trips in a roadway segment operating at unacceptable levels causes the volume-to-capacity (V/C) ratio to increase by more than 5 percent.

The Traffic Operational Analysis examined traffic operations in the vicinity of the proposed project under the following five scenarios:

- Existing Conditions;
- Opening Year (2025) without Project Conditions;
- Opening Year (2025) with Project Conditions;
- Cumulative (2045) without Project Conditions; and
- Cumulative (2045) with Project Conditions.

Based on the City's *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (TIA Guidelines) (July 2020), the Traffic Operational Analysis is required to analyze all intersections of Collector or higher classification streets where the project would contribute 50 or more peak hour trips, along with intersections identified by City staff. Study intersections and roadway segments considered for the analysis are included below.

Study Intersections

1. Winstrom Street/Railroad Avenue (Riverside);
2. Madison Street/Indiana Avenue (Riverside);
3. Madison Street/Casa Blanca Street (Riverside);

4. Madison Street/Railroad Avenue (Riverside);
5. Project Driveway 1/Railroad Avenue (Riverside);
6. Project Driveway 2/Railroad Avenue (Riverside); and
7. Project Driveway 3/Railroad Avenue (Riverside).

Roadway Segments
1. Railroad Avenue, west of Winstrom Street (Riverside);
2. Railroad Avenue, between Winstrom Street and Madison Street (Riverside);
3. Madison Street, between Indiana Avenue and Railroad Avenue (Riverside); and
4. Madison Street, between Railroad Avenue and Evan Street (Riverside).

Project Trip Generation. The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* (11th Edition) for Land Use 252 – "Senior Adult Housing – Multifamily" and Land Use 220 – "Multifamily Housing (Low-Rise) Not Close to Rail Transit." The proposed project would generate 610 daily trips, with 52 trips occurring during the a.m. peak hour and 59 trips occurring during the p.m. peak hour.

The following study intersections and roadway segments are forecast to operate at deficient LOS levels under each of the study scenarios per results of the analysis in the Traffic Operational Analysis:

- **Existing Conditions:** Only the Madison Street/Indiana Avenue (p.m. peak hour only) intersection is currently operating at deficient LOS. All other study intersections and roadway segments are currently operating at a satisfactory LOS.
- **Opening Year (2025) without Project Conditions:** Only the Madison Street/Indiana Avenue (p.m. peak hour only) intersection is forecast to operate at deficient LOS under this scenario. All other study intersections and roadway segments would operate at a satisfactory LOS.
- **Opening Year (2025) with Project Conditions:** The Madison Street/Indiana Avenue (both a.m. and p.m. peak hours) intersection is forecast to operate at deficient LOS under this scenario. All other study intersections and roadway segments would operate at a satisfactory LOS. The project would contribute to an existing deficiency at this intersection.
- **Cumulative (2045) without Project Conditions:** The Madison Street/Indiana Avenue (both a.m. and p.m. peak hours) intersection is forecast to operate at deficient LOS under this scenario. All other study intersections and roadway segments would operate at a satisfactory LOS.
- **Cumulative (2045) with Project Conditions:** The Madison Street/Indiana Avenue (both a.m. and p.m. peak hours) intersection is forecast to operate at deficient LOS under this scenario. All other study intersections and roadway segments would operate at a satisfactory LOS. The project would contribute to an existing deficiency at this intersection.

Implementation of the recommended improvements under Table 17.A below for the intersection of Madison Street/Indiana Avenue is forecast to operate at a satisfactory LOS (LOS D) in both a.m. and p.m. peak hours under opening year with project conditions and cumulative with project conditions. Payment of fair share percentage for recommended improvements would be required.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 17.A: Recommended Improvements for Intersections and Funding Mechanism

Intersection	Opening Year (2025) with Project Improvements	Cumulative (2045) with Project Improvements	Funding Mechanism	Improvements covered by TUMF	Improvements covered by Fair Share
2. Madison Street/Indiana Avenue	Optimize signal timing (p.m. peak hour only)	Optimize signal timing (a.m. and p.m. peak hour)	Fair Share	-	Optimize signal timings

Source: *Traffic Operational Analysis, Madison Flats Project, City of Riverside, Riverside County, California* (LSA, May 2023).
TUMF= Transportation Uniform Mitigation Program

Transit, Bicycle, and Pedestrian Facilities. Additionally, the TOA assessed the proposed project's impact to transit, bicycle, and pedestrian facilities. According to the City's TIA Guidelines, a significant impact occurs when a project conflicts with adopted plans, policies, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities. Based on the City's *Bicycle Master Plan Update: Addendum*, adopted March 2012, at present, Class II bikeways have been added to both directions of Jefferson Street near the project study area. Proposed future Class III bikeways will be added along the eastbound and westbound directions of Lincoln Avenue near the project study area. As such, the project would not decrease the performance or safety of any existing or proposed bicycle facility.

According to the City of Riverside General Plan Circulation Element, sidewalks are generally provided on both sides of the streets. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists and pedestrians in the City. According to the City's General Plan, there is a proposed Regional Trail on Victoria Avenue at the intersection with Madison Street. Although there are no current trails within the project study area, paved sidewalks are provided on both sides of Depot Street, Winstrom Street, Madison Street, Indiana Avenue, Casa Blanca Street, and Evans Street. As previously referenced, the project would construct a paved sidewalk along the project frontage along Railroad Avenue. As such, the project would improve the performance and safety of the existing and proposed pedestrian facilities.

Riverside Transit Agency (RTA) local bus Route 14 currently operates within the study area. Route 14 has connections to the Galleria at Tyler, Downtown Riverside, Hunter Park Metrolink Station, and Loma Linda VA Hospital. Route 14 has stops at the intersections of Winstrom Street/Indiana Avenue and Madison Street/Indiana Avenue. Crosswalks for Indiana Avenue are provided at each these bus stop locations for safe access to the westbound route. The proposed project would not conflict with any existing or proposed bicycle, pedestrian, or public transit facilities. Therefore, the proposed project can be considered to conform to all adopted policies, plans, or programs concerning these facilities and would not have a significant impact.

Therefore, the proposed project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. Impacts would be **less than significant** directly, indirectly, and cumulatively, and no mitigation is required.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐

17b. Response: ***(Source: Appendix I: VMT Analysis Memorandum, LSA, February 2023)***

Less Than Significant Impact. On December 28, 2018, the California Office of Administrative Law cleared the revised *State CEQA Guidelines* for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts were required to be evaluated based on a project's generation of VMT. The City of Riverside adopted new VMT analysis guidelines in July 2020; therefore, all projects where environmental documentation was commenced after July 2020 needed to be analyzed and compliant with the City's TIA Guidelines. The City's VMT analysis guidelines require the proposed project's VMT per capita to be compared with the jurisdictional VMT per capita to determine VMT impacts.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The proposed project would include 76 dwelling units of senior residential development and 45 dwelling units of multi-family residential development. All dwelling units for this project are categorized as affordable housing. Per the City's TIA Guidelines Step 3: Project Type Screening criteria, a project is eligible to be screened out from a VMT analysis if the project consists of 100% affordable housing. As previously mentioned in the project description, the project consists of 100% affordable housing for the senior housing units and multi-family apartments units. Therefore, the project is anticipated to have a **less than significant** VMT impact and may be screened out from a VMT analysis.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

17c. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-6 – Airport Safety Zones and Influence Area; RCALUCP: Chapter 2 – Countywide Policies, Chapter 3 – Individual Airport Policies and Compatibility Maps: RI. Riverside Municipal Airport)***

Less Than Significant Impact. The proposed project is located within Airport Compatibility Zone E as depicted on Figure 5.7-2 of the General Plan FPEIR for the Riverside Municipal Airport, which is the nearest airport. Within Compatibility Zone E, generally, there is no concern with regard to any object up to 100 feet tall unless it is located on high ground or it is a solitary object (e.g., an antenna) more than 35 feet above the ground. The proposed project would consist of a residential complex with 121 residential units distributed in three building clusters. The proposed buildings would be 40 feet high, which falls below the threshold for Zone E. Additionally, the project is not located on high ground, and would not introduce stand-alone elements over 35 feet high. As such, the proposed project would not affect operations at the Riverside Municipal Airport and would not introduce elements that would change air traffic patterns, increase air traffic levels, or result in a change in location that results in substantial safety risks, and impacts would be **less than significant** directly, indirectly, and cumulatively. No mitigation is required.

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

17d. Response: ***(Sources: General Plan 2025, Title 16 – Buildings and Construction, Title 17 – Grading, Title 19 – Zoning; Appendix H: Traffic Operational Analysis, LSA, May 2023)***

Less Than Significant Impact. The proposed project would include the construction of 121 dwelling units, including multi-family and senior residential units. The project is located in an urbanized location of the City surrounded by industrial, commercial, and residential uses. Vehicle access to the project site would be provided by three driveways along Railroad Avenue. The Traffic Operational Analysis includes an intersection and driveway queuing analysis to assess whether adequate queuing is provided at project driveways and adjacent intersections. The study intersections include the following:

1. Madison Street/Railroad Avenue
2. Project Driveway 1/Railroad Avenue
3. Project Driveway 2/Railroad Avenue
4. Project Driveway 3/Railroad Avenue

Available turn-pocket storage lengths and 95th percentile back-of-queue lengths were assessed at the five study intersections under existing, opening year, and cumulative without and with project conditions. Intersection queues at stop-controlled intersections were reported from SimTraffic. It was determined that queues for all the approaches do not exceed the available turn-pocket storage length under the existing scenario nor are forecasted to exceed the available turn-pocket storage length under the opening year and cumulative without and with project scenarios, respectively. As such, it is not forecasted that the project would result in any queuing deficiencies that would negatively affect traffic operations at project driveways and in the vicinity of the project site.

A sight distance analysis was also conducted at the project driveways along Railroad Avenue to evaluate safe access in and out of the project. For purposes of this analysis, only the stopping sight distance and corner sight distance were evaluated. According to the *Caltrans Highway Design Manual (HDM)* (dated July 2020), the stopping sight distance is the minimum

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop. The corner sight distance is the minimum sight distance in which a driver at a stop-controlled approach can see oncoming traffic on the major street to safely maneuver onto the roadway. The stopping sight distance was evaluated on the local street abutting the project (i.e., Railroad Avenue). The posted speed limit on Railroad Avenue is 25 miles per hour. The minimum stopping sight distance for the project driveways have been considered as 150 feet per HDM requirements. Additionally, based on the requirements established in the HDM, it was determined that a minimum corner sight distance of 280 feet would be required for the project driveways. The project would be required to comply with sight distance requirements, pursuant to the City's and the Traffic Operational Analysis recommendations to alleviate the sight distance concern.

The proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. In addition, the project design features would be required to comply with standards set by the City's General Plan, the Zoning Code, Building Code and Grading Code. Lastly, project plan would be submitted to the RFD for review and approval prior to the issuance of building permits to ensure there are no substantial hazards associated with the project design. Therefore, the proposed project would result in a **less than significant impact** related to hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and no mitigation is required.

e. Result in inadequate emergency access?	☐	☐	☒	☐

17e. Response: ***(Source: General Plan 2025; Municipal Code; California Fire Code; and Project Plans)***

Less Than Significant Impact. The proposed project would not result in closures of local roadways that may have an effect on emergency access to the project site. Access for emergency response services and emergency evacuation from the project site would be available through the proposed three ingress and egress driveways located on Railroad Avenue. Furthermore, construction activities occurring within the project site would comply with all conditions, including grading permit conditions regarding lay-down and fire access, and would not restrict access for emergency vehicles responding to incidents on the site or in the surrounding area. Design of project access, internal circulation system, and fire suppression features would be developed to City of Riverside standards and conditions of approval, as well as requirements of the California Fire Code. Additionally, the Riverside Fire Department (RFD) would also review the proposed development plans prior to project approval to ensure that adequate emergency access and on-site circulation are provided. The proposed project would not result in inadequate emergency access and as a result, **a less than significant impact** related directly, indirectly, or cumulatively to conflict with an emergency access would occur.

18. TRIBAL CULTURAL RESOURCES.

Would the project 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:				:
a. 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	☐	☒	☐	☐

18a. Response: (*Sources: AB 52 Consultation and SB 18 Consultation; Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)*

Less Than Significant With Mitigation Incorporated. The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the *State CEQA Guidelines*. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Register of Historical Resources (California Register) or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)).

Per Assembly Bill (AB) 52, public agencies shall reach out to California Native American Tribes who have requested to be notified of projects in areas within or which may have been affiliated with their tribal geographic range. Pursuant to provisions of AB 52, the City contacted the following Native American Tribes on January 20, 2023. The 30-day comment period ended on February 19, 2023.

- Gabrieleno Band of Mission Indians - Kizh Nation
- Soboba Band of Luiseño Indians
- Cahuilla Band of Indians
- Pechanga Band of Luiseño Mission Indians
- Rincon Band of Luiseño Indians
- San Manuel Band of Mission Indians
- Morongo Band of Mission Indians
- Agua Caliente Band of Cahuilla Indians
- San Gabriel Band of Mission Indians

Pursuant to Senate Bill (SB) 18, Native American Tribes traditionally and culturally affiliated with the project area were invited to consult regarding the project based on a list of contacts provided by the Native American Heritage Commission (NAHC). This list includes tribes that requested notification pursuant to SB 18. The City of Riverside mailed notices of the proposed project to each of the tribes listed above on January 20, 2023 which included the required 90-day time period for tribes to request consultation, which ended on April 20, 2023.

Pechanga Band of Luiseño Mission Indians requested consultation, which was held on March 17, 2023. In addition, Agua Caliente Band of Cahuilla Indians requested review of this Initial Study. No other tribes responded to consultation notices within the required time period. As such, AB 52 and SB 18 requirements have been fulfilled.

The project site is currently vacant. According to the Cultural Resources Assessment, the records search and field survey conducted for the proposed project did not identify significant archaeological or historic resources within the project site. During the field survey, a historic foundation for the Casa Blanca Station, four palm trees, and a hydrant valve cover were noted within the project; however, these resources did not meet any criteria to be designated significant historical resources. However, due to the proximity of recorded resources 300 feet north of the project site and due to the presence of the foundation feature onsite, there is potential for subsurface resources to be present on the project site. If any artifacts are inadvertently discovered during ground-disturbing activities, existing federal, State, and local laws and regulations would require construction activities to cease until such artifacts are properly examined and determined not to be of significance by a qualified archeologist. Implementation of **Mitigation Measures CUL-1 through CUL-4** described under Response 5a above would address any potential impact to undiscovered, buried tribal cultural resources. Additionally, Standard Conditions of Approval and compliance with federal and State laws protecting remains would address the accidental discovery of human remains, including Native American burial sites. With implementation of **Mitigation Measures CUL-1 through CUL-4**, impacts to tribal cultural resources would be less than significant.

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

18b. Response: ***(Sources: AB 52 Consultation; Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant With Mitigation Incorporated. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) is listed in, or determined eligible for listing in, the California Register of Historical Resources (California Register); (2) is listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) is identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) is determined to be a historical resource by a project's Lead Agency (PRC Section 21084.1 and *State CEQA Guidelines* Section 15064.5[a]). A "substantial adverse change" to a historical resource, according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired.

As previously discussed, the Cultural Resources Assessment prepared for the project included a record search and field survey of the project site, which did not yield any significant historical resources on the site. However, the Cultural Resources Assessment did determine that there was potential for subsurface resources to be present on the site due to its proximity to existing recorded resources and due to it being the site of the former Casa Blanca Station. As such, **Mitigation Measures CUL-1 through CUL-4**, described under Response 5a above, would be implemented to ensure that consultation between the Project Applicant, developers and consulting Native American Tribes, if applicable, would occur for any tribal cultural resources found in the project site, and that standard conditions of approval for inadvertent discovery of human remains would be implemented in the event human remains are discovered during project construction and they are identified as potential Native American remains. With implementation of **Mitigation Measures CUL-1 through CUL-4**, impacts to tribal cultural resources would be **less than significant**.

19. UTILITIES AND SYSTEM SERVICES.

Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

19a. Response: ***(Sources: General Plan 2025 Public Facilities and Infrastructure Element; General Plan 2025 FPEIR Section 5.16 – Utilities and Service Systems; Riverside Public Utilities, 2020 Urban Water Management Plan, California Department of Water Resources; Appendix F: Project Specific Water Quality Management Plan, PSOMAS, December 2022; and Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. The Riverside Public Utilities provides water service in the vicinity of the project site. Wastewater collection and Treatment would be provided through the Riverside Public Works Department. Stormwater management would also be provided by the Riverside Public Works Department. Electricity would be provided by Riverside Public Utilities. Telecommunication services at the project site would be provided by AT&T and Spectrum.

Water. The proposed project would install onsite 2-, 3-, and 4-inch water lines to connect to an existing 6-inch water main located in Railroad Avenue to provide potable water for the proposed residential uses and water for landscaping onsite. The necessary on-site water distribution line installations are included as a design feature of the proposed project and would not result in any physical environmental effects beyond what is analyzed in this environmental document. Off-site improvements to water lines located in the surrounding streets would not be required as the proposed connection piping would be correctly sized pursuant to City requirements to continue to provide adequate water delivery to the project site. The proposed project would introduce approximately 408 residents to the project site. Based on CalEEMod output sheets included in the AQ/GHG/Energy Impact Analysis (Appendix A), the proposed project would consume 5,766,460 gallons per year, or approximately 15,799 gallons per day. Subject to fulfillment of conditions for service, the project would be served by the Riverside Public Utilities Water Division. Implementation of the proposed project would not require or result in the relocation or construction of new water infrastructure, resulting in a **less than significant impact** directly, indirectly, or cumulatively and no mitigation is required.

Wastewater. The proposed project would install 6 and 8-inch sanitary sewer lines and a sewer lift station on the project site, as well as an 8-inch sewer extension along Winstrom Street to connect to an existing 8-inch sewer main in Casa Blanca Street. Wastewater treatment for the project would be provided by the City of Riverside Water Quality Control Plant. Assuming that

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

projected wastewater generation would equal to estimated water consumption for the proposed project, wastewater generation for the proposed project would be 15,799 gallons per day. According to Riverside Public Utilities' (RPU) 2020 Urban Water Management Plan (UWMP), the Riverside Water Quality Control Plant treatment capacity is 46 million gallons per day (mgd) (or 51,527 acre-feet per year). The projected wastewater generation of the proposed project represents approximately 0.03 percent of the facility's daily capacity. As such, the City's Water Quality Control Plant would have sufficient capacity to serve the project site, and the proposed project would not require or result in the relocation or construction of new wastewater collection or treatment infrastructure, resulting in a **less than significant impact** directly, indirectly, or cumulatively and no mitigation is required.

Stormwater. The proposed project would install onsite drainage infrastructure, including inlets, stormwater settling chambers and dry wells, and storm drain pipelines that would aid in onsite runoff infiltration, as well as in collection and distribution of stormwater from the project site towards storm drain infrastructure along Railroad Avenue and Madison Street. As described in Section 10, Hydrology and Water Quality, the project site includes three Drainage Management Areas (DMAs) (M1A, M2A, and M3A) to manage stormwater runoff from the entire project site. Each DMA consists of landscaped areas and inlets. Stormwater runoff captured within landscaped areas would infiltrate into the soil. Stormwater runoff from impervious areas on the project site (e.g., concrete, asphalt, and roofs) would be directed to multiple on-site inlets, which would all drain into a single 48-inch storm drain pipe, which would then discharge the stormwater runoff into three injection drywells so that stormwater runoff can infiltrate into the soil. The on-site drainage system has been designed to accommodate the Design Capture Volume (DCV) for DMAs M1A, M2A, and M3A in accordance with the County of Riverside's technical guidance for WQMPs. The DCV is the volume of stormwater runoff that must be captured and treated by stormwater BMPs. Overflows from DMA M1A would discharge into the Municipal storm drain system along Madison Street through a 15-inch storm drain pipe and overflows from DMAs M2A and M3A would discharge into Railroad Avenue, mimicking the existing condition. The proposed project would capture and infiltrate stormwater runoff so that excess runoff does not exceed the pre-development conditions and therefore not exceed the capacity of the existing stormwater system in Riverside pursuant to the requirements of the City's MS4 Permit and the City's Municipal Code**.** As such, the proposed project would not require or result in the relocation or construction of new stormwater infrastructure, resulting in a **less than significant impact** directly, indirectly, or cumulatively and no mitigation is required.

Electricity. The proposed project would tie into existing electrical and natural gas infrastructure that exists in roads adjacent to the site. Such connections may require trenching on the adjacent roads; however, construction to connect to existing electrical and natural gas infrastructure would be temporary. Implementation of the proposed project would not require the relocation or construction of new electrical/natural gas infrastructure off site that would cause significant environmental effects. Impacts would be **less than significant**, and no mitigation is required.

Telecommunications. The proposed project would tie into existing telecommunication infrastructure that exists in roads adjacent to the site. Such connections may require trenching on the adjacent roads; however, construction to connect to existing telecommunication infrastructure would be temporary. Implementation of the proposed project would not require the relocation or construction of new telecommunication infrastructure off site that would cause significant environmental effects. Impacts will be **less than significant**, and no mitigation is required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

19b. Response: ***(Sources: General Plan 2025 Public Facilities Element Figure PF-1 – Water Service Areas; General Plan 2025 FPEIR Section 5.16 – Utilities and Service Systems; Riverside Public Utilities, 2020 Urban Water Management Plan, California Department of Water Resources; Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

Less Than Significant Impact. According to the City's General Plan, Figure PF-1 Water Service Areas, the project site is located in the RPU water service area. RPU's Urban Water Management Plan (UWMP) must be updated every five years to include the most recent population trends. Similarly, the City must consult with the RPU regarding development projects exceeding the thresholds noted in the *State CEQA Guidelines* Section 15155 to ensure that sufficient water supplies are available to serve the project. The RPU's 2020 UWMP, dated July 1, 2021, estimated water supply and demand during normal, dry, and multiple-dry years.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The primary source of water supply for the RPU is local groundwater. The RPU also distributes recycled water for non-potable uses. The RPU also has a water sharing agreement with Western Municipal Water District (WMWD) to access imported water when needed. This agreement can provide RPU with up to 21,700 acre-feet per year of imported water. According to the UWMP, water demands are projected to increase during the next 25 years. The demand projections were developed considering variables like climate, population growth, and customer behaviors. Table 19.A below shows water supply available for the City during normal, dry, and multiple dry years and shows that the RPU would have adequate water supply to serve the project during normal, dry, and multiple dry year scenarios.

Table 19.A: Multiple Dry Years Supply and Demand Comparison (All values in AF)

		2025	2030	2035	2040	2045
First Year	Supply Totals	114,923	124,893	128,193	129,693	129,693
	Demand Totals	90,712	100,803	103,260	105,807	108,447
	Difference	24,211	24,090	24,934	23,886	21,245
Second Year	Supply Totals	114,923	124,893	128,193	129,693	129,693
	Demand Totals	90,712	100,803	103,260	105,807	108,447
	Difference	24,211	24,090	24,934	23,886	21,245
Third Year	Supply Totals	114,923	124,893	128,193	129,693	129,693
	Demand Totals	90,712	100,803	103,260	105,807	108,447
	Difference	24,211	24,090	24,934	23,886	21,245
Fourth Year	Supply Totals	114,923	124,893	128,193	129,693	129,693
	Demand Totals	90,712	100,803	103,260	105,807	108,447
	Difference	24,211	24,090	24,934	23,886	21,245
Fifth Year	Supply Totals	114,923	124,893	128,193	129,693	129,693
	Demand Totals	90,712	100,803	103,260	105,807	108,447
	Difference	24,211	24,090	24,934	23,886	21,245

Source: *2020 Urban Water Management Plan* (Riverside Public Utilities, July 1, 2021).
AF= acre-feet

Based on the project's estimated yearly water use of 5,766,460 gallons (approximately 17.7 acre-feet), the proposed project would represent the following percentages of projected water supplies for the following years:

- **2025:** The project would represent 0.015 percent of total water supplies assuming worst-case multiple dry years scenario.
- **2030:** The project would represent 0.014 percent of total water supplies assuming worst-case multiple dry years scenario.
- **2035:** The project would represent 0.014 percent of total water supplies assuming worst-case multiple dry years scenario.
- **2040:** The project would represent 0.014 percent of total water supplies assuming worst-case multiple dry years scenario.
- **2045:** The project would represent 0.014 percent of total water supplies assuming worst-case multiple dry years scenario.

The projected water use for the proposed project would represent a negligible fraction of the water supplies under normal, dry, and multiple dry year scenarios. Therefore, the proposed project would have a **less than significant** impact on water supplies.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

19c. Response: ***(Source: Riverside Public Utilities, 2020 Urban Water Management Plan, California Department of Water Resources; Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023)***

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Less Than Significant Impact. As previously discussed in this section, the proposed project would install onsite drainage and wastewater collection infrastructure, including inlets, 6 and 8-inch sanitary sewer lines and a sewer lift station on the project site, as well as an 8-inch sewer extension along Winstrom Street to connect to an existing 8-inch sewer main in Casa Blanca Street. Wastewater treatment services for the project would be provided at the Riverside Water Quality Control Plant.

The proposed project would introduce approximately 408 residents to the project site, and as such, the project would consume approximately 15,799 gallons per day. The treatment capacity for the Riverside Water Quality Control Plant is 46 million gallons per day (mgd) (or 51,527 acre-feet per year). The projected wastewater generation for the proposed project represents approximately 0.03 percent of the facility's daily capacity. As such, the City's Water Quality Control Plant would have sufficient capacity to serve the project site, in addition to the provider's existing commitments. Therefore, impacts would be **less than significant**.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

19d. Response: ***(Source: Appendix A: AQ/GHG/Energy Impact Analysis, LSA, May 2023; General Plan 2025 FPEIR Section 5.16 – Utilities and Service Systems: Table 5.16-A – Existing Landfills; CalRecycle SWIS Facility/Site Search)***

Less Than Significant Impact. The main landfill for non-hazardous solid waste collected in the City is Badlands Sanitary Landfill, located 16.3 miles northeast from the site and permitted to accept 5000 tons per day of solid waste through 2059. Additionally, local trash haulers in the City may dispose of collected waste at other Riverside County landfills in the area, such as the Lamb Canyon Landfill (daily permitted throughput of 5000 tons through 2032) and El Sobrante landfill (daily permitted throughput of 16,054 tons through 2051). The proposed project would construct 121 residential units in the project site, including 76 dwelling units of senior residential development and 45 dwelling units of multi-family residential development. Based on CalEEMod, operation of the proposed project would generate approximately 27.9 tons of solid waste per year, or approximately 0.08 tons of solid waste per day. This would represent 0.002 percent of maximum permitted daily throughput at the Badlands Sanitary Landfill, 0.002 percent of maximum permitted daily throughput at the Lamb Canyon Landfill and 0.0005 percent of maximum permitted daily throughput at the El Sobrante landfill. These amounts are negligible compared to existing capacity of County landfills. As such, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs. The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals and impacts would be **less than significant**.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

19e. Response: ***(Sources: California Integrated Waste Management Board Landfill Facility Compliance Study; General Plan 2025 FPEIR Section 5.16 – Utilities and Service Systems)***

Less Than Significant Impact. Refer to Response 19d above. Existing landfills serving the City would have sufficient capacity to serve the project site. The 1989 California Integrated Waste Management Act (AB 939) requires that specific waste diversion goals be achieved for all California cities and counties, including an overall reduction in solid waste produced by 50 percent by the year 2000. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the proposed design. Additionally, AB 341 (2011) established a state goal to reduce, recycle, or compost no less than 75 percent of waste generated by the year 2020.

The City is currently achieving a 60 percent diversion rate, well above AB 939 requirements. In addition, California Green Building Standards Code (CALGreen) requires all developments to divert 50 percent of non-hazardous construction and demolition debris for all projects and 100 percent of excavated soil and land clearing debris for all nonresidential projects beginning January 1, 2011.

The proposed project must comply with the City's waste disposal requirements as well as CALGreen and would not conflict with any federal, state, or local regulations related to solid waste. Construction and operational activities for the proposed project would occur in compliance with applicable federal, state, and local statutes and regulations related to solid waste. Therefore, a **less than significant** impact related to solid waste statutes would occur directly, indirectly, or cumulatively.

20. WILDFIRE.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

20a. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Areas; GIS Map Layer VHFSZ)***

Less Than Significant Impact. The proposed project is located in an urbanized area where no wildlands exist and the property is not located within a Very High Fire Severity Zone (VHFSZ) or adjacent to wildland areas or a VHFSZ. Additionally, the project would not result in closures of local roadways that may have an effect on emergency response or evacuation plans in the vicinity of the project site. Entrance for emergency response services and emergency evacuation from the project site would be available through the proposed three ingress and egress driveways located on Railroad Avenue. Furthermore, construction activities occurring within the project site would comply with all conditions, including grading permit conditions regarding lay-down and fire access, and would not restrict access for emergency vehicles responding to incidents on the site or in the surrounding area. Design of project access, internal circulation system, and fire suppression features would be developed to City of Riverside standards and conditions of approval. Additionally, the Riverside Fire Department (RFD) would also review the proposed development plans prior to project approval to ensure that adequate emergency access and on-site circulation are provided. Therefore, impacts would be **less than significant**.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

20b. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Areas; Geotechnical Investigation, Leighton and Associates, Inc., December 2022)***

Less Than Significant Impact. The proposed project is in an urbanized area of the City and not located within or near a VHFSZ. The project site is not located on a slope or in an area of prevailing winds, and there are no other factors that would exacerbate wildfire risks. The proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire and impacts would be **less than significant**.

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐

20c. Response: ***(Source: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Areas)***

Less Than Significant Impact. The proposed project is in an urbanized area of the City and not located within or near a VHFSZ. The project would construct water, sewer, stormwater, electricity and telecommunications infrastructure outlined on Section 19, Utilities and Service Systems, as designed in accordance with City and RFD requirements, and would not result in impacts beyond the construction impacts identified in this environmental document. Additionally, implementation of construction mitigation measures identified through this document would ensure construction impacts associated with utilities would be less than significant. As such, the proposed project would not require the installation or maintenance of infrastructure that may exacerbate fire risk or result in temporary or ongoing environmental impacts, and impacts would be less than significant.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

20d. Response: ***(Sources: General Plan 2025 Public Safety Element: Figure PS-7 – Fire Hazard Areas; General Plan 2025 FPEIR Section 5.6– Geology and Soils: Figure 5.6-1 – Areas Underlain by Steep Slope)***

Less Than Significant Impact. The project site and surrounding lands are relatively flat. Therefore, the risk of downslope or downstream flooding or landslide hazards is considered to be low to nonexistent. Additionally, the project site is not located within or in the vicinity of a VHFSZ. As such, impacts related to downslope or downstream flooding or landslides due to post-fire slope instability or drainage changes would be **less than significant**.

21. MANDATORY FINDINGS OF SIGNIFICANCE.

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

21a. Response: ***(Source: Appendix C: MSHCP Consistency Analysis and Biology Report, LSA, November 2022; Appendix D: Cultural Resources Study, LSA, November 2017, and Cultural Revalidation Assessment, LSA, October 2022)***

Less Than Significant With Mitigation Incorporated. The proposed project's impacts to biological and cultural resources were analyzed in this Initial Study and all direct and cumulative impacts were determined to have no impact, a less than significant impact, or rendered a less than significant impact with implementation of **Mitigation Measures CUL-1 through**

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
CUL-4. Therefore, impacts to biological and cultural resources would be **less than significant with mitigation incorporated,** and no additional mitigation is required.				
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

21b. Response: ***(Source: FPEIR Section 6 – Long-Term Effects/Cumulative Impacts for the General Plan 2025 Program)***

Less Than Significant With Mitigation Incorporated. The proposed project's impacts would be individually limited and not cumulatively considerable. The potentially significant impacts that can be reduced to a less-than-significant level with implementation of recommended mitigation measures includes the topic of cultural resources and tribal cultural resources. However, potentially significant impacts to archaeological resources and tribal cultural resources would be reduced to less-than-significant levels with implementation of **Mitigation Measures CUL-1 through CUL-4**.

For the topics of aesthetics, agricultural and forestry resources, air quality, biological resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, and utilities and service systems, and wildfire, the project would have no impacts or less-than-significant impacts. Therefore, the project would not substantially contribute to any potential cumulative impacts for these topics. All environmental impacts that could occur as a result of the proposed project would be reduced to less-than-significant levels through the implementation of the standard conditions of approval and mitigation measures recommended in this document.

Implementation of these standard conditions of approval and mitigation measures would ensure that the impacts of the project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of project development. Therefore, this impact would be **less than significant with mitigation incorporated**.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

21c. Response: ***(Source: FPEIR Section 5 – Environmental Impact Analysis for the General Plan 2025 Program)***

Less Than Significant With Mitigation Incorporated. Effects on human beings were evaluated as part of the aesthetics, agriculture and forest resources, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use planning, mineral resources, population and housing, public services, recreation, transportation, and utilities and service systems sections of this initial study and impacts were found to be less than significant without mitigation. As set forth in this document, project impacts related to biological resources, cultural resources, hydrology & water quality, noise and tribal cultural resources can be reduced to a less than significant level with implementation of **Mitigation Measures CUL-1 through CUL-4,**. Based on the analysis and conclusions in this Initial Study, the proposed project, with standard conditions of approval and mitigation measures, will not cause substantial adverse effects, directly or indirectly to human beings. Therefore, potential direct and indirect impacts on human beings that result from the proposed project are **less than significant with mitigation**.

Note: Authority cited: Sections 21083 and 21087, Public Resources Code. Reference: Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.3, 21093, 21094, 21151, Public Resources Code; Sundstrom v. County of Mendocino, 202 Cal.App.3d 296 (1988); Leonoff v. Monterey Board of Supervisors, 222 Cal.App.3d 1337 (1990).

Staff Recommended Mitigation Measures

Impact Category	Mitigation Measures	Implementation Timing	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
Cultural Resources	**Mitigation Measure CUL-1:** Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural resources and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities. **Mitigation Measure CUL-2: On call Project Archaeologist:** Prior to the issuance of a grading permit, the Property Owner/Developer shall provide a letter from a County certified Archaeologist and Paleontologist stating that the Property Owner/Developer has retained these individuals, and that the Archaeologist and Paleontologist shall be on call during all grading and other significant ground-disturbing activities in native sediments. **Mitigation Measure CUL-3 Treatment and Disposition of Cultural Resources:** In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:	Prior to commencement of, and during, construction activities	Project Applicant/ Construction Contractor	City of Riverside Community & Economic Development Department	

Impact Category	Mitigation Measures	Implementation Timing	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
	a. Preservation-In-Place of the cultural resources, if feasible as determined through coordination between the project archeologist, developer/applicant, and consulting tribal monitor(s). Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources in perpetuity; b. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed, with an exception that sacred items, burial good and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on human remains and grave goods. Any reburial process shall be culturally appropriate. List of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV report shall be prepared by the project archeologist and shall be filled with the City under a confidential cover and not subject to a Public Records Request. The Tribe(s) should be able to access these areas in the future through enforceable agreement; c. If reburial is not feasible, a curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside				

Impact Category	Mitigation Measures	Implementation Timing	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
	County, to be accompanied by payment of the fees necessary for permanent curation; d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix, include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the City of Riverside, Eastern Information Center, and consulting tribes. **Mitigation Measure CUL-4: Worker's Environmental Awareness Program (WEAP) Training:** The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide conduct mandatory Worker Environmental Awareness Program Training Program (WEAP) training to all construction grading personnel. The training will include a brief review of the cultural sensitivity of the project and the surrounding area, summarize and show examples of the types of resources that could be identified during earthmoving activities and provide notification protocols to be followed in the event suspected cultural resources are identified. Safety protocols would also be discussed to ensure the safety of the monitors and construction crew. Only construction personnel who have received this training can conduct				

Impact Category	Mitigation Measures	Implementation Timing	Mitigation Responsibility	Monitoring/ Reporting Agency	Verification (Initials and Date)
	construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.				

REFERENCES

California Department of Conservation (DOC). 2022. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed February 2023).

California Department of Education. Data Quest. 2021-22 Enrollment for Charter and Non-Charter Schools – Riverside Unified Report (33-67215). Website: https://dq.cde.ca.gov/data quest/dqcensus/Enr CharterLevels.aspx?cds=3367215&agglevel=district&year=2021-22&ro=y&ro=y&ro=y (February 2023).

California Department of Forestry and Fire Protection (CAL FIRE). 2018. California State Geoportal, California Fire Hazard Severity Zones (FHSZ). August 27, 2018.

California Department of Resources Recycling and Recovery (Cal Recycle). 2000. Landfill Facility Compliance Study.

_____. SWIS Facility/Site Search. Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Search (accessed March 2023).

California Department of Transportation (Caltrans). 2020. *Highway Design Manual* (HDM). July.

California Energy Commission (CEC). 2021. Integrated Energy Policy Report.

_____. 2022 Integrated Energy Policy Report Update.

City of Riverside, 2007. Riverside Citywide Design Guidelines and Sign Guidelines. November. Amended January 2019. Website: https://riversideca.gov/cedd/sites/riversideca.gov. cedd/files/pdf/planning/Citywide_ Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf (accessed February 2023).

_____. 2007. General Plan 2025. Circulation and Community Mobility Element. Website: https://riversideca.gov/ cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/12_Circulation_&_Community%20 Mobility_Element_with%20maps.pdf (accessed February 2023).

_____. 2007. General Plan 2025. Open Space and Conservation Element. Website: https://riversideca.gov/ cedd/sites/riversideca.gov.cedd/files/pdf/planning/generalplan/12_Open_Space_and_Conservation_ Element.pdf (accessed February 2023).

_____. 2007. General Plan 2025. Parks and Recreation Element. Website: https://riverside ca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/15_Park_and_Recreation_Element.pdf (accessed February 2023).

_____. 2007. General Plan 2025. Public Safety Element. Website: https://riversideca.gov/ cedd/sites/ riversideca.gov.cedd/files/pdf/planning/general-plan/18_Public_Safety_Element_with%20maps.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.1– Aesthetics. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/ files/pdf/planning/general-plan/vol2/5-1_Aesthetics.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.5– Cultural Resources. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/ pdf/planning/general-plan/vol2/5-5_Cultural_Paleontological_Resources.pdf (accessed February 2023)

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.6– Geology and Soils. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/ pdf/planning/general-plan/vol2/5-6_Geology_and_Soils.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.7– Hazards and Hazardous Materials. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/ planning/general-plan/vol2/5-7_Hazards_Hazardous_Materials.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.13 – Public Services. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-13_Public_Services.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.14 – Recreation. Website: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-14_Recreation.pdf (accessed February 2023).

_____. 2007. Volume 2: Recirculated Draft Program Environmental Impact Report. Section 5.15 - Transportation/ Traffic. Website: https://riversideca.gov/cedd/sites/riversideca.gov. cedd/files/pdf/planning/general-plan/vol2/5-15_Transportation_Traffic.pdf (accessed February 2023).

_____. 2012. Bicycle Master Plan Update: Addendum. Adopted March 2012.

_____. 2015. Urban Forestry Policy Manual. August. Website: https://riversideca.gov/public works/trees/pdf/ urbanforestry-toc.pdf (accessed March 2023).

_____. 2018. Local Hazard Mitigation Plan. Website: https://riversideca.gov/fire/ sites/riversideca.gov.fire/ files/ fire/pdf/Riverside%202018%20LHMP%20County%20Revised%20APA.pdf (accessed March 2023).

_____. 2020. Envision Riverside 2025. Strategic Plan. Website: https://www.riversideca.gov/sites/default/files/ COVID/City%20Strategic%20Plan_Spread%20Digital.pdf (accessed March 2023).

_____. 2020. Parks Master Plan Vision 2030. February 4. Website: https://www.riversideca. gov/park_rec/ planning-projects/parks-master-plan-vision-2030 (accessed February 2023).

_____. 2022. Riverside Municipal Code.

_____. 2020. Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (TIA Guidelines). July.

County of Riverside. 2018. Multi-Jurisdictional Local Hazard Mitigation Plan. July. Website: https://cdnverify. bof.fire.ca.gov/media/xf5hdb0i/rpc-2-b-v-riverside-county-multi-jurisdictional-hazard-mitigation-plan-supplemental.pdf (accessed February 2023).

Federal Highway Administration (FHWA). 1977. *Highway Traffic Noise Prediction Model, FHWA RD 77-108*.

_____. 2006. *FHWA Highway Construction Noise Handbook*.

Federal Railroad Administration (FRA). *Office of Safety Analysis. Crossing Inventory and Accident Reports*. Website: https://safetydata.fra.dot.gov/OfficeofSafety/PublicSite/Crossing/ Crossing.aspx (accessed February 2023).

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. FTA Report No. 0123. September. Website: https://www.transit.dot.gov/sites/fta.dot. gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf (accessed February 2023).

Institute of Transportation Engineers (ITE). *Trip Generation Manual,* 11th edition.

Leighton and Associates, Inc., 2022. *Geotechnical Investigation for Proposed Madison Flats Multi-Family Residential Development Southwest of Madison Street and Railroad Avenue, Riverside, California.* December 5.

LSA Associates, Inc. (LSA). 2017. *Cultural Resources Assessment for Harley Davidson Storage Project, Assessor's Parcel Numbers 230-233-013, 230-245-013, 230-245-015, and 230-253-010, City of Riverside, Riverside County, California*. November 2017.

_____. 2022. *Cultural Resources Study for the Madison Residential Project (APNs 230-233-013, 230-245-013, 230-245-015, and 230-253-010)/Cultural Resources Assessment for the Previous Project on these Parcels in Riverside, Riverside County, California.* October 25.

_____. 2023. *Madison Flats Project Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum*. May.

_____. 2023. *Noise and Vibration Impact Analysis Report for the Madison Flats Project*. May.

_____. 2023. *Transportation Operational Analysis, Madison Flats Project, City of Riverside, Riverside County, California.* February.

_____. 2023. *Vehicle Miles Traveled Analysis Memorandum* (LSA Project No. GBC2201). February 20.

_____. 2023. *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report*. November.

PSOMAS. 2022. *Project Specific Water Quality Management Plan*. December 8, 2022.

Riverside County Airport Land Use Commission (ALUC). 2004. Riverside County Airport Land Use Compatibility Plan (RCALUCP). October 14. Website: http://www.rcaluc.org/Plans/New-Compatibility-Plan (accessed February 2023).

_____. 2004. Riverside County Airport Land Use Compatibility Plan (RCALUCP) – Volume 1 Policy Document. Chapter 2 – Countywide Policies. Website: https://www.rcaluc.org/ Portals/ 13/PDFGeneral/plan/ newplan/04-%20Vol.%201%20County%20wide%20Policies.pdf (accessed February 2023).

_____. 2004. Riverside County Airport Land Use Compatibility Plan – Volume 1 Policy Document. Chapter 3 – Individual Airport Policies and Compatibility Maps: RI. Riverside Municipal Airport. Website: https://www.rcaluc.org/Portals/13/PDFGeneral/ plan/newplan/20-%20Vol.%201%20Riverside%20Municipal.pdf (accessed February 2023).

Riverside Public Utilities. 2021. *2020 Urban Water Management Plan.* July 2021. California Department of Water Resources. Website: https://riversideca.gov/utilities/sites/riversideca.gov.utilities/files/pdf/residents/ RPU% 20Final%202020%20UWMP%20%282%29.pdf (accessed March 2023).

Riverside Unified School District. 2023. RUSD School Locator. Website: https://webapps. riversideunified.org/ apps/SchoolLocator/ (accessed February 2023).

Southern California Association of Governments (SCAG). 2020. Connect SoCal 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy. Website: https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020 (accessed February 2023).

South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*.

_____. 2003. *Final Localized Significance Threshold Methodology*. June 2003, Updated July 2008.

_____. 2005. Rule 403 Dust Control Information.

_____. 2022. *2022 Air Quality Management Plan* (AQMP).

United States Census Bureau. 2022. QuickFacts Riverside City, California. Website: https://www. census.gov/ quickfacts/riversidecitycalifornia (accessed March 2023).

United States Energy Information Administration (EIA). n.d. Units and Calculators Explained, Energy Conversion Calculators. Website: www.eia.gov/energyexplained/units-and-calculators/energy-conversion-calculators. php (accessed March 2023).

APPENDIX A

Air Quality/Greenhouse Gas/Energy Impact Analysis (AQ/GHG/Energy Impact Analysis) (LSA, May 2023)

APPENDIX B

Health Risk Assessment, Madison Flats Project
(Health Risk Assessment)
(LSA, May 2023)

APPENDIX C

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report (MSHCP Consistency Analysis and Biology Report) (LSA, November 2022)

APPENDIX D

Cultural Resources Study for the Madison Residential Project (APNs 230-233-013, 230-245-013, 230-245-015, and 230-253-010)/Cultural Resources Assessment for the Previous Project on these Parcels in Riverside, Riverside County, California (Cultural Revalidation Assessment) (LSA, October 2022)

and Cultural Resources Assessment for Harley Davidson Storage Project, Assessor's Parcel Numbers 230-233-013, 230-245-013, 230-245-015, and 230-253-010, City of Riverside, Riverside County, California

(Cultural Resources Study) (LSA, November 2017)

APPENDIX E

Geotechnical Investigation for Proposed Madison Flats Multi-Family Residential Development Southwest of Madison Street and Railroad Avenue, Riverside, California (Geotechnical Investigation) (Leighton and Associates, Inc., December 2022)

APPENDIX F

Specific Water Quality Management Plan (PSOMAS, December 2022)

APPENDIX G

Noise and Vibration Impact Analysis, Madison Flats Project
(Noise and Vibration Impact Analysis)
(LSA, May 2023)

APPENDIX H

Traffic Operational Analysis, Madison Flats Project
(Traffic Operational Analysis)
(LSA, May 2023)

APPENDIX I

Madison Flats Project Vehicle Miles Traveled Analysis Memorandum
(LSA Project No. GBC2201)
(VMT Analysis Memorandum)
(LSA, February 2023)