

# **Draft Initial Study/Mitigated Negative Declaration**

## **Proposed Merrill Avenue Brownstones City of Riverside, California**

Prepared for | Community and Economic Development Department  
City of Riverside  
3900 Main Street, 3rd Floor  
Riverside, California 92522

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Riverside, California 92507

February 2018

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### APPENDIX

- A. Air Quality Analysis
- B. Phase 1 Cultural Resources Inventory
- C. Preliminary Geologic/Geotechnical Investigation
- D. Greenhouse Gas Emissions Analysis
- E. Phase 1 Environmental Site Assessment (ESA), Limited Phase 2 ESAs, and Phase 1 ESA Update and Phase II ESA Report
- F. Preliminary Water Quality Management Plan
- G. General Plan and Specific Plan Consistency Tables
- H. Noise and Vibration Analysis and Evaluation of Vibration Environment
- I. Traffic Impact Study





City of Arts & Innovation

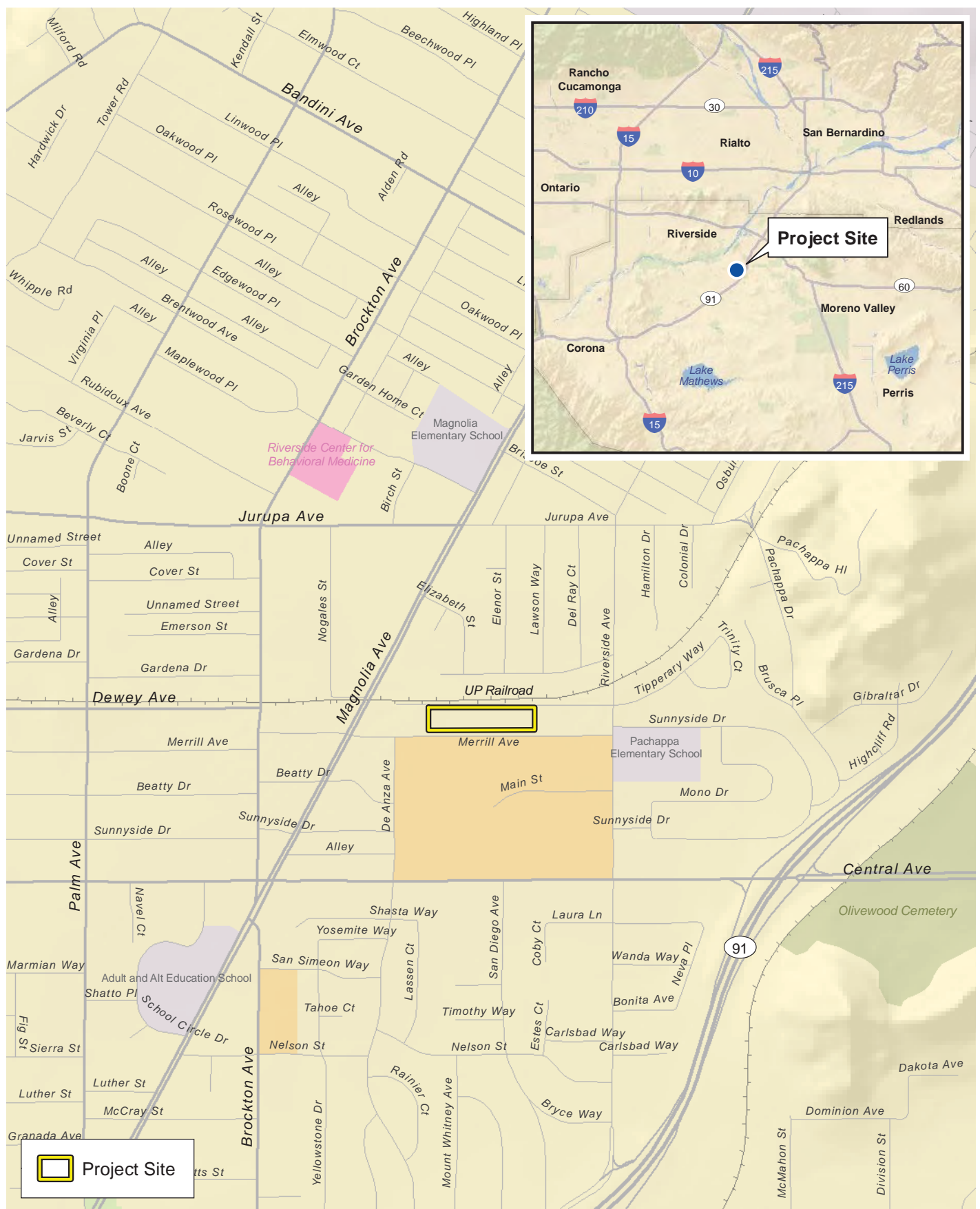
## COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

### Planning Division

## Draft Initial Study/Mitigated Negative Declaration

WARD: 3

1. **Case Numbers:** P17-0466 (Specific Plan Amendment), P17-0467 (General Plan Amendment), P17-0468 (Rezone), P17-0469 (Site Plan Review), P17-0470 (Traffic Pattern Modification), P17-0471 (Summary Vacation) and P17-0472 (Variance)
2. **Project Title:** Merrill Avenue Brownstones
3. **Hearing Date:** March 22, 2018
4. **Lead Agency:** City of Riverside  
Community & Economic Development Department  
Planning Division  
3900 Main Street, 3<sup>rd</sup> Floor  
Riverside, CA 92522
5. **Contact Person:** Brian Norton, Senior Planner  
**Phone Number:** (951) 826-2308
6. **Project Location:** The approximately 3.17-acre project site is located at 3575, 3605, 3607, 3631, 3645, and 3661 Merrill Avenue, Riverside, CA 92506. The site is located north of Merrill Avenue, south of the Union Pacific Railroad (UPRR) tracks, and between Magnolia and Riverside Avenues. The project site is identified as Assessor's Parcel Numbers 225-140-001, -002, -003, -004, -005, and -006. It is located in Section 34, Township 2 South, Range 5 West of the San Bernardino Meridian. Exhibit 1 shows the regional location and local vicinity of the project site, and Exhibit 2 provides an aerial photograph of the project site and surrounding areas.
7. **Project Applicant/Project Sponsor's Name and Address:**  
  
Mr. Richard Hamm  
Pelican Communities, LLC  
1300 Quail Street, Suite 100  
Newport Beach, California 92660
8. **General Plan Designation:** The project site is designated as C - Commercial in the Land Use Policy Map (Figure LU-10 of the Land Use and Urban Design Element) in the City of Riverside General Plan.
9. **Zoning:** The project site is zoned CG-SP - Commercial General – Specific Plan (Magnolia Avenue) Overlay Zones in the City's Zoning Map.







## Aerial Photograph

*Merrill Avenue Brownstones Project*



Exhibit 2





10. **Description of Project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

## **PROJECT BACKGROUND**

The City of Riverside issued a Request for Purchase and Development Proposals (RFP) in April 2015 for the project site, which was purchased by the City's former Redevelopment Agency in 2006 as an integral component of revitalization efforts in the Magnolia Center project area. The RFP identified that a mixed-use development was preferred, which would support the adjacent Riverside Plaza and allow for greater housing density and increased commercial opportunities, reduction of distances between housing, workplaces, retail businesses, and other destinations throughout Magnolia Center; strengthening of neighborhood character; creation of a pedestrian- and bicycle-friendly environment to enhance the surrounding neighborhood; and provide job opportunities for local residents. In December 2016, the Oversight Board for the Successor Agency to the Redevelopment Agency of the City of Riverside adopted a resolution to enter into a Purchase and Sale Agreement with Pelican Communities, LLC, which proposed a mixed-use development consisting of multi-family residential units and some retail space. The project has been designed to meet the City's development standards for the MU-U zone, as further described below.

The project site was used for agricultural purposes until the 1960s when it was initially developed with various non-residential uses; various uses have previously operated at the project site including, but not limited to, auto-related, dry cleaner, and retail stores. The previous structures were demolished by the former Redevelopment Agency in 2005/2007. The project site is currently undeveloped; however, the eastern portion of the site is currently paved and used as an overflow parking lot (refer to Exhibit 2).

## **PROPOSED DEVELOPMENT**

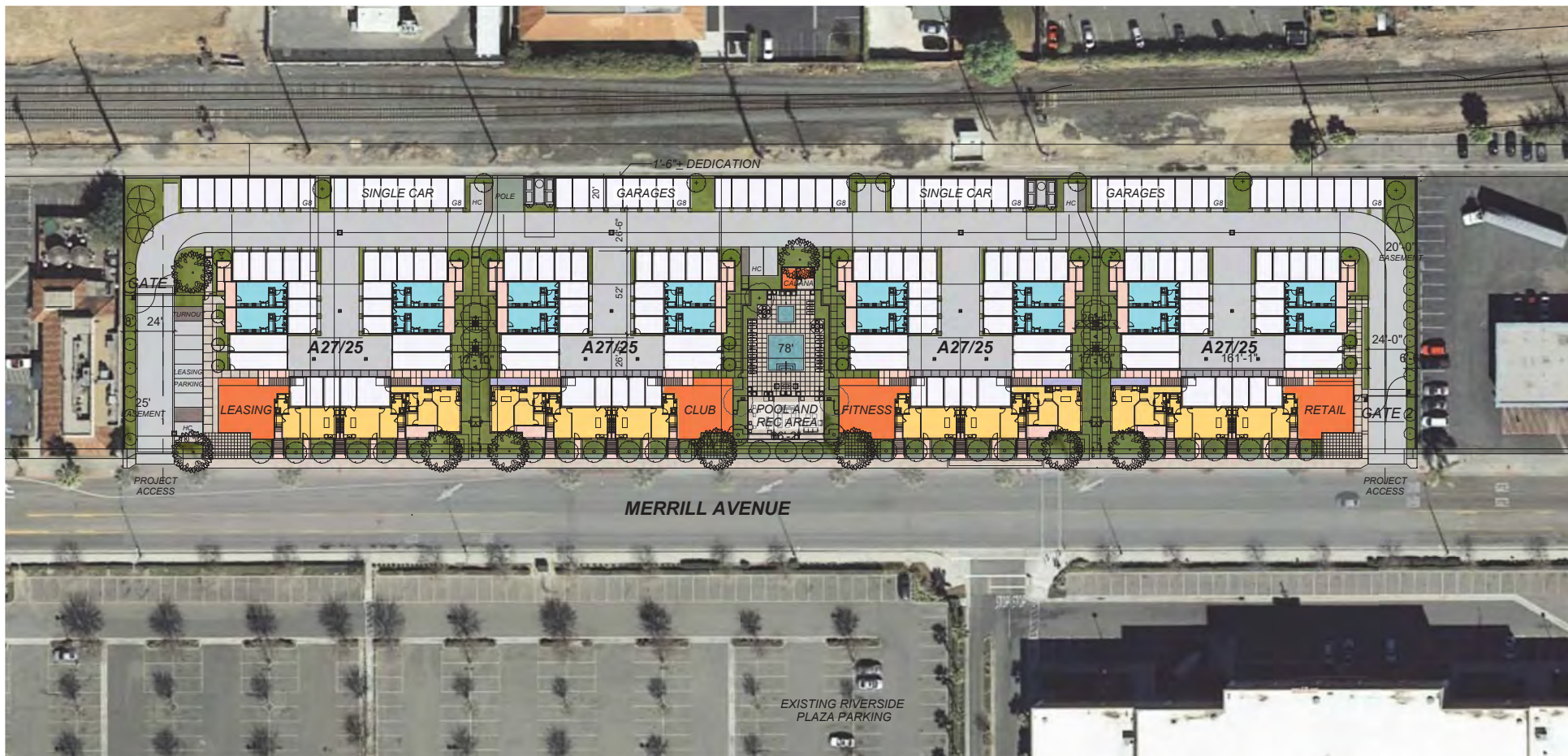
The mixed-use development proposes a total of 98,608 square feet (sf) of floor area with 108 dwelling units and associated amenities (leasing office, club room, swimming pool and spa, fitness center, and cabana). An approximately 1,200-square-foot retail space is also proposed. The conceptual site plan for the proposed project is provided in Exhibit 3. Parking for the proposed residential and commercial uses would be provided on site. In addition, the Merrill Avenue street section would be modified to provide on-street parking immediately adjacent to the project. A description of the proposed uses and other project features is provided below.

### **Residential and Retail Uses**

As shown on Exhibit 3, four U-shaped buildings would be developed along Merrill Avenue. Each building has 24,652 sf of floor area and includes 27 units (consisting of a mix of studio, one-bedroom, and two-bedroom units). Exhibit 4 shows the conceptual floor plans. Project amenities (approximately 3,600 square feet [sf]) (i.e., leasing office, fitness center, and club room) and a retail space (approximately 1,200 sf) will be provided at one corner of the ground floor of each building (refer to Exhibit 3).

Ground-level garages (one- and two-car) will be provided beside the studios and under the residential units at each building. Garages assigned to ground floor units will have connecting doors to the dwelling units, while garages assigned to units on the upper floors have interior or exterior stairs leading to the upper floor units. Seven garage structures (detached from the residential buildings) are also provided along the northern property boundary; each structure will have eight single-car garages.

Exhibits 5a and 5b show the building elevations for the proposed project. The architectural style for the proposed structures is a response to the unique location and setting of the site. The forms and elements are inspired by the pedestrian character of the adjacent regional shopping center context and the historic "East Coast Brownstone" residential character. This style encourages interaction between the proposed uses and public street through ground level "stoop like" entry elements; proposed new on-street parking; place-finding elements signifying community, office, recreation amenity, fitness center, clubroom, and retail nodes; and human scale detail elements, such as wall



Source: Architects Orange, January 2018

## Conceptual Site Plan

Merrill Avenue Brownstones Project



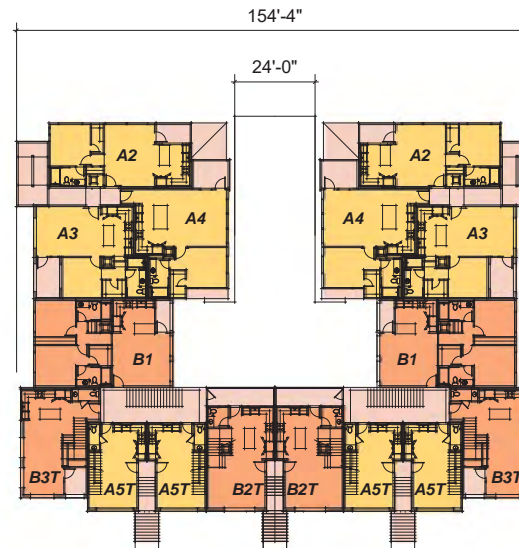
Exhibit 3



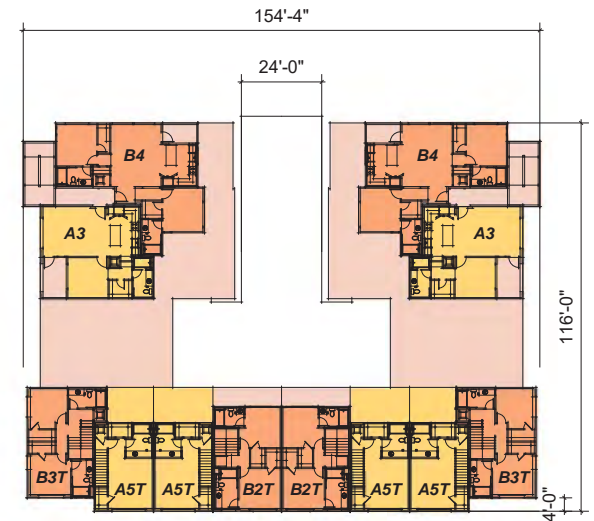
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**STREET LEVEL FLOOR PLAN- 7DU/25(30s)**



**SECOND FLOOR PLAN- 16DU**



**THIRD FLOOR PLAN- 4DU**

## Conceptual Floor Plans

Merrill Avenue Brownstones Project



Source: Architects Orange, September 2017

Exhibit 4



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rustication, window trims and shutters, awnings, storefronts, etc. The building height would be no more than 50 feet maximum with corner tower features, with the parapet heights up to 44 feet above ground level for the three-story elements (the upper parapet height at the north side of each building would be up to 44 feet high and the parapet at the south side of each building would be up to 42 feet high), 30 feet above ground level for two-story elements, and 20 feet above ground level for one-story elements. The varied elevations are proposed to break up the massing of each building and to provide visual interest. The proposed primary exterior building color and material palette also reinforces the “East Coast Brownstone” style, using deep earth tones, materials with a natural stone appearance (i.e., manufactured stone veneer, masonry veneer, and cement plaster, and cultured stone), and accent colors throughout. Windows will have awnings, painted shutters, built-up window trims, or wrought iron railing. Cement plaster in varying finishes, colors and treatments, cultured stone in selected areas, decorative wrought iron railings, and building cornices will highlight this style.

The garages along the northern property boundary are arranged to buffer train noise and are massed to address the railroad edge. These structures will be one level; however, the roofs slope up from south to north, and the garage heights will be staggered to break up massing. The southern roof lines will be 10 and 12 feet high, sloping up to the northern roof lines that will be 17 and 19 feet high.

The proposed project will be designed and constructed in compliance with applicable requirements of the California Building Code, California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings, California Green Building Standards Code or CalGreen Code (Title 24, Part 11 of the California Code of Regulations), and City of Riverside Building and Construction regulations in the Riverside Municipal Code (RMC).

## **Circulation and Parking**

### ***On Site***

As shown in Exhibit 3, vehicular access to the project site is provided by two-way driveways along Merrill Avenue at the western and eastern ends of the site. Secured internal vehicular circulation will be provided from a two-lane internal road along the western, eastern, and northern portions of the site and “T” culs-de-sac at the center of each building that lead into garages at the ground floor of the buildings. The internal road also provides access to the parking spaces in the seven detached garages along the northern property boundary.

Pedestrian pathways provided throughout the site connect residential uses to on-site amenities and public sidewalks along Merrill Avenue.

The City’s parking standards require a total of 183 parking spaces for the proposed project. A total of 190 parking spaces will be provided on site, including 176 parking spaces in garages for residential units and 14 spaces for visitors/guests and designated handicap-accessible spaces for Americans with Disabilities Act (ADA) compliance. In compliance with CalGreen Code, the proposed project will designate two common parking spaces to be pre-wired for electric vehicle charging stations, and will pre-wire the garages attached to the residential buildings for future installation and use of electric vehicle chargers. As a project amenity, a bike storage and maintenance room will be located beside the fitness center or club room that may be used as an active bike shop for residents of the project.

### ***Off Site (Merrill Avenue)***

The principles of roadway design have recently shifted to consider streets as public spaces, with less emphasis on automobile travel and greater concern for the needs of the pedestrian. Through increased transit services, an improved walking environment, convenient connections to attractions and destinations, and safer bikeways, roads are now envisioned as an integral part of the community fabric and as a means of helping build healthier lifestyles. This has encouraged improvements to “right-size” a road or the installation of traffic-calming measures on existing roads.

Traffic calming refers to any number of street design features that slow traffic, many of which do not necessarily reduce traffic volumes. Rather, the main purpose for traffic calming is to slow traffic in order to reduce vehicle



#### MATERIALS LEGEND

- 1 EXTERIOR CEMENT PLASTER
- 2 AWNING
- 3 MANUFACTURED STONE VENEER
- 4 MANUFACTURED STONE VENEER
- 5 STOOP ENTRY ELEMENTS
- 6 WROUGHT IRON RAILING
- 7 DECORATIVE BUILDING CORNICE
- 8 BUILT UP WINDOW TRIM
- 9 MASONRY VENEER
- 10 STOREFRONT GLAZING
- 11 VINYL WINDOW FRAME (COLORED OPTION)
- 12 SIGNAGE LOCATION
- 13 GARAGE DOOR
- 14 PAINTED SHUTTERS



Source: Architects Orange, October 2017

#### Proposed Building Elevations

Merrill Avenue Brownstones Project



Exhibit 5a



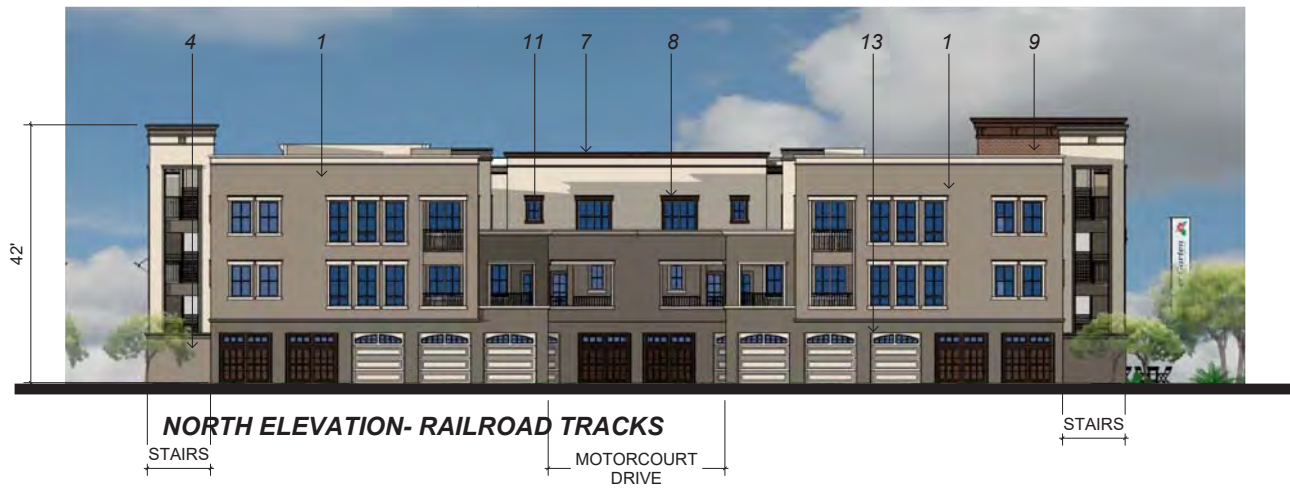
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#### MATERIALS LEGEND

- 1 EXTERIOR CEMENT PLASTER
- 2 AWNING
- 3 MANUFACTURED STONE VENEER
- 4 MANUFACTURED STONE VENEER
- 5 STOOP ENTRY ELEMENTS
- 6 WROUGHT IRON RAILING
- 7 DECORATIVE BUILDING CORNICE
- 8 BUILT UP WINDOW TRIM
- 9 MASONRY VENEER
- 10 STOREFRONT GLAZING
- 11 VINYL WINDOW FRAME (COLORED OPTION)
- 12 SIGNAGE LOCATION
- 13 GARAGE DOOR
- 14 PAINTED SHUTTERS



#### Proposed Building Elevations

Merrill Avenue Brownstones Project



Source: Architects Orange, October 2017

Exhibit 5b



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collisions and increase safety for pedestrians and bicyclists. At the same time, traffic calming can have other positive effects, such as reducing air pollution, noise, crime and boosting social interaction within a neighborhood. Further, traffic calming measures, such as reduced numbers of lanes for passenger vehicles, the provision of bike lanes, and center turn lanes, allow turning passenger vehicles or emergency vehicles to move out of the way of through traffic. Additionally, if the traffic-calming measure avoids diversion, as may occur with street closures or standard speed bumps, it would have little to no effect on traffic volumes on the surrounding streets (AARP 2014).

Studies have also shown that traffic-calming measures can have a positive impact on the local economy. A number of studies conducted in New York and San Francisco concluded that there are links between street projects which created more accessible and welcoming streets (i.e., adding bike lanes, redesigning intersections, and reducing auto lanes) and benefits to the economy. The studies showed that these types of street projects generally helped to increase retail sales (New York City DOT 2013; Drennen 2003).

Thus, in addition to the proposed on-site circulation improvements, off-site roadway improvements are also proposed along Merrill Avenue from Magnolia Avenue to Riverside Avenue. The proposed street layout and existing and proposed cross sections for Merrill Avenue are provided in Exhibits 6 and 7, respectively. These street improvements include various traffic-calming features to create a pedestrian- and bicycle-friendly environment. Specifically, Merrill Avenue would be restriped between De Anza Avenue and Riverside Avenue to modify the roadway segment from the Riverside Plaza west driveway to the Riverside Plaza east driveway from a three-lane roadway to a two-lane roadway, with a raised landscaped median and on-street parallel parking spaces along the project site frontage. The westbound lane drop would be shifted to the east, from the western driveway into Riverside Plaza (Plaza west driveway)<sup>1</sup> to Riverside Avenue. This shift would result in a single westbound through lane along the frontage of the property and the properties east of the site. Painted medians and lane restriping would be provided east of the site to Riverside Avenue and west of the site to De Anza Avenue. In addition, planter areas and 18 on-street parking spaces would be provided along the site frontage on Merrill Avenue. While the existing sidewalk along the site would be retained in place, the right-of-way width of Merrill Avenue would be decreased from 67 feet to 64 feet (through a 3-foot wide summary street vacation along the north side of the street) (see Exhibit 7). A Traffic Impact Study (TIS) was prepared (provided in Appendix I), which verified that these changes would not adversely affect traffic volumes or levels of service along the Merrill Avenue roadway segment or nearby intersections.

With respect to non-vehicular circulation, the segment of Merrill Avenue between Magnolia Avenue and Riverside Avenue would be designated as a shared bicycle path facility by striping the two travel lanes as Class 3 bikeways with painted sharrow legends. Enhanced pedestrian crosswalks defined by textured or painted pavement would be provided at the Merrill Avenue intersection with the Plaza west driveway (just west of the Regal Cinemas 16 building) (refer to the Conceptual Landscape Plan provided in Exhibit 8). Pedestrian access to each residential building would include three stairs that extend from the sidewalk on Merrill Avenue and lead up to the entry stoops and main entries of the second floor units along Merrill Avenue.

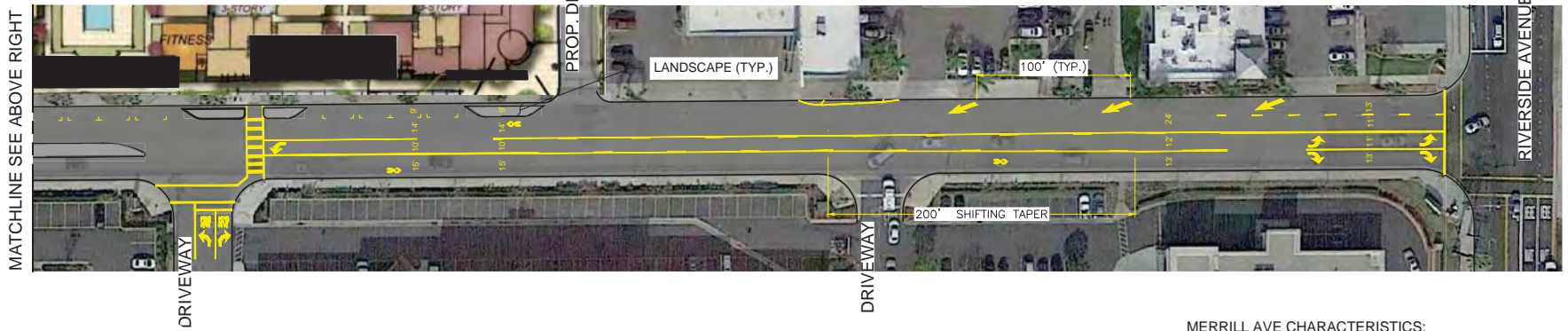
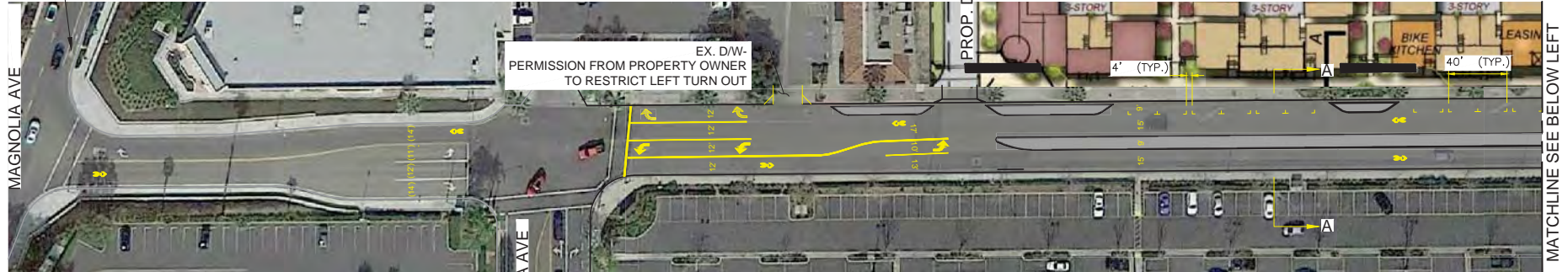
### **Open Space, Landscaping, Walls/Fences, and Exterior Lighting**

The conceptual landscape and open space plans for the proposed project are provided in Exhibits 8 and 9, respectively. As shown, landscaping would be provided at setback areas along the eastern and western edges of the site, consisting of groundcover (i.e., grass and/or low shrubs), with evergreen canopy trees and a small evergreen tree at the northeastern and northwestern corners of the site. The paseos between buildings, the common recreational area, and other areas around the proposed buildings would be planted with groundcover, evergreen canopy trees, vertical accent trees, and small evergreen trees. Landscaped areas between the garages would also be planted with groundcover and small evergreen trees. Existing street trees (Mexican fan palm trees) along Merrill Avenue would be preserved in place and/or removed, with the landscaped areas between the buildings and sidewalk planted with vertical evergreen trees and flowering canopy trees. The proposed planter areas on Merrill Avenue would be planted

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<sup>1</sup> Also referred to as Mall West Driveway in this document and in the Traffic Impact Study

EX. BIKE LANE



**MERRILL AVE CHARACTERISTICS:**  
 COLLECTOR ROAD  
 48' CURB TO CURB  
 67' RIGHT-OF-WAY TO RIGHT-OF-WAY  
 SPEED LIMIT 35MPH

Source: Psomas 2018

## Merrill Avenue Street Layout

Merrill Avenue Brownstones Project

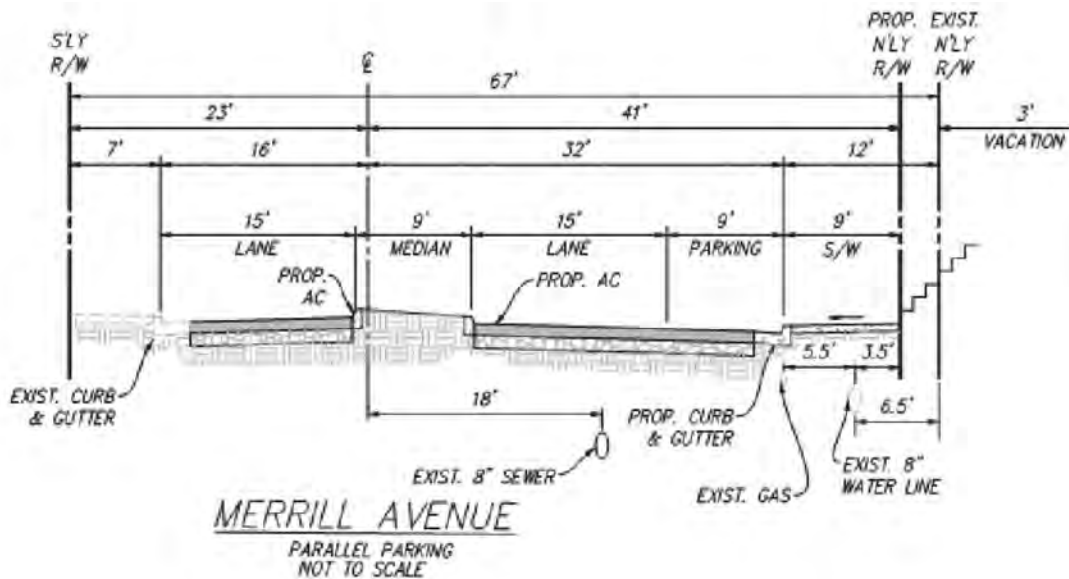
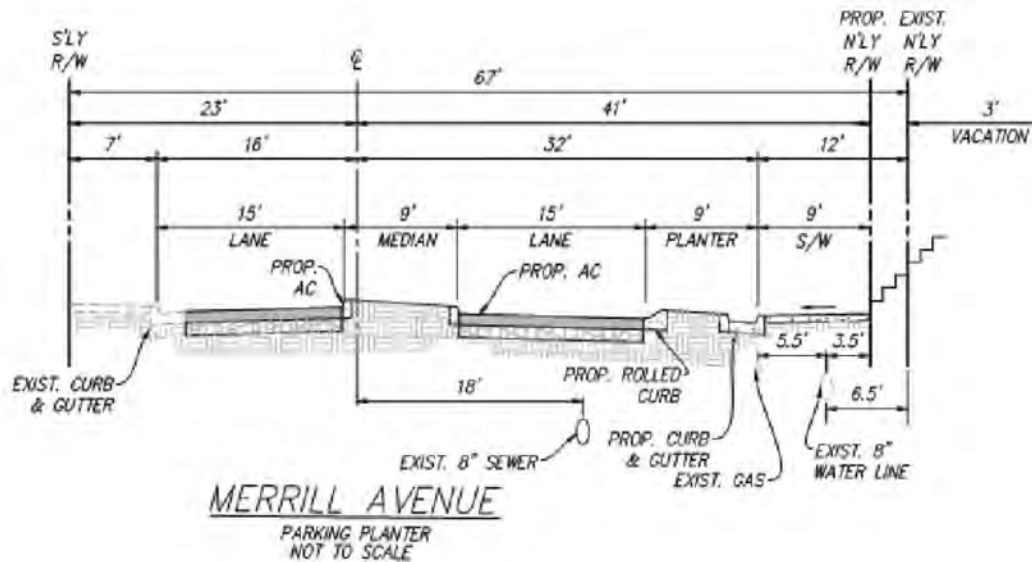


Exhibit 6



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Source: Psomas 2018

## Merrill Avenue Cross Section








Merrill Avenue Brownstones Project

## Exhibit 7

PSOMAS



# LEGEND

-  FLOWERING CANOPY TREE
-  FLOWERING ACCENT TREE
-  EVERGREEN CANOPY TREE
-  VERTICAL EVERGREEN TREE
-  SMALL EVERGREEN TREE
-  VERTICAL ACCENT TREE
-  VERTICAL EVERGREEN SCREEN TREE

SEE EXHIBIT 9  
FOR PASEO AREA  
ENLARGEMENT

SEE EXHIBIT 9  
FOR RECREATION  
AREA ENLARGEMENT

SEE EXHIBIT 9  
FOR PASEO AREA  
ENLARGEMENT

## Conceptual Landscape Plan

Merrill Avenue Brownstones Project



Source: BGB Design Group, 2018

Exhibit 8



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with flowering accent trees, and the landscaped median on Merrill Avenue would be planted with evergreen canopy trees.

Approximately 19,200 square feet of open space would be provided on site in the form of landscaped areas and recreational facilities. Approximately 14,414 square feet would be located in the pool area and paseos, with 1,200 square feet in the clubhouse and another 1,200 square feet in the fitness center. A total of 16,814 square feet of indoor and outdoor open space and recreational facilities would be provided for use by residents of the proposed project, and the rest would consist of landscaped areas along the sidewalk on Merrill Avenue.

A common recreational area with a swimming pool, spa, fire pit, barbecue area, seating areas, and a cabana building would be provided at the center of the site (approximately 8,492 square feet; refer to Exhibit 9). The 1,200-sf fitness center and 1,200-sf club room would be located in the buildings southeast and southwest of the swimming pool. Paseos, consisting of 5,922 square feet of landscaped areas, walkways, and seating, would also be provided between the two buildings on each side of the common recreational area. In addition, a total of 6,512 sf of private open space in the form of decks and balconies would be provided for 92 of the dwelling units.

Walls and fences would be provided around the site for security, privacy, and noise attenuation. Three- to 14-foot high perimeter walls would be provided at the western, northern, and eastern boundaries of the site. The northern boundary wall would be a 14-foot block wall between the garages (refer to Exhibit 10). The northern wall, including the north-facing wall of the garages, would be treated with art to provide visual interest along the alley. Lighting would also be provided at the back of the garages to provide security lighting for the alley. The western boundary wall would be 13 feet high from the northwestern corner of the site for approximately 90 feet to match the existing building wall height along the eastern boundary of the adjacent property (VIP nightclub and restaurant) and 6 feet high from the southwestern corner of the site at Merrill Avenue for approximately 20 feet to the building wall along the eastern boundary of the adjacent property. The eastern boundary wall (along America's Tire Company) would be 14 feet high from the northeastern corner of the site for 60 feet and would then step down to 12 feet for 20 feet and then 10 feet for 5 feet, and 8 feet until the proposed security gate, where it would continue south as a 3-foot decorative wall from the security gate to the southeastern corner of the site at Merrill Avenue. At the center of the site, an 8-foot-high block wall along the north and south sides of the common recreation area would be provided, with wrought iron fencing east and west of the pool area. Decorative wrought iron security fencing and lockable gates would be provided across the driveways and common areas between buildings along Merrill Avenue.

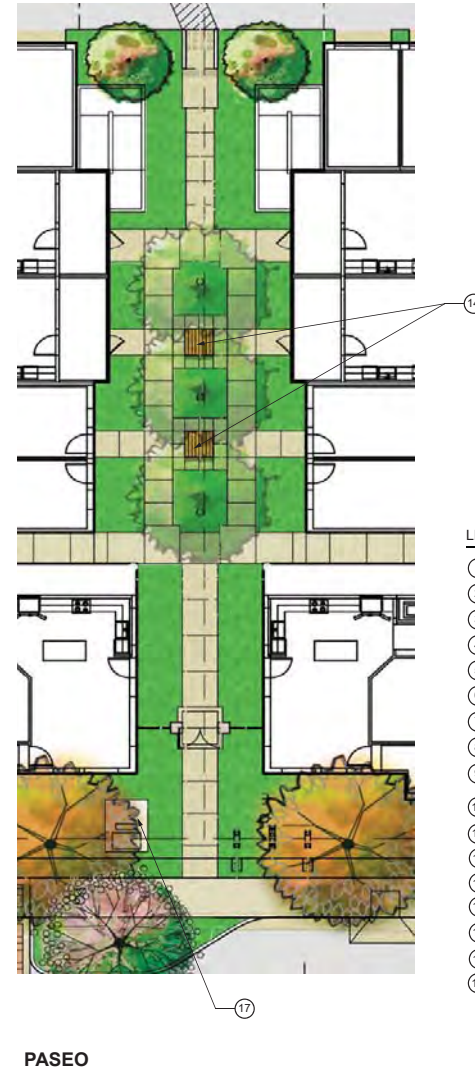
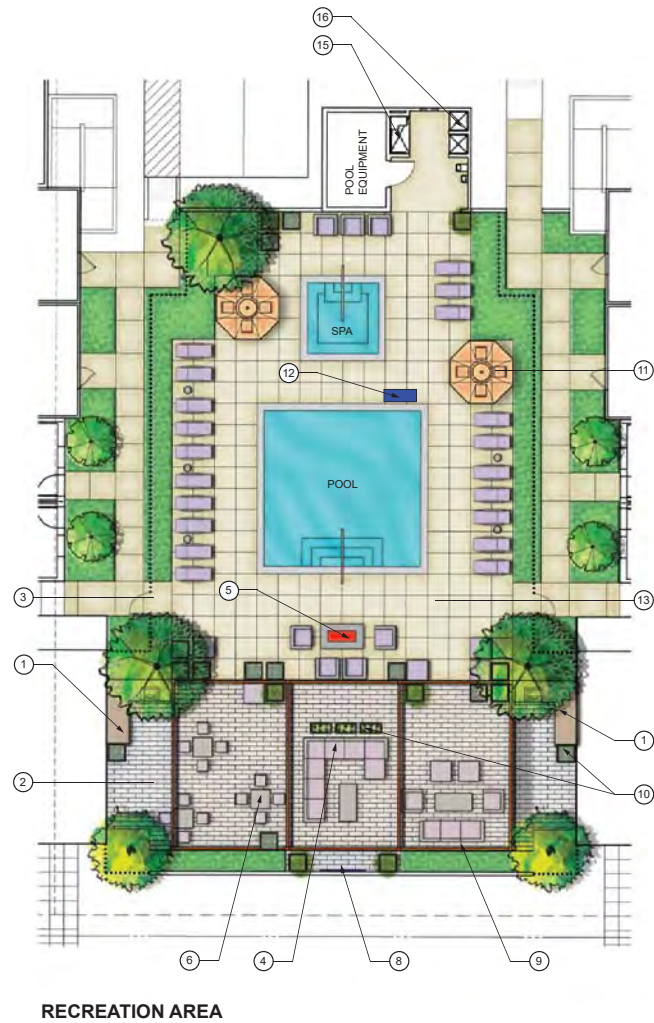
Exterior lighting would be provided throughout the site as necessary for safety, security, and ambience and would include lighting for the pedestrian walkways, entry stoops, architectural elements, and landscape features. A variety of lighting fixtures and illumination levels would be provided, including step lights at the entry stairs and unit entry lights along Merrill Avenue, garage wall-mounted lights, post lights along the internal drive aisles and parking lots, and downlights along the paseos and pedestrian walkways.

### **Utility Infrastructure**

Municipal and private utility services necessary to serve the proposed project are currently available adjacent to or in proximity to the project site. On-site utility infrastructure necessary to serve the proposed project—including water, sanitary sewer, drainage, water quality treatment, and dry utilities (e.g., electricity, natural gas, cable)—would be installed with the proposed development and would connect to existing utility lines. The final sizing and design of on-site facilities would occur during final design. All off-site impacts which would result from installation of all utility infrastructure are analyzed in this Initial Study. Existing and proposed utility infrastructure is described below and shown on Exhibit 11.

- **Water.** Water service to the project site would be through a new water line that would be installed in Merrill Avenue along the site frontage, connecting to an existing 8-inch water line on the north side of Merrill Avenue (southwest and southeast of the site) that is owned and maintained by the Riverside Public Utilities (RPU). The existing water line in the sidewalk fronting the site would be abandoned as part of the project. On-site water lines would be installed to extend from each building to provide domestic water service to





#### LEGEND

- ① BBQ / SERVING COUNTER
- ② CONCRETE PLANK PAVERS
- ③ ENHANCED CONCRETE
- ④ MODULAR SECTIONALS
- ⑤ FIRE PIT
- ⑥ BAR STOOL AND TABLE
- ⑦ CHAISES
- ⑧ PROJECTION SCREEN
- ⑨ FABRIC OR COVERED SUN SHADE W/ STEEL FRAME STRUCTURE
- ⑩ PLANTERS
- ⑪ DINNING TABLE W/ UMBRELLA
- ⑫ PORTABLE ADA LIFT
- ⑬ SANDFINISH CONCRETE PAVING
- ⑭ 4' SQ. WOOD BENCHES
- ⑮ ADA SHOWER
- ⑯ SHOWER
- ⑰ ELECTRIC TRANSFORMER

Source: BGB Design Group, 2018

### Recreation Area and Paseo

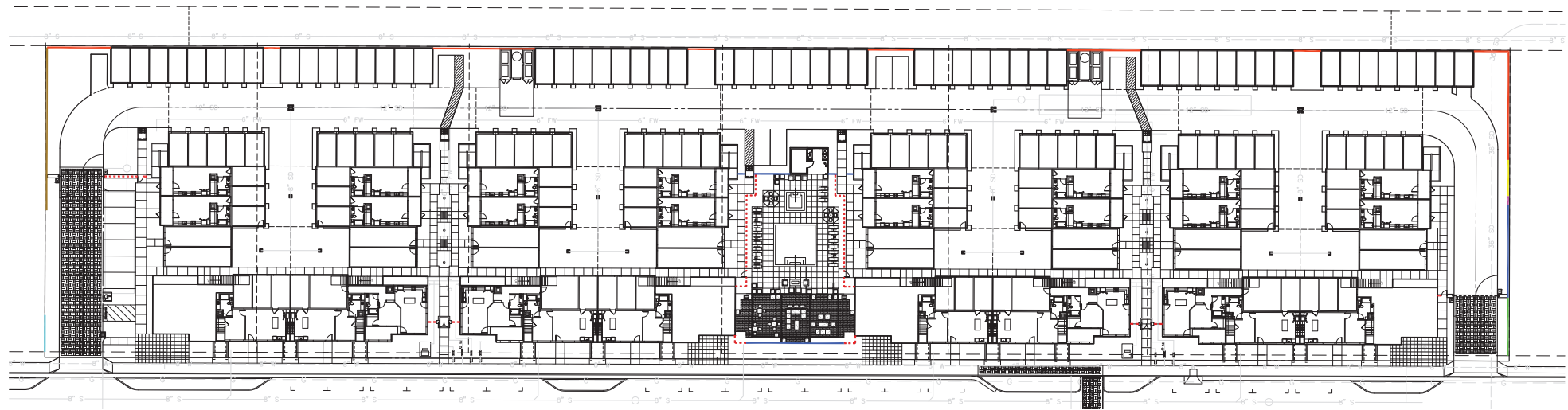
Merrill Avenue Brownstones Project



### Exhibit 9



(01/26/2018 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_RecreationArea\_Paseo.pdf



### FENCE / WALL LEGEND

SYMBOL	DESCRIPTION	QTY
<span style="color: red;">—</span>	14 FEET HIGH CMU WALL	300 LF
<span style="color: orange;">—</span>	13 FEET HIGH CMU WALL	115 LF
<span style="color: yellow;">—</span>	12 FEET HIGH CMU WALL	45 LF
<span style="color: purple;">—</span>	10 FEET HIGH CMU WALL	30 LF
<span style="color: blue;">—</span>	8 FEET HIGH CMU WALL	162 LF
<span style="color: lightblue;">—</span>	6 FEET HIGH CMU WALL	45 LF
<span style="color: green;">—</span>	3 FEET HIGH DECORATIVE CMU WALL	57 LF
<span style="color: red;">- - -</span>	WROUGHT IRON FENCE/GATES	227 LF

Source: BGB Design Group, 2018

### Fence and Wall Plan

Merrill Avenue Brownstones Project



Exhibit 10



(01/26/2018 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_Fence\_Wall\_Plan.pdf





the proposed project and from landscaped areas to provide irrigation. These on-site water lines would connect to the existing 8-inch water line in Merrill Avenue. A fire line would also extend from and loop back to the water line in Merrill Avenue and run along the internal road behind the buildings to provide fire service to the proposed project.

- **Sewer.** Sewer service to the project site is currently available from the City's Public Works Department through an existing 8-inch sewer line in the alley north of the site that connects to an existing 8-inch sewer line in De Anza Avenue and eventually ties to the Riverside Water Quality Control Plant (RWQCP). On-site sewer lines would be installed and would extend from each building and the pool area to a new 8-inch sewer line that would be constructed in Merrill Avenue along the site frontage (approximately 700 feet) and eventually tying to the existing off-site 8-inch sewer line at the intersection of Merrill Avenue and De Anza Avenue.
- **Storm Drainage and Water Quality Features.** The City owns and maintains public storm drains serving the project site and has a 36-inch storm drain line within a 20-foot wide easement at the eastern edge of the site, which ties to a reinforced box culvert running westerly on the south side of Merrill Avenue. With the proposed project, storm water on the site would sheet flow into grate inlets and roof drains would connect to the underground storm drains. Proposed 8-inch and 12-inch storm drain lines would tie into two on-site storm water treatment chambers, which would remove pollutants, and then into two infiltration chambers to allow storm water to percolate into the ground (see Exhibit 11). Overflows from the underground chambers would be directed into 12-inch lines that would tie to the existing storm drain box structure in Merrill Avenue (southwest of the site) and to the existing 36-inch storm drain line in the utility easement at the eastern edge of the site. The eastern portion of the on-site storm drain easement would be planted with groundcover, and the western portion would be used as part of the internal road on the site.
- **Dry Utilities.** The RPU provides electrical power services to the site, and several power lines are located in the alley north of the site, along Merrill Avenue, and within a 15-foot-wide easement at the western edge of the site. The Southern California Gas Company has a 2-inch gas line on the north side of Merrill Avenue. Connections to the existing power and natural gas lines in Merrill Avenue would be made to serve the proposed project. The western portion of the on-site power line easement would be planted with groundcover, and the eastern portion would be used as part of the internal road on the site. An existing power pole at the alley north of the site would also be replaced with a steel pole to eliminate guy wires at the site. AT&T has existing aerial and buried lines in the alley north of the site and in Merrill Avenue. The proposed uses would be connected to the existing telecommunications system line in Merrill Avenue. A 2-inch conduit for the RPU Dark Fiber program would also be installed along the project site frontage. The proposed uses would be able to then be connected to the City's dark fiber network within Magnolia Avenue. RPU owns the dark fiber infrastructure and makes it available for lease to a communication provider that can then enter into a contract to provide high speed and quality wired connection to the proposed project.

### **Construction Activities**

Construction of the proposed project is expected to begin in Summer/Fall 2018, with asphalt demolition/removal and site clearing activities occurring the first two weeks. As much as 1,620 cubic yards (cy) of asphalt, dirt, and organic wastes would be transported for off-site disposal or diversion. This would be followed by grading activities for the next four weeks. The preliminary grading would involve lowering of the eastern portion of the site grade by as much as 3.5 feet and fill of the western portion of the site. Accounting for soil shrinkage and overexcavation, approximately 6,680 cy of soils would need to be exported off-site during the grading period; this is estimated to generate approximately 418 two-way truck trips over the 4-week grading period (approximately 42 one-way truck trips per day). The construction haul route for these trucks would include Merrill Avenue, Riverside Avenue, Central Avenue, and SR-91.

Building construction would take approximately 12 months, followed by two months of painting of interior and exterior surfaces and landscaping. The buildings would be typical slab-on-grade, three-story, Type V wood-frame

construction; and the garages would be slab on-grade, one-story, Type V wood-frame construction. Occupancy of the dwelling units and retail area is expected by Fall 2019 at the earliest.

Anticipated construction equipment during the construction phase would include dozers, tractors, excavators, graders, a crane, loaders, backhoes, forklifts, a welder, an air compressor, a generator, a concrete saw, and other small equipment. No rock crushing or pile driving equipment would be required.

The construction impact limits for the proposed project are shown in Exhibit 12. As shown, the entire project site would be disturbed, and off-site impacts would be associated with roadway improvements along Merrill Avenue and the installation of utility lines and service connections. Construction staging and construction worker parking would occur on the site, and impacts at the alley would be limited to the area around the power pole that would be replaced.

### **Legislative and Discretionary Approvals**

The proposed project would require the following approvals from the City:

- **Adoption of the Mitigated Negative Declaration.** Adoption of the Mitigated Negative Declaration (MND) in accordance with the California Environmental Quality Act (CEQA), prior to approval of the proposed project.
- **Magnolia Avenue Specific Plan Amendment (P17-0466 [AMD]).** The proposed project requires the following amendments to the Magnolia Avenue Specific Plan:
  - Change the land use designation of the site on Figure 3.9, Magnolia Center District, from C - Commercial to MU-U - Mixed Use-Urban (refer to Exhibit 13).
  - Change Table 3.5, General Plan Land Use Designations in the Magnolia Center District, to add a Mixed Use-Urban (MU-U) land use designation with a location of “Parcels to the immediate north of Riverside Plaza”.
  - Change text below Table 3.5 on page 3-38 to add the proposed MU-U as a designation for properties in the Magnolia Center District.
- **General Plan Amendment (P17-0467 [GPA]).** The proposed project requires the amendment of the land use designation of the project site on Figure LU-10 - Land Use Policy Map of the General Plan, from C - Commercial to MU-U - Mixed Use-Urban, which allows 30-40 dwelling units per acre and a Floor Area Ratio (FAR) of 2.0 to 4.0 (see Exhibit 14).
- **Rezone (P17-0468 [RZ]).** The proposed project requires a change in the zoning of the project site on the City’s Zoning Map from CG-SP - Commercial General and Specific Plan (Magnolia Avenue) Overlay Zones to MU-U-SP - Mixed Use-Urban and Specific Plan (Magnolia Avenue) Overlay Zones (see Exhibit 15).
- **Site Plan Approval (P17-0469 [PPE]).** The proposed project would be subject to review and approval of project plans (provided in Exhibit 3).
- **Traffic Pattern Modification (P17-0470 [TP]).** The proposed project involves a change in the roadway configuration of Merrill Avenue (from Riverside Avenue to De Anza Avenue) from two westbound lanes and one eastbound lanes to one travel lane in each direction with a raised or painted median and a total of 18 parallel on-street parking stalls on the north side of the street along the site frontage (see Exhibit 3).
- **Summary Street Vacation (P17-0471 [VC-S]).** The proposed project also requires a partial street vacation to reduce the right-of-way width of Merrill Avenue along the site frontage (northern edge) from 67 feet to 64 feet (see Exhibit 7).





## Construction Areas

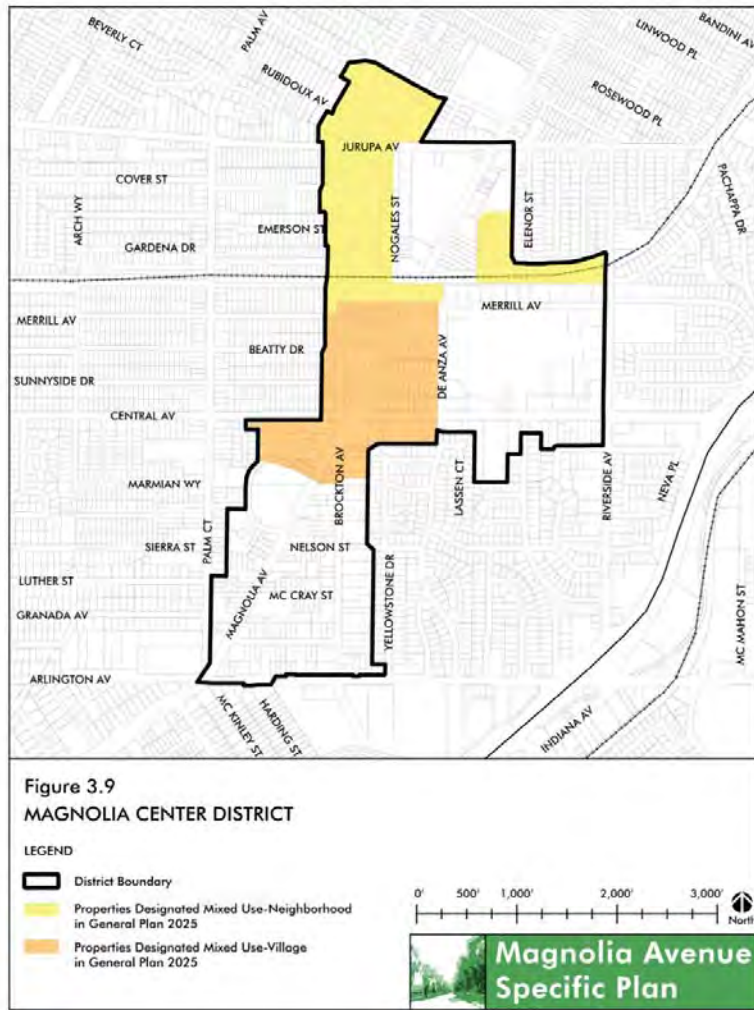
*Merrill Avenue Brownstones Project*



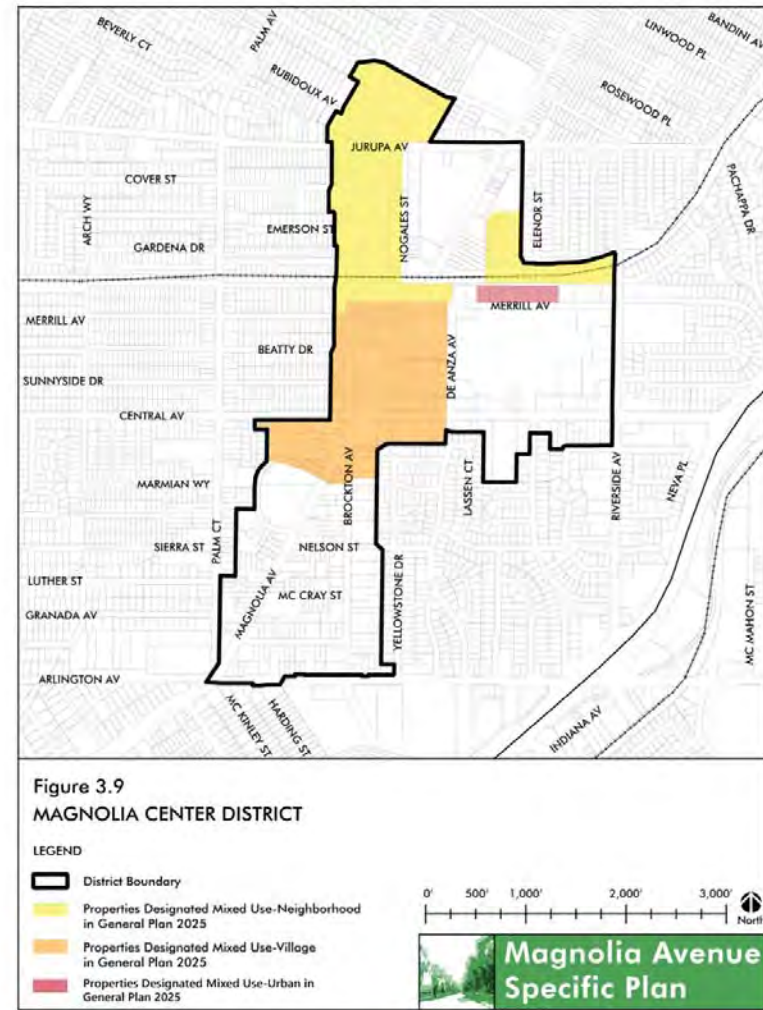
Exhibit 12







Existing Figure 3.9



Proposed Figure 3.9

## Proposed Specific Plan Amendment

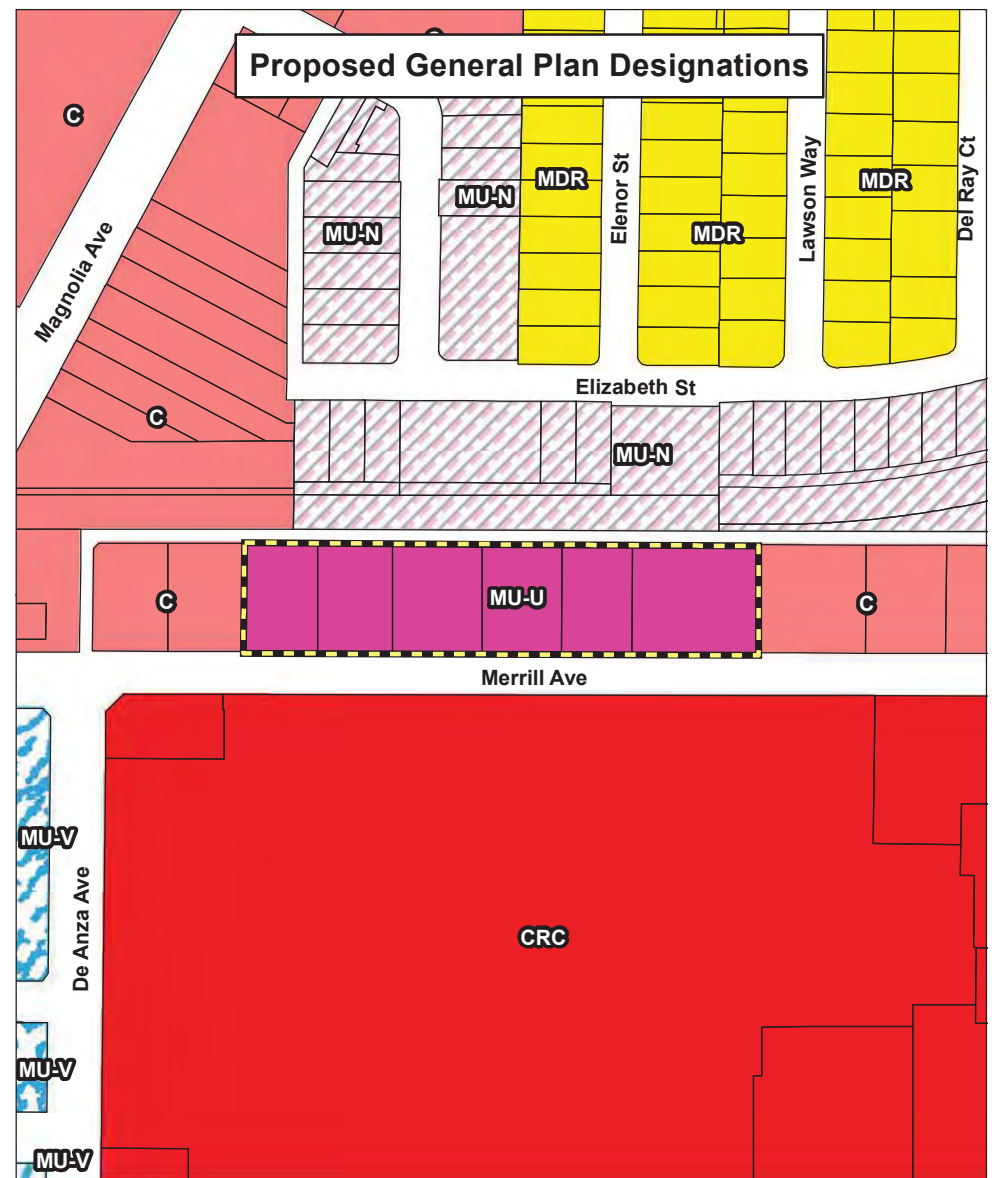
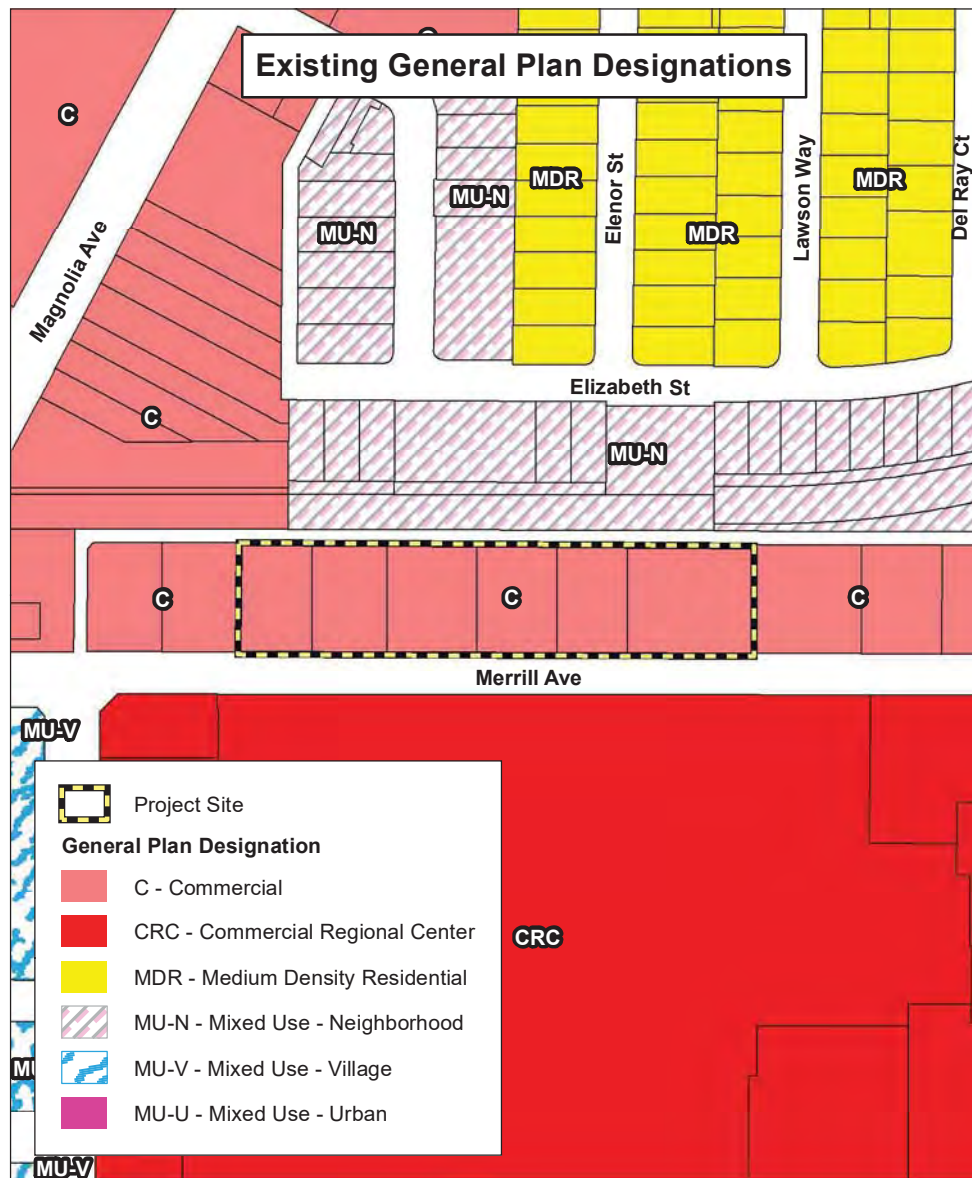
Merrill Avenue Brownstones Project

## Exhibit 13



(11/02/2017 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_Proposed\_SP\_Amendment.pdf

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Source: City of Riverside, 2017

## Existing and Proposed General Plan Amendment

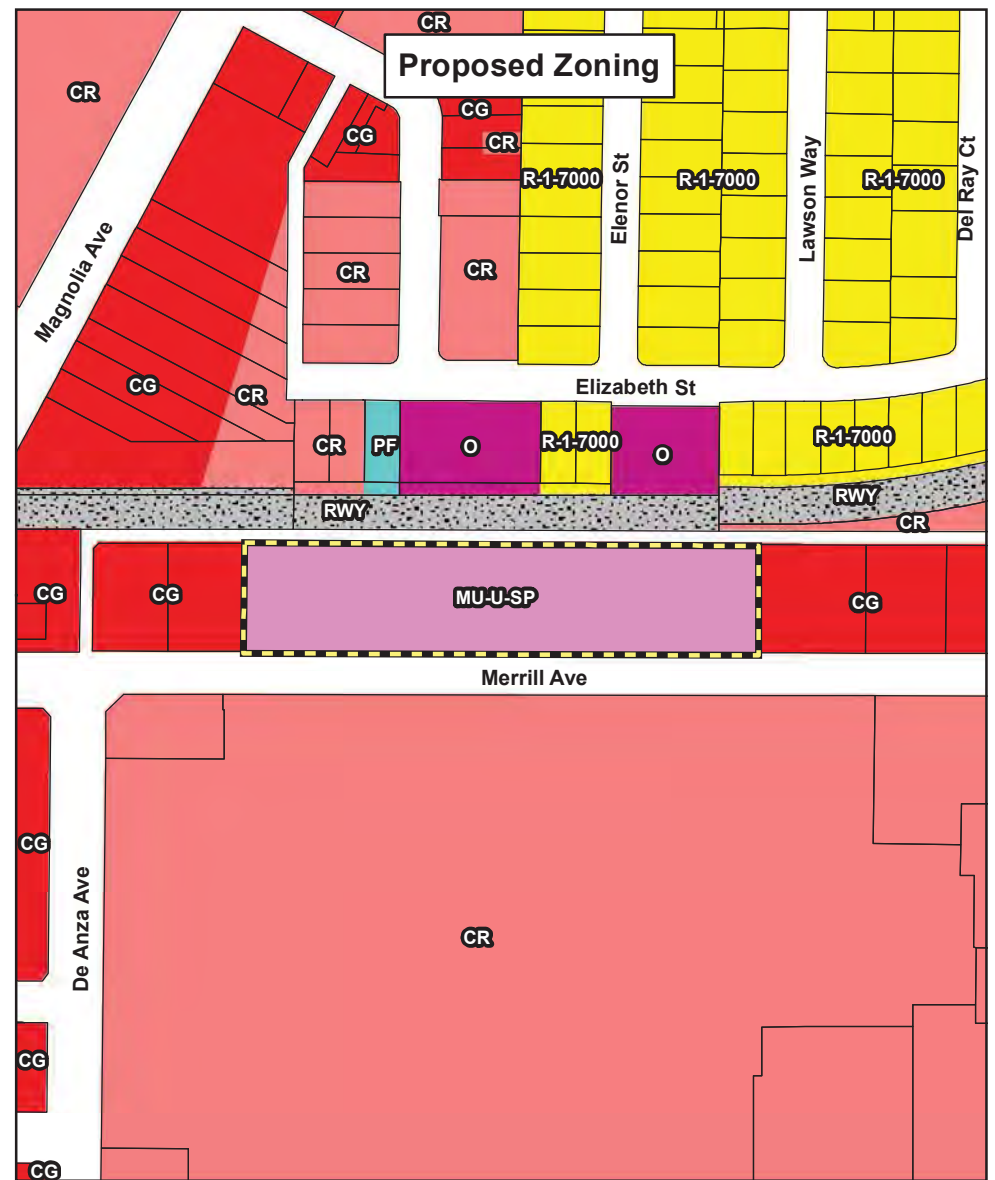
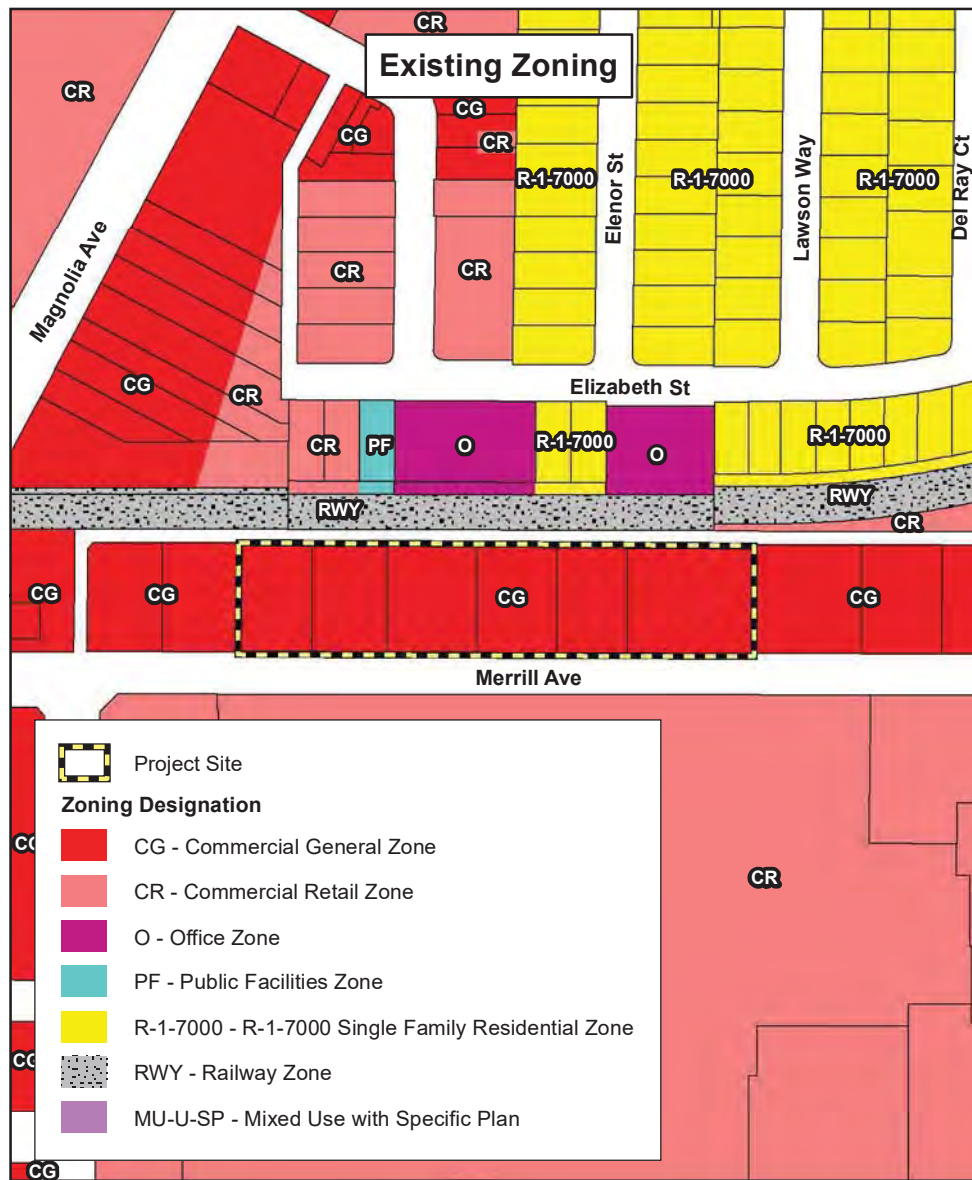
*Merrill Avenue Brownstones Project*



Exhibit 14



(Rev: 11-07-2017 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_Proposed\_GP\_Amendment.pdf



Source: City of Riverside, 2017

## Existing and Proposed Rezone

Merrill Avenue Brownstones Project



Exhibit 15





- **Variance (P17-0472 [VR])** – The proposed project requires a variance for the construction of walls over six feet tall along the northern, eastern and western boundaries of the site.

As a subsequent action, the existing six lots that comprise the site (Assessor's Parcel Numbers 225-140-001, -002, -003, -004, -005, and -006) would be consolidated/merged into one lot prior to issuance of building permits.

#### 11. Surrounding land uses and setting: Briefly describe the project's surroundings:

The project site is located in an urbanized area of the City and was previously developed with various commercial structures. As previously discussed, the structures have since been demolished, and the eastern portion of the site is paved with asphalt and used as an overflow surface parking lot for adjacent land uses. It is open to the public and is used as an informal park-and-ride lot, as overflow parking during the holiday season for Riverside Plaza, and for special events in the area (e.g., at Pachappa Elementary School and Magnolia Center Church of Christ). The western section of the site is not paved. On-site and adjacent developments, land use designations, and zoning are provided below.

	Existing Land Use	General Plan Designation	Zoning Designation
<b>Project Site</b>	Parking lot and undeveloped area	C - Commercial	CG-SP-Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones
<b>North</b>	Public alley and UPRR tracks	MU-N - Mixed Use – Neighborhood	RWY-SP-Railroad-Specific Plan (Magnolia Avenue) Overlay Zones, CR-SP-Commercial Retail-Specific Plan (Magnolia Avenue) Overlay Zones, PF-SP-Public Facility-Specific Plan (Magnolia Avenue) Overlay Zones, O-SP-Office-Specific Plan (Magnolia Avenue) Overlay Zones, R-1-7000-SP-Single Family Residential-Specific Plan (Magnolia Avenue) Overlay Zones
<b>East</b>	America's Tire Company	C - Commercial	CG-SP-Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones
<b>South</b>	Regal Cinemas 16 and Riverside Plaza shopping center	CRC - Commercial Regional Center	CR-SP-Commercial Retail-Specific Plan (Magnolia Avenue) Overlay Zones
<b>West</b>	VIP Night Club and restaurant	C - Commercial	CG-SP-Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones



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

- a. Santa Ana Regional Water Quality Control Board – Coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- b. Riverside County Airport Land Use Commission (ALUC)

**13. Other Environmental Reviews Incorporated by Reference in this Review:**

- a. Riverside General Plan 2025
- b. Riverside General Plan 2025 Final Program Environmental Impact Report (FPEIR) (State Clearinghouse No. 2004021108)
- c. Riverside Municipal Code

**13. California Native American tribes traditionally and currently affiliated with the project area requesting consultation pursuant to Public Resources Code Section 21080.3.1:**

- a. Rincon Band of Luiseño Indians
- b. Soboba Band of Luiseño Indians

**14. List of Appendices**

- a. Air Quality Analysis
- b. Phase 1 Cultural Resources Inventory
- c. Preliminary Geologic/Geotechnical Investigation
- d. Greenhouse Gas Emissions Analysis
- e. Phase 1 Environmental Site Assessment (ESA), Limited Phase 2 ESAs, and Phase 1 ESA Update and Phase II ESA Report
- f. Preliminary Water Quality Management Plan
- g. General Plan and Specific Plan Consistency Tables
- h. Noise and Vibration Analysis and Evaluation of Vibration Environment
- i. Traffic Impact Study

**15. Acronyms**

AB -	Assembly Bill
AQMP -	Air Quality Management Plan
ARB -	Air Resources Board
AUSD -	Alvord Unified School District
BCE -	Before Common Era
bgs -	below ground surface
BMP -	Best Management Practices
C&D -	construction and demolition
CAAQS -	California Ambient Air Quality Standards
CalARP -	California Accidental Release Prevention
CalEEMod -	California Emissions Estimator Model
CalGreen Code -	California Green Building Standards Code
CalEPA -	California Environmental Protection Agency
CalFire -	California Department of Forestry and Fire Prevention
CAP -	Climate Action Plan
CAPCOA -	California Air Pollution Control Officers Association
CDFW -	California Department of Fish and Wildlife
CE -	Common Era
CEQA -	California Environmental Quality Act
CERCLIS -	Comprehensive Environmental Response, Compensation, and Liability Information System

cfs -	cubic feet per second
CH <sub>4</sub> -	methane
CHMIRS -	California Hazardous Material Incident Report System
CMP -	Congestion Management Program
CNDDDB -	California Natural Diversity Database
CNPS -	California Native Plant Society
CO -	carbon monoxide
CO <sub>2</sub> -	carbon dioxide
CO <sub>2</sub> e -	carbon dioxide equivalent
CPTED -	Crime Prevention Through Environmental Design
DOF -	Department of Finance
DOGGR -	Division of Oil, Gas, and Geothermal Resources
DPM -	diesel particulate matter
DTSC -	Department of Toxic Substances Control
DWQ -	Division of Water Quality
DWR -	Department of Water Resources
EDR -	Environmental Data Resource
EIC -	Eastern Information Center
EIR -	Environmental Impact Report
EMI -	Emissions Inventory Data
EO -	Executive Order
EOP -	Emergency Operations Plan
EPAP -	Economic Prosperity Action Plan
ESA -	Environmental Site Assessment
FAR -	floor area ratio
FEMA -	Federal Emergency Management Agency
FMMP -	Farmland Mapping and Monitoring Program
FPEIR -	GP 2025 Final Programmatic Environmental Impact Report
FTIP -	Federal Transportation Improvement Program
GHG -	Greenhouse Gas
GP 2025 -	General Plan 2025
GPA -	General Plan Amendment
gpd -	gallons per day
GWP -	global warming potential
HCP -	Habitat Conservation Plan
HFC -	hydrofluorocarbons
HRA -	Health Risk Assessment
I- -	Interstate
IS -	Initial Study
LACM -	Los Angeles County Museum of Natural History
LHMP -	Local Hazard Mitigation Plan
LLC -	Limited Liability Corporation
LOS -	level of service
LST -	localized significance thresholds
LUST -	Leaking Underground Storage Tank
MATES-IV -	Multiple Air Toxics Exposure Study in the South Coast Air Basin
MBTA -	Migratory Bird Treaty Act
MEI -	maximally exposed individual
mg/Kg -	milligrams per kilogram
MM -	mitigation measure
MPO -	Metropolitan Planning Organization
MRF -	Materials Recycling Facility
MRZ -	Mineral Resource Zone

MS4 -	Municipal Separate Storm Sewer System
MSHCP -	Multiple Species Habitat Conservation Plan
msl -	mean sea level
MSSL -	Maximum Soil Screening Levels
MTCO <sub>2</sub> e -	metric tons of CO <sub>2</sub> e
N <sub>2</sub> O -	nitrous oxide
NAAQS -	National Ambient Air Quality Standards
NCCP -	Natural Communities Conservation Plan
NO <sub>2</sub> -	nitrogen dioxide
NPDES -	National Pollutant Discharge Elimination System
NRHP -	National Register of Historic Places
O <sub>3</sub> -	ozone
OES -	Office of Emergency Services
OPR -	Office of Planning & Research, State
PCE -	tetrachloroethene
PFC -	perfluorocarbon
PEIR -	Program Environmental Impact Report
PHMSA -	Pipeline and Hazardous Material Safety Administration
PM <sub>2.5</sub> -	fine particulate matter with a diameter of 2.5 microns or less
PM <sub>10</sub> -	respirable particulate matter with a diameter of 10 microns or less
ppb -	parts per billion
PQL -	Practical Quantification Limits
PRG -	Preliminary Remediation Goal
PW -	Public Works, Riverside
RCA -	Regional Conservation Authority
RCALUC -	Riverside County Airport Land Use Commission
RCALUCP -	Riverside County Airport Land Use Compatibility Plan
RCP -	Regional Comprehensive Plan
RCFC&WCD -	Riverside County Flood Control and Water Conservation District
REC -	Recognized Environmental Condition
RCTC -	Riverside County Transportation Commission
RHNA -	Regional Housing Needs Assessment
RMC -	Riverside Municipal Code
RMP -	Risk Management Program
RPD -	Riverside Police Department
RPU -	Riverside Public Utilities
RRG -	Riverside Restorative Growthprint
RTA -	Riverside Transit Agency
RTP -	Regional Transportation Plan
RUSD -	Riverside Unified School District
RWQCB -	Regional Water Quality Control Board
RWQCP -	Regional Water Quality Control Plant
SB -	Senate Bill
SCAG -	Southern California Association of Governments
SCAQMD -	South Coast Air Quality Management District
SCG -	Southern California Gas Company
SCH -	State Clearinghouse
SCS -	Sustainable Communities Strategy
SF <sub>6</sub> -	sulfur hexafluoride
SKR-HCP -	Stephens' Kangaroo Rat - Habitat Conservation Plan
SO <sub>2</sub> -	sulfur dioxide
SoCAB -	South Coast Air Basin
SPA -	Specific Plan Amendment

SR--	State Route
SWPPP -	Storm Water Pollution Prevention Plan
TAC -	toxic air contaminant
TDM -	Transportation Demand Management
TMDL -	Total Maximum Daily Load
TPH -	Total Petroleum Hydrocarbon
TRI -	Toxics Release Inventory
UCR -	University of California, Riverside
UPRR -	Union Pacific Railroad
USACE -	U.S. Army Corps of Engineers
USEPA -	U.S. Environmental Protection Agency
USFWS -	U.S. Fish and Wildlife Service
USGS -	United States Geologic Survey
UST -	underground storage tank
UWMP -	Urban Water Management Plan
VHFHSZ -	Very High Fire Hazard Severity Zone
VMT -	vehicle miles traveled
VOC -	volatile organic compound
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.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture & Forest Resources | <input type="checkbox"/> Air Quality               |
| <input type="checkbox"/> Biological Resources               | <input type="checkbox"/> Cultural Resources             | <input type="checkbox"/> Geology/Soils             |
| <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards & Hazardous Materials  | <input type="checkbox"/> Hydrology/Water Quality   |
| <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources              | <input type="checkbox"/> Noise                     |
| <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Service                 | <input type="checkbox"/> Recreation                |
| <input type="checkbox"/> Transportation/Traffic             | <input type="checkbox"/> Tribal Cultural Resources      | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> 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 Brian Norton, Senior Planner

For City of Riverside





City of Arts & Innovation

## COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT

### Planning Division

## Environmental Initial Study

### 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
<b>1. AESTHETICS.</b> Would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>1a. Response:</b> (<i>Source: General Plan 2025 FPEIR Section 5.1, Aesthetics; General Plan 2025 Open Space and Conservation Element; and Magnolia Avenue Specific Plan</i>)</p> <p><b>Less Than Significant Impact.</b> The City’s General Plan 2025 Open Space and Conservation Element identifies scenic resources in the City and states that “the hillsides and ridgelines above Riverside offer scenic benefits to the community.” Notably, Box Springs Mountain, Mount Rubidoux, Arlington Mountain, Alessandro Heights, and the La Sierra/Norco Hills are scenic resources and offer scenic views in the City (Riverside 2007a). The project site is not located near these scenic resources, but there are distant views of the Box Springs Mountain to the east and Mount Rubidoux to the north from the project site and vicinity. Also, there are views of Pachappa Hill (a prominent local hill located 0.5 mile to the northeast of the site), an unnamed hill near Olivewood Cemetery 0.5 mile to the southeast, and the Jurupa Mountains and the San Gabriel Mountains to the distant north. Pachappa Hill and the unnamed hill are not considered scenic resources that create major ridgelines providing a visual backdrop for the entire City.</p> <p>The proposed project consists of an infill development within an urbanized area and is surrounded by existing development in an area with no recognized scenic vistas. The proposed project would introduce buildings up to 3-stories on a site that currently has no aboveground structures. Easterly views of the Box Springs Mountains would still be available from Merrill Avenue. The distant and partially obstructed views of Mount Rubidoux from Merrill Avenue would be further obstructed by the proposed development; however, the viewers from Merrill Avenue would consist mainly of travelling motorists, pedestrians and bicyclists with temporary views of the mountain as they pass by or walk in the area. However, the proposed project does not involve any development that would alter these local hillsides, and views of these hillsides from various public vantage points in the City would remain available. Therefore, the proposed project would not have a substantial adverse effect on a scenic vista.</p> <p>Further, the proposed project design has been reviewed for consistency with the City’s aesthetic values. The City’s General Plan 2025 policies are aimed at balancing development interests with broader community preservation objectives. The Magnolia Avenue Specific Plan also sets policies, development standards, and design guidelines to maintain the visual character along the Magnolia Avenue corridor. Through project compliance and implementation of applicable General Plan and Specific Plan objectives and policies, development standards, design guidelines, and requirements, including General Plan Objectives LU-27, LU-28, LU-29, LU-30, LU-67 and Policies LU-30.3, LU-58.7, LU-67.4, and LU-67.5; Specific Plan Policies 1.6 and 2.2; Magnolia Center District Policies 1.3, 1.4, 1.5, 1.6, 1.7, and 1.8 (see Appendix G of this Initial Study for project consistency with these objectives and policies), the potential direct, indirect, and cumulative impacts of the proposed project on scenic vistas are considered <b>less than significant</b>.</p>				
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>1b. Response:</b> (<i>Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways; General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards, Parkways, Table 5.1-A – Scenic and Special Boulevards, Table 5.1-B – Scenic Parkways; City’s Urban Forestry Policy Manual; RMC Title 20 – Cultural Resources; Magnolia Avenue Specific Plan; and Caltrans List of Eligible and Officially Designated State Scenic Highways</i>)</p> <p><b>Less Than Significant Impact.</b> The California Scenic Highway Program by the California Department of Transportation (Caltrans) classifies highways meeting specific criteria as “scenic” throughout the State. The purpose of the program is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. According to Caltrans, “a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler’s enjoyment of the view” (Caltrans 2017a). Review of the California Scenic Highway Mapping System shows that no officially designated Scenic Highways are near the project site. State Route (SR-) 243 from the Interstate (I-) 10 to SR-74 is an</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>officially designated State Scenic Highway but is nearly 30 miles east of the site. I-15 from SR-91 to the San Diego County Line and SR-91 from I-15 to the Orange County line are eligible Scenic Highways located approximately 10 miles southwest of the site. Due to distance and intervening structures, terrain, and vegetation, the proposed project would not be visible from SR-243 and the segments of I-15 and SR-91 that are eligible Scenic Highways. The proposed project would have no impact on these eligible and officially designated Scenic Highways and would not damage scenic resources, including trees, rock outcroppings, and historic buildings along a State Scenic Highway.</p> <p>Figure CCM-4 in the Circulation Element of the Riverside General Plan 2025 identifies Special Boulevards, Scenic Boulevards, and Scenic Parkways that require special landscaping and additional right-of-way, if needed. Merrill Avenue along the southern boundary of the project site is not designated as a Special or Scenic Boulevard or Scenic Parkway. The City's General Plan proposes to restore the Magnolia/Market Corridor as a scenic showcase roadway and designates it as a Special and Scenic Boulevard and a Scenic Parkway (Riverside 2007a). Magnolia Avenue is located 480 feet west of the site and generally extends in a northeast-southwest direction. There are only temporary obstructed views of the project site from vantage points along Magnolia Avenue at its intersection with Merrill Avenue; views are obstructed by existing intervening development (i.e., Staples store, VIP restaurant, and former Bank of America offices) and mature trees on Merrill Avenue between Magnolia Avenue and the project site. The proposed project would have no adverse impact on the City's Scenic Boulevards and Parkways. Changes in distant views of the site from Magnolia Avenue would be less than significant.</p> <p>Since there are no State Scenic Highways within the City that could potentially be impacted by the proposed project; and the project site is not located along a Scenic Boulevard, Parkway or Special Boulevard as designated by the City's General Plan 2025, the proposed project would not have any effect on scenic resources within a scenic roadway. Also, there are no rock outcroppings or historic buildings on or near the project site, so no impacts to these resources would occur. The proposed project does not involve any physical improvements along Magnolia Avenue, and would implement the Magnolia Avenue Specific Plan Policies 1.6 and 2.2, and Magnolia Center District Policies 1.3 through 1.8, which would enhance travel and scenic resources in the Magnolia Avenue corridor (which includes the segment of Merrill Avenue adjacent to the project site). In addition, existing street trees on Merrill Avenue that would be retained and/or removed and the planting of new street trees along Merrill Avenue would comply with the City's Urban Forestry Policy Manual for tree preservation, removal, planting, and care. Lastly, the Magnolia Avenue Specific Plan includes regulations for building setbacks, building heights, land uses, landscaping, parking and other development standards for the development of properties within the Specific Plan area. The proposed project would comply with these standards to avoid any conflict with the development of Magnolia Avenue as Special and Scenic Boulevard and a Scenic Parkway. Therefore, any potential adverse direct, indirect or cumulative impacts from the proposed project are considered <b>less than significant</b>.</p>				
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>1c. Response: (Source: Site Visit; General Plan 2025; General Plan 2025 FPEIR; RMC Title 19 – Zoning; and Magnolia Avenue Specific Plan)</b></p> <p><b>Less Than Significant Impact.</b> The undeveloped project site currently consists of a paved parking lot to the east and an unpaved disturbed lot to the west. The site lacks natural topography; on-site elevations are 850 feet above mean sea level (msl) at the eastern end to 840 feet above msl at the western end, with a slope of about 1 percent across the site). Existing vegetation is limited to palm trees along Merrill Avenue. The visual character of the project site and surrounding areas is depicted in the site photographs presented in Exhibits 16a, 16b, and 16c. As shown, the area surrounding the project site can be characterized as an urban area developed with various residential, retail, commercial/office, and parking lot uses. The aerial photograph provided previously on Exhibit 2 shows the project site's relationship to the surrounding land uses. There is not a single or common architectural theme but rather a combination of characteristics shaped by the individual building types and heights that occur in the project area vicinity. As previously identified, there are no scenic resources on or in the immediate vicinity of the project site. It should be noted that due to the relatively flat topography of the project site and developed nature of the surrounding area, views of the project site are limited to vantage points in the immediate vicinity of the project site. Distance views are obstructed by intervening development and mature landscaping.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Views of the site from Merrill Avenue are provided in Exhibit 16a and show current conditions of the site as a relatively flat and undeveloped area (Photos 1 and 2), with asphalt pavement on the eastern section (Photos 3 and 4). The existing sidewalk and row of street trees define the site's southern boundary. Views from vantage points along the north side of the site are provided in Exhibit 16b to further demonstrate current site conditions (Photos 5 and 7). Utility poles and overhead lines along the north side of the alley and the raised tracks of the UPRR to the north (Photos 5 and 6) are prominent visual features. Exhibit 16c provides photographs from vantage points north of the project site along Elizabeth Street, and demonstrates that views to the south from this public roadway are obstructed by existing uses and vegetation. It should be noted that residential uses north of the site (north of and adjacent to the railroad tracks) front Elizabeth Street, and block walls, wooden fences in the backyards largely obstruct views of the project site (Photo 12).</p> <p>During construction activities at the site, there would be views of construction fencing, construction equipment, ongoing construction activities, exposed soils, building materials and debris, and various construction vehicles. This visual change is considered less than significant because of its temporary nature and because these views are typical of construction sites in an urban environment.</p> <p>As shown on the conceptual site plan provided in Exhibit 3, the building elevations presented in Exhibits 5a, 5b, and the conceptual renderings in Exhibits 17 and 18, the proposed project would alter the visual character of the project site and views from vantage points on Merrill Avenue by replacing the existing surface parking lot and undeveloped lot with various mixed-use buildings. The forms and elements are inspired by the pedestrian character of the adjacent regional shopping center context and the historic "East Coast Brownstone" residential character. There would be 4 three-story U-shaped residential buildings with ground level amenities and retail uses along Merrill Avenue, and seven detached garages that would be up to 19-foot-high structures at the northern end of the site (along the railroad tracks) are proposed. A one-story, 15-foot high cabana is also proposed at the center of the site. The building height for the four primary structures would be no more than 50 feet maximum at tower features, with the building parapets at 44 feet above ground level for the three-story elements (the upper parapet height at the north side of each building would be up to 44 feet high and the parapet at the south side of each building would be up to 42 feet high), 30-feet above ground level for two-story elements, and 20-foot above ground level for one-story elements. The heights of the proposed buildings would approximately match or be lower than the heights of the existing buildings at Riverside Plaza to the south and the office building to the southwest. The varied elevations are proposed to break up the massing of each building and to provide visual interest. The ground floors of the four buildings would match the elevation of the sidewalk on Merrill Avenue, and stairs would lead up to the entry stoops at the second floors of the buildings. As in the East Coast Brownstone architectural style, the street scene would give individuality to each residence through a different but compatible character.</p> <p>Exterior treatments would include materials with a natural stone appearance (i.e., manufactured stone veneer, masonry veneer, and cement plaster in varying finishes, colors, and treatments and cultured stone in selected areas). Windows would have awnings, painted shutters, built-up window trims, and wrought iron railing. Parapet roofs would have varying heights and decorative cornices. Stairs would be marked by low columns and decorative railing and entry stoops. Building entrances would have side columns and pediments. The main exterior colors would be deep earth tones (e.g., brown and grey) with red awnings as accent, complementing the beige, white, and brown colors of adjacent buildings. Wall rustication, window trims and shutters, awnings, and storefronts would create a pedestrian-scale environment.</p> <p>Existing street trees (Mexican fan palm trees) along Merrill Avenue would be preserved in place and/or removed, with the landscaped areas between the buildings and sidewalk planted with vertical evergreen trees and flowering canopy trees. In addition, the setback areas at the eastern and western edges of the site would be landscaped with groundcover, and evergreen canopy trees and a small evergreen tree would be planted at the northeastern and northwestern corners of the site. The paseos between buildings, common recreation area, and other areas around the proposed buildings would be planted with groundcover, evergreen canopy trees, vertical accent trees, and small evergreen trees. Landscaped areas between the garages would be planted with groundcover and small evergreen trees. The proposed planter areas on Merrill Avenue would also be planted with flowering accent trees, and the landscaped median on Merrill Avenue would be planted with evergreen canopy trees (see Exhibit 8).</p> <p>While there would be limited views of the proposed development from vantage points to the north, the garage walls and block walls would have varying heights of 14, 17, and 19 feet and would be treated with art to break up the monotony of the</p>				





Photo 1: Looking east at sidewalk along Merrill Avenue.



Photo 2: Looking west at the site from the sidewalk southeast of the site.

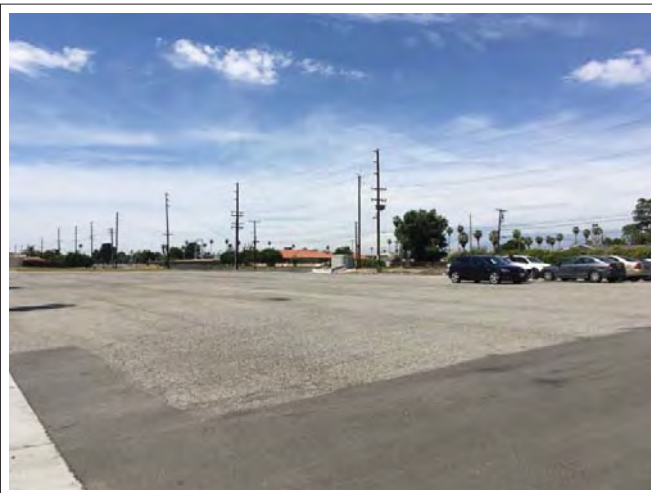


Photo 3: Looking northwest at the site from the southeast corner of the site.



Photo 4: Looking southwest at the site from the northeast corner of the site.



## Site Photographs

*Merrill Avenue Brownstones Project*

Exhibit 16a



(11/06/2017 MMD) R:\Projects\PEL\_Pelican\3PEL\020100\Graphics\IS-MND\ex\_Photos\_Site.pdf

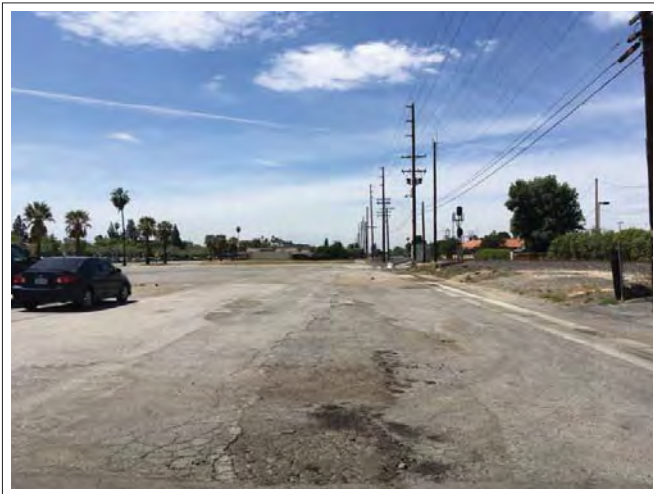


Photo 5: Looking west at the alley and railroad tracks from northeast of the site.



Photo 6: Looking east at the alley and railroad tracks from northwest of the site.



Photo 7: Looking southeast at the site from the northwest corner of the site.



Photo 8: Looking south at western site boundary.



## Site Photographs

*Merrill Avenue Brownstones Project*

Exhibit 16b



(11/06/2017 MMD) R:\Projects\PEL\_Pelican\3PEL\020100\Graphics\IS-MND\ex\_Photos\_Site.pdf





Photo 9: Looking southwest at residences on Elizabeth Street.



Photo 10: Looking south at office on Elizabeth Street.



Photo 11: Looking southeast at RPU substation.



Photo 12: Looking north at residences across alley and UPRR tracks from northeast corner of the site.



## Site Photographs

*Merrill Avenue Brownstones Project*

Exhibit 16c



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Source: Architects Orange, 2017

## Conceptual Rendering – Aerial View Looking Northeast on Merrill Avenue

*Merrill Avenue Brownstones Project*

Exhibit 17



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**SOUTH ELEVATION- MERRILL AVENUE**

CLUB RM

RECREATION / POOL AREA

FITNESS



Source: Architects Orange, 2017

## Conceptual Rendering – Views from Merrill Avenue

Merrill Avenue Brownstones Project

Exhibit 18



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ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>new structures and walls and provide visual interest for viewers standing north of the site (such as people in the alley, in passing trains, and in rear yards of residential and office uses farther north). The conceptual rendering and building elevations presented in Exhibit 19 show that the upper stories of the residential buildings would be visible above the garages and would feature patios, windows, and exterior stairwells. The parapet roofs would also have varying heights and decorative cornices.</p> <p>The proposed project is an infill project located in an urbanized area, and the site is surrounded by existing development, and is consistent with the objectives and policies of the Magnolia Center District in the Magnolia Avenue Specific Plan, as discussed under Threshold 10b and in Appendix G of this Initial Study. The proposed project has also been designed to be compatible with the surrounding area and has been subject to the required Site Plan Review Permit (as outlined in Chapter 19.770 of the RMC) to ensure consistency with the Design and Sign Guidelines in the Magnolia Avenue Specific Plan and the Citywide Design Guidelines (related to building placement and orientation, scale and mass, building modulation and articulation, site design, pedestrian space and circulation, privacy for residential units, open space, architectural style, materials and finishes, and color and texture) and to prevent adverse impacts to the visual quality of the project area.</p> <p>Therefore, the proposed project would not degrade the existing visual character of the area; and direct, indirect, and cumulative impacts on the visual character and quality of the area are considered <b>less than significant</b>.</p>				
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>1d. Response:</b> <i>(Source: General Plan 2025; General Plan 2025 FPEIR Figure 5.1-2 – Mount Palomar Lighting Area; and RMC Title 19- Zoning)</i></p> <p><b>Less Than Significant Impact.</b> The project site is located in an urbanized area that is already subject to nighttime lighting from existing development, including commercial parking lots, outdoor security lighting, and lighted signs. In addition, Merrill Avenue and adjacent streets have existing streetlights. The proposed project would introduce new light sources at the site during construction and operation that currently do not exist. New sources of light and glare during project construction would primarily be for security purposes and would be temporary; this lighting would cease upon construction completion. New operational light sources would be typical of a residential neighborhood, and would include exterior building lights, internal roadway and pathway lights, and pool and recreation area lights, garage lights, automobile headlights, security lighting, decorative landscape lighting, etc. These light sources would be similar to existing light sources at adjacent development that contribute to light and glare and affect the nighttime sky in the project area.</p> <p>There are no light-sensitive uses adjacent to the project site; commercial and retail uses are located to the east, west and south, and an alley and railroad track to the north. The residential uses further to the north of the project site would be physically separated from the proposed project by distance (minimum 75-feet), the proposed 17- to 19-foot-high garages along the northern property boundary, existing and proposed walls, fences and vegetation. Further, on-site lights would be installed in compliance with Chapter 19.556 and Section 19.590.070 of the RMC. Chapter 19.556 of the RMC sets forth standards to ensure that lighting provided for projects is adequate to light the project for safety while not causing light spillage onto neighboring properties. Section 19.590.070 of the RMC establishes performance standards for light and glare and identifies required lighting for safety purposes (at entryways, along walkway, between buildings, and within parking areas), and minimum lighting levels and other lighting requirements. A photometric study was completed for the proposed project and demonstrates that lighting levels at the northern edge of the site would range from 1.2 to 2.4 footcandles. Lighting that would be provided at the back of the garages to provide security lighting for the alley would comply with Chapter 19.556 and 19.590.070 of the RMC and would not spillover into the residential uses located approximately 53 feet north of the alley, across the railroad tracks. Lighting levels at the western boundary of the site would range from 1.1 to 7.9 footcandles, while lighting levels at the eastern boundary would range from 1.3 to 8.3 footcandles. Perimeter walls up to 13 feet high would separate the project from the VIP nightclub and perimeter walls up to 14 feet high would separate the site from America's Time Company. These adjacent commercial uses would not be adversely impacted by light from the project. Lighting levels at the southern boundary would range from 0.3 to 2.1 footcandles and would not adversely affect vehicles on Merrill Avenue or people at Riverside Plaza farther south. The project site is also located outside the Mount Palomar Policy Area; thus, the project would not affect nighttime observations from the Mount Palomar Observatory.</p>				



**NORTH ELEVATION- RAILROAD EDGE**



**GARAGES AND WALL HEIGHTS**



**VIEW LOOKING SOUTHEAST ALONG THE RAILROAD**

Views from the North  
Merrill Avenue Brownstones Project

Source: Architects Orange, 2017

Exhibit 19



(11/09/2017 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_VIEWS\_North.pdf

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on intensity and direction of sunlight in relation to the presence of reflective materials. Glare can create hazards to motorists and nuisances for pedestrians and other viewers. As shown on the building elevations presented in Exhibit 4, the proposed project does not propose mirrors, metallic surfaces, or glazing materials over large exterior surfaces, which may have the potential to create glare from sunlight. Rather, the proposed buildings would feature facade materials with a natural stone appearance. Glass and glazing materials would be limited to doors and windows that would occupy limited and scattered areas of the building facades. Additionally, in compliance with Chapter 19.556 and Section 19.590.070 of the RMC, lighting would be directed, oriented, and shielded to prevent light from shining onto adjacent properties, public rights-of-way, and driveway areas in a manner that would obstruct drivers' vision. The configuration of project driveways and roadways would not direct vehicle headlights into sensitive uses. Therefore, less than significant impacts related to glare would occur.</p> <p>As such, based on project design and compliance with the City's regulations regarding light and glare (Chapter 19.556 and Section 19.590.070), a <b>less than significant impact</b> would occur directly, indirectly, or cumulatively from this project.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>2. AGRICULTURE AND FOREST RESOURCE.</b>				
<p>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 compiled 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:</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>2a. Response: (Source: General Plan 2025 – Figure OS-2 – Agricultural Suitability and FMMP Riverside County Important Farmland 2014)</b></p> <p><b>No Impact.</b> The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP) pursuant to Section 65570 of the California Government Code. Under the FMMP, the project site and the adjacent developed areas are designated as Urban and Built-Up Land. No Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance is on or near the site. The project site and the surrounding area are not subject to agricultural activities. Rather, the project site is located within an urbanized area with surrounding commercial, office, and residential uses. A review of Figure OS-2 – Agricultural Suitability of the General Plan 2025 reveals that the site is not designated as, and is not adjacent to or in proximity to, any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Therefore, the proposed project would have <b>no impact</b> directly, indirectly or cumulatively on Farmland or agricultural uses.</p>				
<p>b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>2b. Response: (Source: General Plan 2025 – Figure OS-3 - Williamson Act Preserves; General Plan 2025 FPEIR – Figure 5.2-2 - Williamson Act Preserves and Figure 5.2-4 – Proposed Zones Permitting Agricultural Uses; Zoning Map of the City of Riverside; and RMC Title 19 –Zoning)</b></p> <p><b>No Impact.</b> The project site is zoned as CG-SP – Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones, which does not allow agricultural uses. No areas near the project site are allowed to support agricultural uses under their current zoning designations. The proposed project includes a Rezone to MU-U-SP; the Specific Plan refers uses in a mixed-use zone back to the Base Zones Permitted Land Uses Table 19.150.020(A) of the City's Zoning Code, which does not allow for agricultural uses in mixed use zones. A review of Figure OS-3 in the General Plan 2025 and Figure 5.2-2 – Williamson Act Preserves in the General Plan 2025 FPEIR reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Therefore, the proposed project would have <b>no impact</b> directly, indirectly, or cumulatively.</p>				
<p>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</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
<p><b>2c. Response:</b> (Source: <i>Zoning Map of the City of Riverside; RMC Title 19 – Zoning; and General Plan 2025 Open Space and Conservation Element Figure OS-5 - Habitat Areas and Vegetation Communities</i>)</p> <p><b>No Impact.</b> The project site is currently vacant and a surface parking lot. As shown in Figure OS-5 - Habitat Areas and Vegetation Communities in the General Plan 2025 Open Space and Conservation Element, the project site and surrounding area do not support riparian forest or woodland/forest vegetation. The site is zoned as CG-SP, which does not allow timberland uses. The proposed Rezone of the site to MU-U-SP also would not allow timberland uses on the site. There are no on-site trees that are part of a forest or that may be considered timberland. Thus, no impact on forest land, timberland, or forestry resources would occur with the proposed project. Therefore, <b>no impact</b> to forest land would occur from this project directly, indirectly, or cumulatively.</p>				
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>2d. Response:</b> (Source: <i>General Plan 2025 Open Space and Conservation Element Figure OS-5 - Habitat Areas and Vegetation Communities and National Forest Locator Map</i>)</p> <p><b>No Impact.</b> The project site and surrounding areas do not support a riparian forest or woodland/forest vegetation, as shown in Figure OS-5 - Habitat Areas and Vegetation Communities in the General Plan 2025 Open Space and Conservation Element. Existing vegetation at the project site is limited to street trees along the parkway on Merrill Avenue, which is not forest land. The nearest National Forest to the site is the Cleveland National Forest, located within the Santa Ana Mountains and approximately 13.4 miles southwest of the project site. Therefore, the proposed project would have <b>no impact</b> on forest land directly, indirectly or cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>2e. Response:</b> (Source: <i>General Plan 2025 Open Space and Conservation Element Figure OS-2 – Agricultural Suitability and Figure OS-3 – Williamson Act Preserves; FMMP Riverside County Important Farmland 2014; Zoning Map of the City of Riverside; RMC Title 19- Zoning; and National Forest Locator Map</i>)</p> <p><b>Note:</b> For the purposes of this analysis, Farmland and agricultural land considered under this threshold include Farmland of Local Importance, land subject to Proposition R and Measure C, and land under Williamson Act Contract, as well as any other land being used for agricultural uses as non-conforming uses.</p> <p><b>No Impact.</b> The FMMP identifies the site as Urban/Built Up Land and not as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The project site is a surface parking lot and undeveloped area located in an urbanized area of the City. Also, the site does not support agricultural resources or operations. In addition, there are no agricultural resources or operations, including farmlands near the site. Thus, the proposed project would not result in the conversion of designated farmland to non-agricultural uses.</p> <p>The project site and surrounding area do not support trees that may be considered a forest. Therefore, the proposed project would not affect or convert forest land to other uses. <b>No impact</b> would occur from this project directly, indirectly, or cumulatively related to the conversion of Farmland to non-agricultural use or to the loss of forest land.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>3. AIR QUALITY.</b>				
Where available, the significance criteria established by the applicable air quality management 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>3a. Response:</b> ( <i>Source: South Coast Air Quality Management District's 2016 Air Quality Management Plan (AQMP) and Air Quality Analysis prepared by Psomas in January 2018 [included in Appendix A]</i> )				
<p><b>Less Than Significant Impact.</b> An Air Quality Analysis was prepared for the proposed project (see Appendix A of this Initial Study) and is summarized below. On March 3, 2017, the South Coast Air Quality Management District (SCAQMD) adopted the 2016 Air Quality Management Plan (AQMP), which is a regional and multi-agency effort (SCAQMD, California Air Resources Board [ARB], Southern California Association of Governments [SCAG], and U.S. Environmental Protection Agency [USEPA]). The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016–2040 RTP/SCS); updated emission inventory methodologies for various source categories; and SCAG's latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. The 2016 AQMP would develop integrated strategies and measures to meet the following National Ambient Air Quality Standards (NAAQS):</p> <ul style="list-style-type: none"> <li>• 8-hour Ozone (O<sub>3</sub>) (75 parts per billion [ppb]) by 2031</li> <li>• Annual PM<sub>2.5</sub> (12 micrograms per cubic meter [µg/m<sup>3</sup>]) by 2025</li> <li>• 8-hour O<sub>3</sub> (80 ppb) by 2023</li> <li>• 1-hour O<sub>3</sub> (120 ppb) by 2022</li> <li>• 24-hour PM<sub>2.5</sub> (35 µg/m<sup>3</sup>) by 2019</li> </ul> <p>For a specific project to be consistent with the AQMP, the pollutants emitted from the proposed project should not (1) exceed the SCAQMD CEQA air quality significance thresholds and (2) conflict with or exceed the assumptions in the AQMP.</p> <p>The proposed project meets the first criterion. As discussed under Threshold 3b below, air pollutant emissions from the proposed project would be less than the SCAQMD thresholds and would not result in a significant impact.</p> <p>With respect to the second criterion, the site is currently zoned CG-SP - Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones with a Commercial land use designation, and is used as an overflow parking lot. As previously identified, the proposed project would require a Rezone, a General Plan Amendment, a Specific Plan Amendment, and other discretionary approvals. Thus, it is not consistent with the land uses assumptions that were the basis for the growth projections provided by the City to SCAG for use in the growth forecasts in the 2016–2040 RTP/SCS and the 2016 AQMP. However, projects that are consistent with the projections of employment and population forecasts identified by SCAG are considered consistent with the AQMP growth projections, since these forecast numbers were used by SCAG's modeling section to forecast travel demand and air quality for planning activities such as the RTP/SCS, the SCAQMD's AQMP, Federal Transportation Improvement Program (FTIP), and the Regional Housing Needs Allocation Plan. The proposed project involves the development of 108 apartment units and a 1,200-square-foot retail area at the site and may directly induce population growth in the City. The proposed project would provide 16 studios, 60 one-bedroom units, and 32 two-bedroom units. Using the City's 2017 average household size of 3.33 persons per dwelling unit as a conservative worst-case estimate (since studios are likely to be occupied by fewer than 3.33 persons per unit), the proposed project would generate approximately 360 residents in the City. This additional population would represent a negligible population increase (approximately 0.11 percent increase) compared to the City's 2017 population of 326,792 persons. The 108 dwelling units would also lead to a negligible increase (approximately 0.11 percent) in the City's current housing stock of 100,113 dwelling units (DOF 2017). In addition, the proposed retail area would provide permanent jobs for area residents. Based on the City's Transportation Demand Management (TDM) Regulations (Chapter 19.880 of the RMC) that assume an average floor area of 500 square feet per employee for retail commercial uses, the proposed project's 1,200-square-foot retail space would have</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>approximately three employees. Based on TDM average floor area of 250 square feet per employee for office/professional uses, five employees are expected at the 1,200-square-foot leasing office. Thus, a total of eight employees would be working on site, which would be a negligible amount (less than 0.01 percent) of the City's 2015 employment base of 139,774 individuals (CalRecycle 2017c) and less than the number of employees that would occupy the site if developed with commercial uses.</p> <p>SCAG projections show a population of 386,600 residents, 118,600 households, and 200,500 jobs in the City of Riverside by 2040 (SCAG 2016b). The project residents would represent less than 0.1 percent of the City's projected future 2040 population and less than 0.1 percent of the projected households in the City. The on-site employment (eight employees) would also make up less than 0.01 percent of the City's 2040 projected employment base. Thus, the population increase associated with occupancy of the proposed project's 108 dwelling units would be within SCAG's growth projections, which are the basis for the growth assumptions in the 2016 AQMP.</p> <p>Therefore, the proposed project would not conflict with the emission or growth projections used in the 2016 AQMP. The proposed project would have a <b>less than significant impact</b> directly, indirectly, and cumulatively, as it relates to the implementation of an air quality plan.</p>				
<p>b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>3b. Response:</b> <i>(Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds; South Coast Air Quality Management District's 2016 AQMP; CalEEMod; and Air Quality Analysis prepared by Psomas in January 2018 [included in Appendix A])</i></p> <p><b>Less Than Significant Impact.</b> The proposed project would generate air pollutant emissions primarily from (1) demolition of on-site asphalt pavement, which would require export of demolition and construction debris (estimated at 136 truckloads of exported asphalt material); (2) on-site grading activities, which are expected to include the export of 418 truckloads of soils; (3) construction and occupancy/operation of 108 multi-family dwelling units, 1,200 square feet of commercial retail space, and accessory structures; and (4) new vehicle trips coming to and from the project site during project occupancy.</p> <p>A project may have a significant impact where project-related emissions of "criteria" air pollutants would exceed federal, State, or regional standards or thresholds or where project-related emissions would substantially contribute to an existing or projected air quality violation. Criteria air pollutants include the following, which are described in the Air Quality Analysis included in Appendix A of this Initial Study: ozone (O<sub>3</sub>), respirable particulate matter with a diameter of 10 microns or less (PM<sub>10</sub>), fine particulate matter with a diameter of 2.5 microns or less (PM<sub>2.5</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. The SCAQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards. A project with daily emission rates that exceed the SCAQMD's thresholds (shown in Table 4 of the Air Quality Analysis in Appendix A of this Initial Study and in Tables 1 and 3 below) would have a significant effect on regional air quality.</p> <p>Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1 computer program. CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and County-specific information. Construction of the proposed project is modeled to begin in 2018 and occur for 20 months, with occupancy/operations starting in 2019. The CalEEMod input for construction emissions was based on the proposed project's construction assumptions and default assumptions from CalEEMod. The input for operational emissions was based on the vehicle trip generation rates provided in the Traffic Impact Study and the proposed building area. Additional input details are included in the Air Quality Analysis (refer to Attachment A of Appendix A of this Initial Study).</p>				

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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#### ***Construction Emissions***

Air pollutant emissions would primarily occur from construction equipment exhaust; fugitive dust from demolition and site grading; exhaust and particulate emissions from trucks hauling demolition and construction debris, soil, and building materials to and from the project site and from vehicles driven to and from the site by construction workers; and volatile organic compounds (VOCs) from painting and asphalt paving operations. The proposed project would comply with applicable SCAQMD rules and regulations, including Rule 403 for fugitive dust control and Rule 1113 for architectural coatings. Rule 403 requires the implementation of dust control measures, including regular watering of active grading areas and unpaved roads, limiting vehicle speeds on unpaved surfaces, stabilizing stockpiled earth, and curtailing grading operations during high wind conditions. Watering of active grading areas is included in the CalEEMod emissions analysis and results in reduced PM10 and PM2.5 emissions. SCAQMD Rule 1113 limits the VOC content of architectural coatings. The emission reductions associated with compliance with this rule have been included in the emissions calculations.

#### **Regional Emissions Thresholds – Maximum Daily Regional Emissions**

Table 1, Estimated Maximum Daily Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed project and compares the estimated emissions with the SCAQMD's daily regional emission thresholds. As shown, project construction mass daily emissions would be less than the SCAQMD's thresholds for all criteria air pollutants. As such, emissions from construction activities would not violate any air quality standard or substantially contribute to an existing or projected air quality violation. Impacts would be less than significant, and no mitigation is required.

**TABLE 1  
ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS**

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
2018	5	54	29	<1	6	4
2019	20	31	30	<1	4	2
<b>Maximum</b>	<b>20</b>	<b>54</b>	<b>30</b>	<b>&lt;1</b>	<b>6</b>	<b>4</b>
<b>SCAQMD Thresholds (Table 4)</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<b>Exceeds SCAQMD Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.						
Source: SCAQMD 2015 (thresholds); see Attachment A in Appendix A of this Initial Study for CalEEMod model outputs.						

#### **Construction-Phase Localized Significance Thresholds**

In addition to the mass daily emissions thresholds, short-term local impacts to nearby sensitive receptors from on-site emissions of NO<sub>2</sub>, CO, PM10, and PM2.5 are examined based on SCAQMD's localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating localized impacts.

The LST method is recommended for projects on 5 acres or less. For the purposes of an LST analysis, the SCAQMD considers receptors where it is possible that an individual could remain exposed for 1 hour to NO<sub>2</sub> and CO and for 24 hours for PM10 and PM2.5. These emissions limits in the lookup tables are based on the SCAQMD's Ambient Air Quality Standards.

The closest receptors to the site include a nightclub/restaurant adjacent to the project's western boundary, an automotive repair/tire store 50 feet from the site's eastern boundary, office and residential uses 75 feet from the project's northern boundary, and retail uses approximately 130 feet from the project's southern boundary. The LST emissions thresholds for

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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receptors within 25 meters (82 feet)<sup>2</sup> of the project site are used below. Thresholds for receptors farther away would be less stringent, and the proposed project emissions would be a smaller fraction of the thresholds.

Table 2 shows the maximum daily on-site emissions for construction activities compared with the SCAQMD LSTs with receptors within 25 meters. While the site covers approximately 3.17 acres, as per the SCAQMD, the thresholds shown are from the lookup tables for a site that is 1.5 acres, which is calculated based on the equipment mix and quantities for the most intensive construction phase and is not calculated based on the size of the project site, in order to use more conservative LST thresholds. The proposed project's maximum daily on-site emissions would occur during the asphalt demolition phase (for NOx and CO) and during the grading phase (for PM10 and PM2.5). As shown in Table 2, the local emissions would be less than the thresholds, and no significant impacts would result.

**TABLE 2  
CONSTRUCTION PHASE  
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS**

Emissions and Thresholds	Emissions (lbs/day)			
	NOx	CO	PM10	PM2.5
Project maximum daily on-site emissions	47.9	27.9	5.6	3.7
<b>Localized Significance Threshold</b>	<b>144</b>	<b>743</b>	<b>6</b>	<b>4</b>
<b>Exceed threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.				
Note: Data is for SCAQMD Source Receptor Area 23, Metropolitan Riverside County				
Source: SCAQMD 2009 (thresholds); see Attachment A in Appendix A of this Initial Study for CalEEMod model outputs.				

### **Operational Emissions**

Operational emissions are comprised of area, energy, and mobile source emissions. Area and energy source emissions are based on CalEEMod assumptions for the specific land uses and size. Mobile source emissions are based on estimated project-related trip generation forecasts, as contained in the Traffic Impact Study; the proposed project would generate 772 daily vehicle trips (Psomas 2018f). Estimated peak daily operational emissions are shown in Table 3.

**TABLE 3  
PEAK DAILY OPERATIONAL EMISSIONS**

Source	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Area sources	3	<1	9	<1	<1	<1
Energy sources	<1	1	<1	<1	<1	<1
Mobile sources	2	2	21	<1	6	2
<b>Total Operational Emissions*</b>	<b>4</b>	<b>3</b>	<b>31</b>	<b>&lt;1</b>	<b>6</b>	<b>2</b>
<b>SCAQMD Significance Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
lbs/day: pounds per day; VOC: volatile organic compounds; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.						
* Some totals do not add due to rounding.						
Note: CalEEMod model data sheets are included in Attachment A of Appendix A of this Initial Study.						

<sup>2</sup> The SCAQMD recommends that, when sensitive receptors are located nearer than 25 meters (82 feet) from the project site, the minimum 25 meter/82 foot-distance threshold should be used.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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As shown in Table 3, the proposed project's operational emissions would be less than the SCAQMD CEQA significance thresholds for all criteria pollutants. Therefore, the proposed project's operational impact on regional emissions would be less than significant, and no mitigation is required.

#### Operations Phase Localized Significance Thresholds

The SCAQMD has also developed LSTs to assess potential local impacts to nearby sensitive receptors from on-site emissions of NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> generated during long-term operations. The operations phase LST analysis was also assessed using the emissions thresholds for receptors within 25 meters (82 feet) of the site. Table 4 shows the maximum daily on-site emissions for operational activities compared with the SCAQMD LSTs. As shown, the local emissions from the proposed project would be less than the thresholds, and no significant impacts would result.

**TABLE 4  
OPERATIONS PHASE  
LOCALIZED SIGNIFICANCE THRESHOLD EMISSIONS**

Emissions and Thresholds	Emissions (lbs/day)			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Project Maximum Daily On-Site Emissions</b>				
Area	<1	9	<1	<1
Energy	1	<1	<1	<1
Mobile <sup>a</sup>	<1	1	<1	<1
<b>Total</b>	<b>1</b>	<b>10</b>	<b>&lt;1</b>	<b>&lt;1</b>
<b>Localized Significance Threshold</b>	<b>144</b>	<b>743</b>	<b>2</b>	<b>1</b>
<b>Exceed threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
lbs/day: pounds per day; NO <sub>x</sub> : nitrogen oxides; CO: carbon monoxide; PM <sub>10</sub> : respirable particulate matter 10 microns or less in diameter; PM <sub>2.5</sub> : fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.				
<sup>a</sup> On-site mobile emissions are conservatively assumed to be 5% of the total on- and off-site emissions.				
Note: Data is for SCAQMD Source Receptor Area 23, Metropolitan Riverside County				
Source: SCAQMD 2009 (thresholds); see Attachment A in Appendix A of this Initial Study for CalEEMod model outputs.				

The proposed project would not generate pollutant emissions during short-term construction and long-term occupancy/operation that would exceed SCAQMD thresholds for regional and local emissions. Thus, the proposed project would not result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation. The Air Quality Analysis has determined that project would have **less than significant impacts** related to the violation of an air quality standard directly, indirectly and cumulatively.

c. 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>3c. Response: (Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds; South Coast Air Quality Management District's 2016 Air Quality Management Plan; CalEEMod; and Air Quality Analysis prepared by Psomas in January 2018 [included in Appendix A])</b>				



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**Less Than Significant Impact.** The USEPA has established National Ambient Air Quality Standards (NAAQS) for the criteria air pollutants. ARB has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. The CAAQS and NAAQS are provided in the Air Quality Analysis in Appendix A of this Initial Study. As identified in Table 5 below, the South Coast Air Basin (SoCAB) is a nonattainment area for CAAQS for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> and for the NAAQS for O<sub>3</sub> and PM<sub>2.5</sub>.

**TABLE 5  
ATTAINMENT STATUS OF CRITERIA POLLUTANTS  
IN THE SOUTH COAST AIR BASIN**

<b>Pollutant</b>	<b>State</b>	<b>Federal</b>
O <sub>3</sub> (1 hour)	Nonattainment	No standard
O <sub>3</sub> (8 hour)		Extreme Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment/Maintenance
PM <sub>2.5</sub>	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO <sub>2</sub>	Attainment	Attainment/Maintenance
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards
O <sub>3</sub> : ozone; PM <sub>10</sub> : respirable particulate matter 10 microns or less in diameter; PM <sub>2.5</sub> : fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO <sub>2</sub> : nitrogen dioxide; SO <sub>2</sub> : sulfur dioxide; SoCAB: South Coast Air Basin. * Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards. Source: SCAQMD 2016; see Appendix A of this Initial Study for the Air Quality Analysis		

As discussed under Threshold 3b above, the proposed project would generate PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, and O<sub>3</sub> precursors (NO<sub>x</sub> and VOC) during short-term construction and long-term occupancy/operations. Thus, the proposed project would have an incremental contribution to O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the region.

#### ***Construction Activities***

As discussed under Threshold 3b and quantified above in Tables 1 and 2, construction activities associated with the proposed project would result in less than significant construction-related regional and localized air quality impacts with compliance with applicable SCAQMD regulations. SCAQMD's policy with respect to cumulative impacts associated with criteria pollutants and their precursors is that impacts that would be directly less than significant would also be cumulatively less than significant (SCAQMD 2003). Therefore, consistent with SCAQMD policy, the cumulative construction impacts of the proposed project would also be less than significant.

#### ***Operational Activities***

As shown in Tables 3 and 4 above, the proposed project's operational emissions for criteria pollutants would be below the SCAQMD CEQA significance thresholds. Therefore, the proposed project would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors from the proposed project would not be cumulatively considerable and would be less than significant.

Therefore, the cumulative air quality emissions impacts of the proposed project are considered **less than significant**.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>3d. Response:</b> (<i>Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds; South Coast Air Quality Management District's 2016 Air Quality Management Plan; CalEEMod; and Air Quality Analysis prepared by Psomas in January 2018 [included in Appendix A]</i>)</p> <p><b>Less Than Significant Impact.</b> The SCAQMD defines a “sensitive receptor” as a land use or facility such as residences, schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes. The closest sensitive receptors to the project site are single-family residences on Elizabeth Street, 75 feet north of the project site, across the UPRR tracks (refer to the aerial photograph provided in Exhibit 2). A significant impact may occur when a project would generate pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at-large. Exposure of sensitive receptors is typically addressed for the following situations, as applicable: CO hotspots; criteria pollutants and toxic air contaminants (TACs, specifically diesel particulate matter [DPM]) from on-site construction; exposure to off-site TAC emissions; and asbestos and lead-based paint during demolition. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways. Residential land uses do not generate substantial quantities of TACs (due to the nature of residential uses and activities, when compared to commercial and industrial uses that may utilize large equipment). The proposed leasing office, fitness room, club room, and retail space would not involve any uses or activities that would generate TACs. Therefore, operational TACs are not addressed. No structures or improvements are present on site that would contain asbestos or lead-based paint; no further analysis for these substances is provided.</p> <p><b>Carbon Monoxide Hotspot</b></p> <p>In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive receptors and at other less congested intersection locations.</p> <p>An initial screening procedure is provided in the <i>Transportation Project-Level Carbon Monoxide Protocol</i> (CO Protocol) to determine whether a project poses the potential to generate a CO hotspot. The key criterion is whether the proposed project would worsen traffic congestion at signalized intersections operating at level of service (LOS) E or F. If a project poses a potential for a CO hotspot, a quantitative screening is required.</p> <p>The Traffic Impact Analysis for the proposed project indicates that one signalized intersection would operate at LOS E (Psomas 2018f). Central Avenue at Riverside Avenue would operate with a LOS E during the PM peak hour with and without trips generated by the proposed project under the Existing, Opening Year, and Cumulative scenarios and at LOS F under the Buildout scenario. This intersection is projected to handle 5,980 vehicles during the PM peak hour in 2025, and the proposed project would contribute 15 outbound and 24 inbound trips during the PM peak hour to this intersection. The Sacramento Metropolitan Air Quality Management District's (SMAQMD) <i>CEQA Guide to Air Quality Assessment in Sacramento County</i> states that intersections with less than 31,600 vehicles per hour would not result in CO hotspots. Vehicular emission rates from Sacramento County would not differ substantially from the SoCAB due to California emission standards being uniform across all California counties. The intersection of Central Avenue and Riverside Avenue would have a total of 5,980 trips during the PM peak hour for year 2025 conditions. This quantity of traffic is substantially below the SMAQMD threshold of 31,600 vehicles per hour that could potentially result in an exceedance of the California or federal ambient air quality standards. Thus, the proposed project would not contribute to a CO hotspot and project impacts would be less than significant.</p> <p><b>Criteria Pollutants from On-Site Construction</b></p> <p>Exposure of persons to localized concentrations of NOx, CO, PM10, and PM2.5 emissions is discussed under Threshold 3b above. Impacts would be less than significant, and no mitigation is required.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><b><i>Toxic Air Contaminant Emissions from On-Site Construction and Operation</i></b></p> <p>Construction activities would result in short-term emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading), paving, building construction, and other miscellaneous activities. ARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project.</p> <p>Due to the size of the proposed project and project site, a limited number of off-road, heavy-duty diesel equipment would be in operation; and the total construction period would be relatively short (20 months) when compared to a 30-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and ARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant.</p> <p>Additionally, the proposed residential and retail uses would not generate TAC emissions, and would not expose sensitive receptors to substantial TACs due to the types of activities associated with these land uses.</p> <p><b><i>Off-Site Toxic Air Contaminant Emissions</i></b></p> <p>The Air Resources Board (ARB) has identified TACs, including diesel particulate matter (DPM), as carcinogenic substances, based on their potential to cause cancer, premature death, and other health problems. Those most vulnerable are children whose lungs are still developing and the elderly who may have other serious health problems. Title 14, Section 15126.2(a) of the California Code of Regulations recommends that significant environmental effects of a project be assessed when a project brings development and people into an affected area.</p> <p>The ARB <i>Air Quality and Land Use Handbook: A Community Health Perspective</i> provides guidance concerning land use compatibility with TAC sources. While not a law or adopted policy, the Handbook offers advisory recommendations for siting sensitive receptors near uses associated with TACs (such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities) to help keep children and other sensitive populations out of harm's way (ARB 2005).</p> <p>Projects of concern for mobile sources of TACs are typically those located within 500 feet of the following types of facilities that emit significant quantities of DPM: urban roads with more than 100,000 vehicles per day; freeways or roads with a high heavy truck concentration; and/or rail yards, ports, and/or distribution centers.</p> <p>The project site is more than 500 feet from any freeway or major urban road. The SR-91 freeway is located 0.57 mile east of the site. Local roads near the site (such as Merrill Avenue, De Anza Avenue, Elizabeth Street, and Riverside Avenue) do not have volumes of 100,000 vehicles per day or more. Additionally, for future conditions, the Traffic Impact Study (see Appendix I) forecasts the average daily traffic (ADT) volumes on Merrill Avenue, De Anza Avenue and Riverside Avenue to be substantially less than the 100,000 vehicles per day under the Cumulative with Project and Buildout with Project scenarios. With respect to proximity to emissions from railroad sources, ARB recommends avoiding siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. While there are railroad tracks north of the project site, the site is not located within 1,000 feet of a major service and maintenance rail yard. Thus, future residents of the project would not be exposed to significant amounts of DPM from passing trains. In addition, there is no port or large distribution center near the site. Thus, the project site is not located within the buffer areas for land use types that generate substantial amounts of DPM.</p> <p>Heavy industrial buildings, dry cleaners and large gas stations could also generate TACS that may affect adjacent land uses. No heavy industrial uses or gas stations are located within 300 feet of the site, nor are there any dry cleaning operations within</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>500 feet. The proposed residential units and retail area of the project also do not include uses or emission sources with the potential for substantial levels of emissions of TACs. While the future retail use is not known at this time, the limited floor area (i.e., 1,200 square feet) precludes the use of the on-site retail space for a dry cleaner, or other use requiring the use of large equipment. As such, no off-site or on-site sensitive uses would be exposed to significant levels of TACs. Impacts would be less than significant and no mitigation is required.</p> <p>In summary, exposure of sensitive receptors to substantial pollutant concentrations from the project and from off-site TACs would be <b>less than significant impact</b> directly, indirectly, or cumulatively.</p>				
<p>e. Create objectionable odors affecting a substantial number of people?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>3e. Response:</b> <i>(Source: Air Quality Analysis prepared by Psomas in January 2018 [included in Appendix A])</i></p> <p><b>Less than Significant Impact.</b> The proposed project may generate odors during short-term construction and long-term operations and use.</p> <p><b>Construction Activities</b></p> <p>Construction of the proposed project would involve equipment and activities that would generate odors. Potential construction-related odors include diesel exhaust from construction equipment, as well as roofing, painting, and paving operations. Situations would occur where construction activity odors could be noticed by persons in the immediate vicinity. These odors would be temporary and would dissipate rapidly from the source (i.e., the project site) with an increase in distance. Therefore, the presence of potential construction-related odors at the site would be short-term and would not affect a substantial number of people. As such, a less than significant impact would occur.</p> <p><b>Operational Activities</b></p> <p>Potential operational odors could be created by cooking activities and trash storage associated with proposed residential uses. These odors would be similar to those at existing residential uses near the site and throughout the City, and odors would be generally confined to the immediate vicinity of the proposed dwelling units.</p> <p>With respect to odors during operation of non-residential uses, activities at the leasing office, fitness center, and club room are not expected to generate odors. Odors from the retail use at the site would depend on the commercial tenant, but no food preparation or commercial kitchen uses are proposed and any future retail use is not expected to be a source of substantial odors due to the limited size (i.e., 1,200 square feet) of the retail space. According to the SCAQMD's <i>CEQA Air Quality Handbook</i>, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not propose any use identified by the SCAQMD as being associated with objectionable odors; and, therefore, the proposed project would not produce objectionable odors during operation.</p> <p><b>Less than significant impacts</b> related to the creation of objectionable odors would occur directly, indirectly, or cumulatively.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>4. BIOLOGICAL RESOURCES.</b> 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>4a. Response:</b> (<i>Source: Site Visit; Western Riverside County MSHCP and California Natural Diversity Database [CNDDB] database searches; General Plan 2025 Open Space and Conservation Element Figure OS-5 – Habitat Areas and Vegetation Communities, Figure OS-6 – Stephens’ Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans [HCP], Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas; General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 - MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, and Figure 5.4-8 – MSHCP Burrowing Owl Survey Area; and U.S. Fish and Wildlife Service [USFWS] Critical Habitat for Threatened and Endangered Species</i>)</p> <p><b>Less than Significant Impact with Mitigation Incorporated.</b> As shown on Exhibit 2, the eastern portion of the project site is a surface parking lot, and the western portion of the site is vacant. The project site was previously developed with commercial structures that have been demolished. Figure OS-5 Habitat Areas and Vegetation Communities in the Open Space and Conservation Element of the General Plan shows that the site supports residential, urban, or exotic vegetation. On-site vegetation is limited to weeds on the undeveloped portion of the site and Mexican fan palm trees and weeds that are present in the parkway fronting the project site along Merrill Avenue.</p> <p>The site is located outside designated Core Reserves for the Stephens’ Kangaroo Rat and is not located within designated critical habitats for Threatened and Endangered species. The site is also outside Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Cores and Linkages, Criteria Cell and Subunit Areas, Narrow Endemic Plant Species Survey Area, Criteria Area Species Survey Area, and Burrowing Owl Survey Area. The proposed project is not subject to the Urban/Wildlands Interface Guidelines as the site is surrounded by urban development on all sides.</p> <p>A search of the Western Riverside County MSHCP database and other appropriate databases (California Natural Diversity Database) conducted by Psomas identified a number of candidate, sensitive and special status species that have been found in the area (Psomas 2017c), but no suitable habitat for such species is present on or near site, including Federal Species of Concern and California Species of Special Concern. California Special Species Plants on Lists 1-4 of the California Native Plant Society (CNPS) Inventory are also not expected to be present on the paved and highly disturbed project site.</p> <p>However, the Federal Migratory Bird Treaty Act (MBTA) makes it illegal to take, possess, buy, sell, purchase, or barter any migratory bird listed in the Code of Federal Regulations (Title 50, Part 10), including feathers, nests, eggs, or other avian products. The MBTA also protects the active nests of all bird species, including common species. With the exception of the street trees along Merrill Avenue adjacent to the project site, there is no vegetation on-site that would support nesting birds.</p> <p>To prevent impacts to nesting birds and their eggs and nests, vegetation (tree) removal and the start of demolition activities should occur outside the nesting bird season (between September 1 and February 28). If any vegetation (tree) removal occurs during the nesting season (between February 16 and August 31), project activities could impact an active nest. To reduce this potential impact, Mitigation Measure (MM) BIO-1 requires a pre-construction survey for nesting birds and describes the methods for managing any active nest sites, if encountered. Implementation of MM BIO-1 would reduce potential impacts related to nesting birds to a less than significant level.</p> <p><b>MM BIO-1</b> To avoid impacts on nesting birds, street trees shall be removed between September 1 and February 15 of the following year. If street tree removal will occur inside the peak nesting season (between February 16 and August 31), a pre-construction survey shall be conducted by a qualified Biologist to identify if there are any active nesting locations on the site and the construction areas. If the Biologist does not find any active nests within this area, then vegetation clearing and construction work will be allowed. If the Biologist</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>finds an active nest within the area and determines that the nest may be impacted by demolition/construction activities, the Biologist will delineate an appropriate buffer zone around the nest depending on the species and the type of construction activity. Demolition/construction activities would be prohibited in the buffer zone until a qualified Biologist determines that the nest has been abandoned.</p> <p>With MM BIO-1, the proposed project would have a <b>less than significant impact after mitigation</b> directly, indirectly, and cumulatively on species identified as a candidate, sensitive, or special status species in local or regional plans, and policies or regulations of the California Department of Fish and Wildlife (CDFW) or USFWS.</p>				
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>4b. Response:</b> (Source: Site Visit; General Plan 2025 Figure OS-5 – Habitat Areas and Vegetation Communities and Figure OS-4 – Arroyos; and Western Riverside County MSHCP Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools)</p> <p><b>No Impact.</b> The project site is located on a previously developed site within an urbanized area of the City where no riparian habitat or other sensitive natural community exists. The site is also not located in an area where the Western Riverside County MSHCP has identified habitats for sensitive species. Further, the surrounding area has been developed for many years; and a long history of disturbance exists in the area, such that there is little chance that any riparian habitat could have persisted. Therefore, the proposed project would have <b>no impact</b> on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS directly, indirectly, and cumulatively.</p>				
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>4c. Response:</b> (Source: General Plan 2025 Open Space and Conservation Element Figure OS 8.1 – Rivers, Creeks and Streams; USGS National Map Viewer; and USFWS National Wetlands Inventory)</p> <p><b>No Impact.</b> Figure OS 8.1 – Rivers, Creeks and Streams in the Open Space and Conservation Element of the General Plan shows that the site is not located near the Santa Ana River or other blueline streams in and near the City. The site and surrounding areas are served by underground storm drain lines that convey storm water to the Santa Ana River, located 1.7 miles northwest of the project site. The project site is located within an urbanized area where no federally protected wetlands, as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.), occur. The USFWS National Wetlands Inventory and U.S. Geological Survey (USGS) National Map Viewer do not show blueline streams, wetlands, riparian areas, or riparian mapping areas on the project site or near the site. The project site does not contain any discernible drainage courses, inundated areas, wetland vegetation, or hydric soils and, thus, does not include U.S. Army Corps of Engineers (USACE) jurisdictional drainages or wetlands. Therefore, the proposed project would have <b>no impact</b> to federally protected wetlands as defined by Section 404 of the Clean Water Act directly, indirectly, and cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>4d. Response:</b> (Source: Site Visit; Western Riverside County MSHCP; and General Plan 2025 Figure OS-7 – MSHCP Cores and Linkages)</p> <p><b>No Impact.</b> The project site is within an urbanized area; is surrounded by existing development; and is not located within any Western Riverside County MSHCP Criteria Cells, Cores, or Linkages. It is also not located near the Sycamore Canyon Wilderness Park or the Box Springs Mountain Regional Park, between Box Springs Mountain Reserve and the Santa Ana</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>River via Springbrook Wash, or between the Santa Ana River and La Sierra/Norco Hills, which all serve as wildlife corridors in the City. In addition, the site is not located near the Tequesquite, Prenda, or Alessandro arroyos, which are valuable wildlife corridors in the City.</p> <p>The site is surrounded by urban uses, with commercial development to the east and west; Merrill Avenue and commercial uses to the south; and an alley, railroad tracks and residential and non-residential uses to the north. Thus, wildlife or wildlife movement is limited in the project area. The proposed project would not result in a barrier to the movement of any native resident or migratory fish or wildlife species or within established native resident or migratory wildlife corridors, nor impede the use of native wildlife nursery sites. Therefore, the proposed project would have <b>no impact</b> to wildlife movement directly, indirectly, and cumulatively.</p>				
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>4e. Response:</b> (Source: RMC Title 16- Buildings and Construction, Section 16.72.040 – Establishing the Western Riverside County MSHCP Mitigation Fee; City of Riverside Urban Forestry Policy Manual, and Magnolia Avenue Specific Plan)</p> <p><b>Less Than Significant Impact.</b> Implementation of the proposed project is subject to applicable federal, State, and local policies and regulations related to the protection of biological resources and tree preservation. Any project within the City of Riverside’s boundaries that proposes planting a street tree within a City right-of-way is required to follow the City’s Urban Forestry Policy Manual. The Manual includes guidelines for the planting, pruning, preservation, and removal of all trees on City rights-of-way. The guidelines are based on national standards for tree care, as established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute. Generally, all California and Mexican fan palms, Mexican blue palms, Guadalupe palms, Queen palms, windmill palms, and in some cases date palms and Canary Island date palm trees, require relocation and preservation unless approved by the Riverside Parks and Recreation Commission. The existing Mexican fan palms in the parkway along Merrill Avenue would be retained and/or removed in accordance with the City’s Urban Forestry Policy Manual. The planting of new street trees along the parkways, planter areas, and landscaped median along Merrill Avenue would also be conducted in compliance with the City’s Urban Forestry Policy Manual and consistent with the landscape palette in the Magnolia Avenue Specific Plan. Compliance with these City requirements would prevent adverse impacts related to tree preservation policies.</p> <p>The proposed project would also pay the applicable Western Riverside County MSHCP local development mitigation fee, in compliance with Section 16.72.040 of the RMC. Therefore, impacts related to policies or ordinances protecting biological resources would be <b>less than significant</b> directly, indirectly and cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>4f. Response:</b> (Source: Western Riverside County MSHCP; General Plan 2025 Figure OS-6 – Stephens’ Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP); Stephens’ Kangaroo Rat Habitat Conservation Plan; Lake Mathews Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan; and El Sobrante Landfill Habitat Conservation Plan)</p> <p><b>No Impact.</b> The project site is located outside the core reserves for the SKR and outside the boundaries of the HCPs for the El Sobrante Landfill and Lake Matthews. The site is within the 1.26-million-acre planning area for the Western Riverside County MSHCP. This MSHCP protects 146 plant and animal species on 500,000 acres of existing and future open space areas in the Western Riverside region. It is used to regulate the “take” of plant and wildlife species identified within the planning area and promote the acquisition of conservation lands and reserves for protected species.</p> <p>The project site is not located within the Western Riverside County MSHCP-designated Conserved Lands, Conservation Easements, Special Linkage Areas, or Criteria Areas (where land may be acquired for conservation by the Western Riverside County Regional Conservation Authority [RCA]). Thus, development of the proposed project would not conflict with the</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Western Riverside County MSHCP, with payment of the MSHCP local development mitigation fee to the RCA, in accordance with Chapter 16.72.040 of the RMC. No conflict with the Western Riverside County MSHCP would occur with the proposed project.</p> <p>Since the project site is a previously developed/improved site within an urbanized area, the project would not impact an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan directly, indirectly, and cumulatively. Therefore, the proposed project would have <b>no impact</b> on the provisions of an adopted Habitat Conservation Plan; Natural Community Conservation Plan; or other approved local, regional, or State habitat conservation plan.</p>				
<b>5. CULTURAL RESOURCES.</b> Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>5a. Response:</b> (<i>Source: GP 2025 FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas; General Plan 2025 Land Use and Urban Design Element Figure LU-5 – Historic Fabric; General Plan 2025 FPEIR Appendix D – Cultural Resources Study for the City of Riverside; and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B]</i>)</p> <p><b>No Impact.</b> A discussion of the cultural background and history of the City is provided in the Phase I Cultural Resources Inventory included in Appendix B of this Initial Study, with major historic periods defined as the Spanish Period (1769-18220, Mexican Period (1822-1848), and American Period (1848-Present). Local history includes habitation of the valley near the Santa Ana River and between the Rubidoux and Box Springs Mountains by Cahuilla tribes of Native Americans for hundreds of years before Europeans settled and established missions in the area in the early 1770s. With secularization in 1834, large land grants were given to the earliest European and American settlers. The City was founded in 1870 by John North and a group of Easterners who wished to establish a colony dedicated to furthering education and culture on land that was once a Spanish rancho. At the turn of the twentieth century, the City had the most successful agricultural cooperative (California Fruit Growers Exchange) and a world class research institution (Citrus Experiment Station). Structures for agri-industrial and railroad uses, as well as mansions and citrus worker housing, were built. Chinese, Japanese, Korean, Italian, and Mexican immigrants came as labor groups for the citrus industry, resulting in ethnic diversity in the area. The Post World War I boom resulted in the subdivision of large properties in the City into residential tracts. During the 1950s and 1960s, Riverside was one of the fastest growing cities in the western United States. Decreases in agricultural dependence and development pressures led to the replacement of orange groves and orchards with tract homes, shopping centers, banks, and public facilities.</p> <p>There is no building on the site, and the paved parking lot that replaced on-site commercial structures is not a historic resource. Previous commercial buildings on the site were demolished by the City and were not considered historic resources in the City’s General Plan 2025 or the FPEIR for the General Plan. Review of the City’s Historic Districts and Buildings show that the Parent Navel Orange Tree is a historic and cultural landmark in the Magnolia Center neighborhood but is not located near the site (approximately 0.9 mile to the southwest). The Palm Heights, a potential historic district, is located west of Brockton Avenue (0.23 mile west of the site) and does not include the site.</p> <p>The Eastern Information Center (EIC) at University of California, Riverside, completed the cultural resources records search and literature review for the proposed project on April 27, 2017. The record search indicated that seven cultural resources investigations have been conducted within a ½-mile radius of the project site, and one investigation included a portion of the project site. The records also showed that 113 cultural resources were recorded within a ½-mile radius of the project site. These consisted mainly of historic properties; none of which were located on the project site. Therefore, <b>no impact</b> directly, indirectly, and cumulatively to historical resources is expected with the proposed project.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5 of the CEQA Guidelines?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5b. Response:</b> <i>(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity; General Plan 2025 FPEIR Appendix D – Cultural Resources Study; and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</i></p> <p><b>Less Than Significant Impact with Mitigation Incorporated.</b> The sequence of the later prehistoric periods of Southern California include Horizon I: Early Man or Paleo-indian Period (11,000 BCE to 7,500 BCE); Horizon II: Milling Stone Assemblages (7,500 Before Common Era [BCE] to 1,000 BCE); Horizon III: Intermediate Cultures (1,000 BCE to 750 Common Era [CE]); and Horizon IV: Late Prehistoric Cultures (750 CE to 1769 CE). This was followed by the major historic periods: Spanish Period (1769–1822); Mexican Period (1822–1848); and American Period (1848–Present). A detailed discussion of the ethnographic background and history of the City is provided in the Phase Cultural Resources Inventory included in Appendix B of this Initial Study.</p> <p>The project site is located in the region known to have been occupied by the Cahuilla Indians. Cahuilla territory is bounded on the north by the San Bernardino Mountains; on the east by the Orocopia Mountains; on the west by the Santa Ana River, the San Jacinto Plain, and the eastern slope of the Palomar Mountains; and on the south by Borrego Springs and the Chocolate Mountains. The project site was also within the territory occupied by the Luiseño, named by the Spanish after the Mission San Luis Rey de Francia in the present-day City of Oceanside, where some of their linguistic group frequented. The Luiseño cultural area incorporated southern Riverside County, northern San Diego County, and eastern Orange County; and the area linguistically comprised a language of the Shoshonean language family. As stated above, the valley near the Santa Ana River and between the Rubidoux and Box Springs Mountains was inhabited by Cahuilla tribes of Native Americans for hundreds of years before Europeans settled and established missions in the area in the early 1770s.</p> <p>Figure 5.5-1 in the FPEIR for the General Plan 2025 shows that the site is located in an area with unknown archaeological sensitivity, and Figure 5.5-2 shows the site has unknown prehistoric cultural resources sensitivity. A cultural resources records search and literature review for the proposed project was conducted by EIC on April 27, 2017. The search did not identify archaeological resources at the project site or surrounding areas. Cultural resources recorded within a ½-mile radius of the project site consisted mainly of historic properties, none of which were located on the project site.</p> <p>Previous commercial structures at the site were demolished in 2005/2007, and the project site is located in a highly urbanized area. Thus, no archeological field survey was necessary nor conducted. Fill soils occur to depths of 3 to 4 feet at the project site, and the preliminary geotechnical investigation for the proposed project (refer to Section 6, Geology and Soils, of this Initial Study) recommends that underlying native soils be overexcavated approximately 5 feet. Additionally, undocumented backfill near a former underground storage tank would be removed (to a depth approximately 15 feet below the existing grade). Thus, the majority of grading activities on the site would be limited to the upper 5 feet of soils, which would include approximately 1 to 2 feet of native soils below the artificial fill. However, certain grading and excavation activities on the property such as deeper excavations for infrastructure improvements (i.e., utility line trenching, storm water infiltration chambers, and power pole replacement) would disturb underlying native soils to greater depths. While the proposed project would have a low probability of disturbing previously unrecorded archaeological resources due to past ground disturbance, there is a potential that archaeological materials, such as historic refuse, disturbed archaeological sites, or other resources, would be discovered during grading activities that may extend 1 to 2 feet deep into native soils and deeper excavation activities during construction of the proposed project. Implementation of MMs CUL-1 and CUL-2, which require retention of a qualified Archaeologist and a pre-grade conference/cultural sensitivity training to inform construction personnel of the potential for encountering unique cultural resources, and MM CUL-3, which requires the Archaeologist to evaluate unanticipated archaeological discoveries, would reduce potential impacts to a level considered less than significant.</p> <p><b>MM CUL-1</b> 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.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
MM CUL-2	<p><b>Cultural Sensitivity Training:</b> The project Archaeologist and Native American Tribes consulting on the project shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. 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 and submitted to the Archeologist.</p>			
MM CUL-3	<p><b>Treatment and Disposition of Cultural Resources:</b> 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:</p> <ol style="list-style-type: none"> <li>1. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and</li> <li>2. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: <ol style="list-style-type: none"> <li>a. Accommodate the process for onsite 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;</li> <li>b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would 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;</li> <li>c. If more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and.</li> <li>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 interested tribes.</li> </ol> </li> </ol> <p>With the implementation of MMs CUL-1, CUL-2, and CUL-3, impacts to archaeological resources directly, indirectly, and cumulatively as a result of the proposed project would be reduced to a <b>less than significant level after mitigation</b>.</p>			

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>5c. Response:</b> <i>(Source: General Plan 2025 Policy HP-1.3 and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</i></p> <p><b>Less Than Significant Impact with Mitigation Incorporated.</b> The Los Angeles County Museum of Natural History (LACM) conducted a record search for paleontological resources in the project area in April 2017. The project area was determined to have surface deposits consisting of older Quaternary Alluvium, which typically do not contain significant vertebrate fossils. Thus, surface grading or very shallow excavations in the older Quaternary deposits would not likely uncover significant fossil vertebrate remains.</p> <p>However, finer-grained older deposits may underlie the site, where a fossil specimen of whipsnake and a fossil specimen of deer have been found west and southwest of the site at a depth of 9 to 11 feet below the surface. Thus, the project site is considered moderately sensitive for paleontological resources, and excavations of 9 feet or deeper that encounter native sediments have the potential to yield paleontological resources. As indicated above, deeper excavations needed for infrastructure improvements are expected to disturb native soils. Therefore, there is a potential that ground-disturbing activities within native sediments could uncover previously unidentified paleontological resources. Implementation of MM CUL-1 above, which requires retention of a Paleontologist and MM CUL-2 for a pre-grade conference/cultural sensitivity training to inform construction personnel of the potential for encountering unique paleontological resources, and MM CUL-4, which requires the Paleontologist to evaluate unanticipated paleontological discoveries, would reduce potential impacts to a level considered less than significant.</p> <p><b>MM CUL-4</b> In the event that any paleontological resources (e.g., plant or animal fossils) are encountered before or during grading, the Property Owner/Developer shall retain a qualified Paleontologist to evaluate unanticipated discoveries and to take appropriate measures to protect or preserve them for study. The Paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> <li>• Assign a Paleontological Monitor, trained and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full time during earth-disturbing activities.</li> <li>• Divert earth-disturbing activities away from the immediate area of the discovery until the Paleontological Monitor has completed salvage. If construction personnel make the discovery, the Grading Contractor shall immediately divert construction and notify the Paleontological Monitor of the find.</li> <li>• Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (e.g., Natural History Museum of Los Angeles County).</li> <li>• Prepare and submit a technical report describing the identification, salvage, evaluation, and treatment of all fossils discovered during grading to the City of Riverside. Transfer collected specimens with a copy of the report to the depository.</li> </ul> <p>The Phase I Cultural Resources Inventory prepared by Psomas in January 2018 (Appendix B of this Initial Study) has determined that the proposed project is consistent with General Plan Policy HP-1.3, including compliance with the Federal Native American Graves Protection and Repatriation Act. With the implementation of MMs CUL-1, CUL-2, and CUL-4, impacts to paleontological resources directly, indirectly, and cumulatively as a result of the proposed project can be reduced to a <b>less than significant level after mitigation</b>.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>5d. Response:</b> <i>(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</i></p> <p><b>Less Than Significant Impact.</b> The site was previously developed with commercial structures that have since been demolished. The literature review and record searches conducted as part of the Phase I Cultural Resources Inventory did not provide any indication that human remains are present on or near the site. Thus, there is limited potential for human remains to be present on site, and the proposed project is not expected to disturb human remains.</p> <p>Figure 5.5-1 in the FPEIR for the General Plan 2025 shows that the site is located in an area with unknown archaeological sensitivity, and Figure 5.5-2 shows the site has unknown prehistoric cultural resources sensitivity. Thus, excavation and soil disturbance could have the potential to disturb or destroy unknown buried Native American human remains and other human remains, including those interred outside formal cemeteries. Should grading and excavation activities for construction of the proposed project unearth unknown human remains or unknown burials, compliance with existing regulatory requirements under Section 7050.5 of the California Health and Safety Code is required. This states that if human remains are encountered during excavation activities, the County Coroner shall be notified within 24 hours of the discovery. No further excavation or disturbance of the site or any nearby areas reasonably suspected to overlie adjacent remains would occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains.</p> <p>If the remains are determined to be are or are believed to be Native American human remains, the County Coroner is required to notify the Native American Heritage Commission (NAHC) within 24 hours. In accordance with Section 5097.98 of the California Public Resources Code, the NAHC would immediately notify the persons it believes to be the most likely descendant (MLD) of the deceased Native American. The descendants would complete their inspection and make a recommendation within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the City and the Developer, the disposition of the human remains. The MLD's recommendation would be followed if feasible, and may include scientific removal and non-destructive analysis of the human remains and any items associated with Native American burials. If the Developer rejects the MLD's recommendations, the Developer shall rebury the remains with appropriate dignity on the property in a location that would not be subject to further subsurface disturbance (California Code of Regulations, Title 14, Section 15064.5[e]). Compliance with the requirements of the California Health and Safety Code and California Public Resources Code would ensure that potential impacts to human remains, including those interred outside formal cemeteries, are <b>less than significant</b> directly, indirectly, and cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>6. GEOLOGY AND SOILS.</b> Would the project:				
a. Expose people or structures to 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>6ai. Response:</b> (Source: General Plan 2025 Figure PS-1 – Regional Fault Zones; General Plan 2025 FPEIR Figure 5.6-2 – Faults and Fault Zones and Appendix E – Geotechnical Report; and Preliminary Geologic/Geotechnical Investigation and Preliminary Infiltration Assessment prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>No Impact.</b> Seismic activity is expected throughout the Southern California region due to the presence of various earthquake faults. The project site is in a valley area east of the Santa Ana River Canyon and north of the Temescal Mountain foothills, in the Peninsular Ranges geomorphic province of California. The City of Riverside and the site are located on the Perris Block, a geologic structure bound by the Elsinore Fault Zone to the west, the Santa Ana River to the north, and the San Jacinto Fault Zone to the east. Seismic activity in the project area is largely influenced by the Elsinore Fault Zone and San Jacinto Fault Zone and their interactions with local faults such as the Chino Fault, Glen Ivy Fault, and other smaller nearby faults.</p> <p>Based on review of Figure PS-1 – Regional Fault Zones in the General Plan 2025, Figure 5.6-2 – Faults and Fault Zones and Appendix E in the FPEIR for the General Plan 2025, and the Preliminary Geologic/Geotechnical Investigation for the proposed project, no active faults or designated Alquist-Priolo Earthquake Fault Zones are located in the City of Riverside. The nearest earthquake fault to the site is the San Jacinto Fault, located 9.0 miles to the northeast. The project site is not underlain by any known active fault line; and, based on distance from active faulting, the potential for fault rupture at the site is low. Therefore, <b>no impact</b> related to ground surface rupture would occur directly, indirectly, and cumulatively.</p>				
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>6aii. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.6-2 – Faults and Fault Zones and Appendix E – Geotechnical Report and Preliminary Geologic/Geotechnical Investigation and Preliminary Infiltration Assessment prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>Less Than Significant Impact.</b> As shown in Figure 5.6-2 – Faults and Fault Zones in the FPEIR for the General Plan 2025, the San Jacinto Fault Zone (located northeast of the City and 9.0 miles northeast of the site) and the Elsinore Fault Zone (located south of the City’s Sphere of Influence and 12.2 miles southwest of the site) have the potential for moderate to large earthquakes that would cause intense ground shaking at the site. This ground shaking could lead to structural instability and damage to the proposed buildings and infrastructure that are constructed as part of the proposed project.</p> <p>Project design and construction would have to comply with Part 2 of Title 24 of the California Code of Regulations (California Building Code), as adopted into Title 16 of the RMC (Building Code). These regulations include building standards for the erection, construction, enlargement, alteration, installation, reconstruction, repair, movement, improvement, connection, conversion, demolition, and use of any building, structure or premises, and grading within the City. In compliance with the California Building Code and Chapter 16.08 of the Riverside Building Code, a Preliminary Geologic/Geotechnical Investigation (G3Soil Works, included in Appendix C of this Initial Study) has been prepared to identify geologic and seismic hazards where structural elements and structures would be constructed on the site and to provide geotechnical design parameters, safety factors, and recommendations to be incorporated into the project plans. The recommendations of the Preliminary Geologic/Geotechnical Investigation would be used in the engineering design and construction of proposed structures and infrastructure.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Because the proposed project would comply with pertinent provisions of the California Building Code and the Riverside Building Code and incorporate the recommendations in the Preliminary Geologic/Geotechnical Investigation for the proposed project, impacts associated with strong seismic ground shaking would be <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>6aiii. Response:</b> (Source: General Plan 2025 Figure PS-2 – Liquefaction Zones; General Plan 2025 FPEIR Figure 5.6-3 – General Liquefaction Zones and Appendix E – Geotechnical Report; and Preliminary Geologic/Geotechnical Investigation prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>Less Than Significant Impact.</b> The project site is located in an area with a low potential for liquefaction, per the General Plan 2025 Figure PS-2 - Liquefaction Zones. The Preliminary Geologic/Geotechnical Investigation states that artificial fill was found up to approximately 3 to 5 feet below the ground surface (bgs) at the site, underlain by native alluvial sediments up to 51 feet bgs. Soils within 10 feet bgs consisted of fine to medium sandy silt underlain by silty fine to coarse sand. From 10 to 50 feet bgs, soils consisted of fine to coarse sand, silty fine to coarse sand, and sandy silt. Since groundwater was not encountered to the depth of 51.5 feet bgs and local groundwater is reported at 75 feet bgs, the Preliminary Geologic/Geotechnical Investigation confirms that the potential for liquefaction at the site is considered low.</p> <p>Incorporation of the recommended design measures in the Preliminary Geologic/Geotechnical Investigation and compliance with the California Building Code and Riverside Building Code regulations would ensure that impacts related to seismic-related ground failure, including liquefaction, are at <b>less than significant impact</b> levels directly, indirectly, and cumulatively.</p>				
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>6aiv. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope and Appendix E – Geotechnical Report and Preliminary Geologic/Geotechnical Investigation and Preliminary Infiltration Assessment prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>No Impact.</b> The project site and the surrounding area have a generally flat topography (on-site elevations are 850 feet above mean sea level [msl] at the eastern end to 840 feet above msl at the western end, with a slope of about 1 percent across the site). The project site is not located in an area underlain by steep slopes (per Figure 5.6-1 of the General Plan 2025 FPEIR) that are generally prone to landslides. Notably, the closest hillside area (Pachappa Hill) is located approximately 0.5 mile to the northeast of the site.</p> <p>The general lack of surface relief indicates the area is relatively stable and not subject to landsliding. The proposed project would retain the flat topography of the site and would not create or be exposed to landslide hazards. Therefore, there would be <b>no impact</b> related to landslides directly, indirectly, and cumulatively.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>6b. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Appendix E – Geotechnical Report and RMC Title 18 – Subdivision Code and Title 17 – Grading Code)</p> <p><b>Less Than Significant Impact.</b> The site does not contain steep slopes, but Figure 5.6-4 – Soils in the General Plan 2025 FPEIR shows that the site is underlain by Arlington soils, which have slight to moderate erosion potential. Erosion and loss of topsoil could occur as a result of ground disturbance activities during construction of the proposed project. The National Pollutant Discharge Elimination System (NPDES) Construction General Permit calls for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for establishing erosion and sediment control Best Management Practices (BMPs) during construction activities (refer to Section 9, Hydrology and Water Quality, of this Initial Study). The proposed project would be subject to the NPDES Construction General Permit and must implement the BMPs in a project-specific SWPPP.</p> <p>In the long term, because the western portion of the site is currently exposed soil, the proposed project would decrease the amount of pervious surface, resulting in less surface area exposed to potential erosion. Soil and pollutants flowing off site (by wind or water erosion) would be reduced by landscaping areas and paved areas. Thus, areas of exposed soils would be minimal following construction of the proposed project, and the potential for erosion would be limited. Additionally, the project site is not intended to be used for agricultural or other purposes that require topsoil.</p> <p>In addition, the City’s erosion control standards (in Title 18, Subdivisions, of the RMC) and the City’s Grading Code (Title 17 of the RMC) also require the implementation of measures to minimize soil erosion. Compliance with NPDES Construction General Permit requirements, as well as with Titles 18 and 17 of the RMC, would ensure that soil erosion or the loss of topsoil would be <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>6c. Response:</b> (Source: General Plan 2025 Figure PS-2 – Liquefaction Zones; General Plan 2025 FPEIR Figure 5.6-5 – Soils with High Shrink-Swell Potential, Figure 5.6-1 - Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Appendix E – Geotechnical Report; RMC Title 16 – Buildings and Construction, Title 18 – Subdivision Code and Title 17 – Grading Code; and Preliminary Geologic/Geotechnical Investigation and Preliminary Infiltration Assessment prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>Less Than Significant Impact.</b> The general topography of the site and surrounding area is flat. The soils on the site consist of artificial fill up to approximately 3 to 4 feet bgs, underlain by native alluvial sediments up to 51 feet bgs. Soils within 10 feet bgs consisted of fine to medium sandy silt underlain by silty fine to coarse sand. From 10 to 50 feet bgs, soils consisted of fine to coarse sand, silty fine to coarse sand, and sandy silt. The Preliminary Geologic/Geotechnical Investigation describes on-site soil and geologic characteristics and provides recommendations to prevent unstable soil conditions and geologic hazards from project development, if appropriate:</p> <ul style="list-style-type: none"> <li>• <b>Landslides:</b> There is no potential for landslides. See response under Threshold 6a(iv).</li> <li>• <b>Lateral spreading:</b> Adherence to the City’s Grading and Subdivision Codes (Titles 17 and 18 of the RMC), as well as the California Building Code (as adopted by the City of Riverside and set out in Title 16 of the RMC) in the design and construction of this project would prevent lateral spreading. The proposed project would retain the flat topography of the site and implement the recommendations in the Preliminary Geologic/Geotechnical Investigation for the proposed project. This would prevent hazards associated with lateral spreading.</li> <li>• <b>Subsidence:</b> The Preliminary Geologic/Geotechnical Investigation prepared for the proposed project does not indicate the potential for subsidence. Adherence to the recommendations in the Preliminary Geologic/Geotechnical</li> </ul>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Investigation to account for total static settlements and differential settlement would reduce impacts related to subsidence to less than significant levels.</p> <ul style="list-style-type: none"> <li>• <b>Liquefaction:</b> The potential for liquefaction is low. See response under Threshold 6a(iii).</li> <li>• <b>Collapse:</b> The proposed project would retain the flat topography of the site. Adherence to the City's grading and building requirements (Titles 16 and 17 of the RMC) and the recommendations in the Preliminary Geologic/Geotechnical Investigation would ensure that the site is adequately graded and prepared to prevent the collapse of graded pads and/or slopes.</li> </ul> <p>Compliance with the City's Building Code (Title 16 of the RMC) and the recommendations of the Preliminary Geologic/Geotechnical Investigation for the proposed project would ensure that impacts related to on-site soil and geologic conditions are <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>6d. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Figure 5.6-5 – Soils with High Shrink-Swell Potential, and Appendix E – Geotechnical Report; RMC Title 16 - Buildings and Construction and Title 18 – Subdivisions; and Preliminary Geologic/Geotechnical Investigation and Preliminary Infiltration Assessment prepared by G3SoilWorks in May 2017 [included in Appendix C])</p> <p><b>No Impact.</b> Expansive soil is defined under California Building Code based on its potential to shrink or swell. Figure 5.6-5 in the General Plan 2025 FPEIR does not identify the site as having high shrink-swell potential and Figure 5.6-4 shows that the site is underlain by Arlington soils, which have low to moderate potential for soil expansion.</p> <p>The Preliminary Geologic/Geotechnical Investigation for the proposed project indicates that the on-site soils consist of sandy silts with a trace of clay. The expansion index test for these soils indicate a low potential for expansion. Thus, the proposed project would not be exposed to geologic hazards associated with soil expansion. Compliance with the recommendations of the Preliminary Geologic/Geotechnical Investigation and applicable provisions of the City's Building Code and Subdivision Code (Titles 16 and 18 of the RMC) and the California Building Code would ensure <b>no impact</b> related to soil expansion would occur directly, indirectly and cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>6e. Response:</b> (Source: Project Conceptual Utility Plan)</p> <p><b>No Impact.</b> The project site is served by the public sewer system; an existing 8-inch sewer line runs in the alley north of the site westerly toward a driveway across De Anza Avenue and then westerly in Merrill Avenue. The proposed project would include the construction of sewer lines from the proposed buildings and pool area (cabana) that would connect to a proposed 8-inch sewer line in Merrill Avenue that would connect to the 8-inch sewer line in Merrill Avenue at the intersection with De Anza Avenue. The proposed project would not utilize on-site septic tanks or alternative wastewater disposal systems. The proposed project would have <b>no impact</b> related to septic tanks or alternative waste water disposal systems directly, indirectly, and cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>7. GREENHOUSE GAS EMISSIONS.</b> Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>7a. Response:</b> <i>(Source: CalEEMod and GHG Emissions Analysis prepared by Psomas in January 2018 [included in Appendix D])</i></p> <p><b>Less than Significant Impact.</b> A Greenhouse Gas Emissions (GHG) Emissions Analysis was prepared for the proposed project (refer to Appendix D of this Initial Study) and is summarized herein. Climate change refers to any significant change in measures of climate (e.g., average temperature, precipitation, or wind patterns) over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere which, in turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through fossil fuel combustion in conjunction with other human activities appears to be closely associated with global warming.</p> <p>GHGs are global pollutants and are therefore unlike criteria air pollutants such as O<sub>3</sub>, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and TACs, which are pollutants of regional and local concern (refer to Section 3, Air Quality, of this Initial Study). While pollutants with localized air quality effects have relatively short atmospheric lifetimes (generally on the order of a few days), GHGs have relatively long atmospheric lifetimes, ranging from one year to several thousand years. Long atmospheric lifetimes allow for GHGs to disperse around the globe. Therefore, GHG effects are global, as opposed to the local and/or regional air quality effects of criteria air pollutant and TAC emissions.</p> <p>GHGs include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). GHGs vary widely in the power of their climatic effects; therefore, climate scientists have established a unit called global warming potential (GWP). The GWP of a gas is a measure of both potency and lifespan in the atmosphere as compared to CO<sub>2</sub>. Carbon dioxide equivalent (CO<sub>2</sub>e) is a quantity that enables all GHG emissions to be considered as a group despite their varying GWP. The GWP of each GHG is multiplied by the prevalence of that gas to produce CO<sub>2</sub>e.</p> <p>The project site is vacant, with the exception of an overflow parking lot on the eastern portion of the site, and no GHG emissions are generated at the project site.</p> <p>Construction of the project would involve the use and operation of construction equipment and vehicle trips for construction workers, building materials, and construction debris, which, in turn, would lead to the combustion of fossil fuels and associated generation of GHGs. In the long term, project-generated vehicle trips, the production and on-site use of electricity, natural gas, and water, and solid waste collection and disposal during project occupancy/operations would also generate GHGs.</p> <p>GHG emissions from the proposed project's construction and operations phases were calculated by using the California Emission Estimator Model (CalEEMod) version 2016.3.1 computer program. CalEEMod is designed to model construction and operational emissions for land use development projects and allows for the input of project- and County-specific information. Construction of the project is modeled to begin in 2018 and occur for 20 months, with occupancy/operations starting in 2019. The CalEEMod input for construction emissions was based on the project's construction data and default assumptions from CalEEMod. The input for operational emissions was based on the vehicle trip generation rates provided in the traffic impact analysis and the proposed building area. Additional input details are included in Attachment A of Appendix D of this Initial Study. For GHG emissions calculations, emissions associated with electricity, water use, and waste disposal are included. The estimated construction and operational GHG emissions for the proposed project are shown in Tables 7 and 8, respectively.</p>				

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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Because impacts from construction activities would occur over a relatively short period of time (20 months), they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, measures to reduce GHG emissions from construction equipment are relatively limited. The SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime and added to the operations phase emissions. As shown in Table 6, the 30-year amortized construction emissions would be 36 metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e) per year.

**TABLE 6  
CONSTRUCTION-RELATED GREENHOUSE GAS  
EMISSIONS**

<b>Construction-Period Emissions</b>	<b>Annual MTCO<sub>2</sub>e</b>
2018	540
2019	553
<b>Total Construction-Period Emissions</b>	<b>1,093</b>
Amortized construction-period Emissions*	36
MTCO <sub>2</sub> e: metric tons of carbon dioxide equivalent	
* Total amortized over 30 years	

The SCAQMD has developed “Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans” to assess potential GHG impacts attributable to new land use development projects. At Tier 1 of the proposed approach, GHG emissions impacts would be less than significant if a project qualifies under a categorical or statutory CEQA exemption. At Tier 2, for projects that do not meet the Tier 1 criteria, the GHG emissions impact would be less than significant if a project is consistent with a previously adopted GHG-Reduction Plan that meets specific requirements. At Tier 3, the Working Group proposes a 3,000 MTCO<sub>2</sub>e per year screening threshold for residential, commercial, and mixed-use projects. A project with emissions greater than the screening threshold would have to demonstrate achievement of performance standards (Tier 4) and/or provide mitigation offsets. The Tier 3 analysis, the 3,000 MTCO<sub>2</sub>e per year screening threshold, is used in the analysis in this Initial Study.

As shown in Table 7, with consideration of amortized construction emissions, the total annual estimated GHG emissions for the proposed project are 1,589 MTCO<sub>2</sub>e per year. This value is less than the proposed SCAQMD Tier 3 screening threshold of 3,000 MTCO<sub>2</sub>e per year. These estimates also do not account for a reduction in GHG emissions associated with compliance with the 2016 Energy Efficiency Standards, the California Green Building Standards Code (CalGreen Code), and potential trip reductions that would occur due to the proposed project’s location near an existing elementary school, a shopping center, and restaurants (since the proposed project’s proximity to these uses could reduce vehicle trips and trip lengths by facilitating alternative forms of transportation such as walking or bicycling).



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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**TABLE 7  
PROJECT-RELATED GREENHOUSE GAS EMISSIONS**

Operational Emissions Source	Annual MTCO <sub>2</sub> e
Area	2
Energy	622
Mobile	808
Waste	26
Water	96
<i>Total Operational Emissions*</i>	<i>1,553</i>
Amortized Construction Emissions (Table 6)	36
<i>Total Project Emissions</i>	<i>1,589</i>
<b>SCAQMD Tier 3 Screening Threshold</b>	<b>3,000</b>
<b>Exceed Threshold?</b>	<b>No</b>
MTCO <sub>2</sub> e: metric tons of carbon dioxide equivalent; SCAQMD: South Coast Air Quality Management District. * Totals may not add due to rounding. Source: SCAQMD 2008 (threshold). CalEEMod output worksheets are provided in Attachment A in Appendix D of this Initial Study.	

It is unlikely that one individual development project would have GHG emissions of a magnitude that would directly impact global climate change; therefore, any impact would be considered on a cumulative basis. Because the proposed project's GHG emissions would be less than the 3,000 MTCO<sub>2</sub>e per year significance threshold, the GHG emissions are not considered to be cumulatively considerable. Thus, a **less than significant impact** would occur directly, indirectly, or cumulatively with the proposed project.

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



**7b. Response: (Source: Riverside Economic Prosperity Action Plan and Climate Action Plan and GHG Emissions Analysis prepared by Psomas in January 2018 [included in Appendix D])**

**Less than Significant Impact.** The SCAQMD and the City of Riverside have adopted measures for the purpose of reducing GHG emissions. As further described in the Greenhouse Gas Emissions Analysis prepared for the proposed project and included in Appendix D of this Initial Study (Psomas 2018d), several State policies and standards have been adopted for the purpose of reducing GHG emissions that are applicable to the proposed project. In summary, Executive Order (EO) S-3-05 calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. Assembly Bill (AB) 32 (the California Global Warming Solutions Act of 2006) establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions and codified the GHG reduction goals of EO S-3-05. Senate Bill (SB) 375 (Sustainable Communities and Climate Protection Act) established a process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 required SCAG to incorporate a "sustainable communities strategy" (SCS) into its regional transportation plans (RTPs). SCAG's 2016–2040 RTP/SCS includes goals and policies to reduce vehicle miles traveled (VMT) and focuses on transportation and land use

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>planning that includes building infill projects, locating residents closer to where they work and play, and designing communities to have access to high quality transit service.</p> <p>EO B-30-15 orders “A new interim Statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. SB 350 (Clean Energy and Pollution Reduction Act) implements EO B-30-15 by increasing the procurement target for electricity from renewable sources from 33 percent to 50 percent and doubling the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. SB 32 codified the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030. This goal is expected to keep the State on track to meet the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050. AB 197 was signed at the same time as SB 32 to ensure that the SB 32 goals are met. Additional discussion of these policies and standards is provided in the GHG Emissions Analysis in Appendix D of this Initial Study.</p> <p>Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the Statewide level, and compliance at the individual development project level is assumed through mandatory project compliance with State laws. State regulations, plans, and policies adopted for the purpose of reducing GHG emissions that are directly applicable to the proposed project include the California Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the CalGreen Code, which require the implementation of trip reduction, alternative fuel vehicles, energy and water conservation, and solid waste reduction and diversion measures that would reduce GHG emissions. The proposed project would be developed in compliance with the requirements of these regulations as a standard condition during the plan check process.</p> <p>The City adopted the Riverside Restorative Growthprint (RRG) Economic Prosperity Action Plan (EPAP) and Climate Action Plan (CAP) in 2016. The RRG-CAP establishes reduction targets for future years (2020 and 2035), which include a 15-percent community-wide emissions target reduction for 2020, from the City’s 2010 emissions inventory. This reduction target for 2020 is consistent with the AB 32 goal of emission reductions to 1990 levels. The 2035 community-wide reduction target is set to 49 percent below the 2007 baseline, which would be consistent with the AB 32 goal and EO S-3-05, which has set a goal for 80 percent below 1990 levels by 2050 (using a straight-line interpolation). The municipal operation reduction targets are set for a 15-percent reduction from the City’s 2007 baseline emissions for 2020 and a 49 percent reduction from the City’s 2007 baseline emissions for 2035. The strategies in the City’s RRG-EPAP include place-making, smart growth and infrastructure, and connected community that are supported by the proposed project. Specifically, the proposed infill, higher density, mixed-use development would help create a stronger identity for the Riverside Plaza area by introducing a resident population that could easily walk or bike to surrounding commercial uses. The strategies for policy lens and future leaders are directed at City actions and do not relate to the proposed project.</p> <p>The measures in the RRG-CAP identify State regulations and regional programs (e.g., efficiency standards for passenger vehicles, carbon content of transportation fuels, and minimum renewable energy supply requirements for utilities) that are currently being implemented by various agencies and do not directly impose regulations or standards for a specific development. These State and regional measures would also result in GHG emissions in the City of Riverside without any additional action by the City or the Developer. Other State and regional programs require implementation by the City (e.g., CalGreen Code, water efficient landscape requirements, and water conservation programs) and are implemented as part of the City’s permitting processes or through current incentive programs. In addition, the RRG-CAP identifies local measures that the City of Riverside is currently implementing or has committed to implementing to further reduce GHG emissions.</p> <p>Most of the State and regional measures do not directly relate to the proposed project, but those relevant to the proposed project include the following:</p> <ul style="list-style-type: none"> <li>• <b>Measure SR-2 2013, California Building Energy Efficiency Standards (Title 24, Part 6).</b> Mandatory energy efficiency standards for buildings. <i>The proposed project would comply with the latest 2016 California Building Energy Efficiency Standards.</i></li> <li>• <b>Measure SR-12, Electric Vehicle Plan and Infrastructure.</b> Facilitate electric vehicle use by providing necessary infrastructure.</li> </ul>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><i>The proposed project would include pre-wired electric vehicle charging parking spaces, as required by the CalGreen Code.</i></p> <ul style="list-style-type: none"> <li> <b>Measure SR-13, Construction and Demolition Waste Diversion.</b> Meet mandatory requirement to divert 50 percent of construction and demolition (C&amp;D) waste from landfills by 2020 and exceed requirement by diverting 90 percent of C&amp;D waste from landfills by 2035.           <p><i>The proposed project would divert C&amp;D waste by 50 percent, as required by the CalGreen Code. Under this regulation, the contractor would implement a Construction Waste Management Plan that would recycle and/or salvage at least 50 percent of the estimated volume or weight of all nonhazardous construction and demolition wastes, as verified by the City during plan check and site inspections during construction.</i></p> </li> </ul> <p>The subregional and local measures in the CAP are mainly City programs organized under four policy goals: Energy, Transportation and Land Use, Water, and Solid Waste. Those relevant to the proposed project include the following:</p> <ul style="list-style-type: none"> <li> <b>Measure E-2, Shade Trees.</b> Strategically plant trees at new residential developments to reduce the urban heat island effect.           <p><i>The proposed project would plant trees throughout the site and would provide trees in locations that would serve to provide shade (e.g., along walkways and sidewalks).</i></p> </li> <li> <b>Measure T-1, Bicycle Infrastructure Improvements.</b> Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.           <p><i>As a part of the project, shared bicycle lane signing would be installed along Merrill Avenue from Magnolia Avenue to Riverside Avenue as part of the proposed improvements on Merrill Avenue. This would accommodate connections to the existing bike lane on Magnolia Avenue and the proposed bike route on Riverside Avenue.</i></p> </li> <li> <b>Measure T-2, Bicycle Parking.</b> Provide additional options for bicycle parking.           <p><i>The proposed project would include a bike storage and maintenance room beside the fitness center or club room that may be used as an active bike shop for residents of the project.</i></p> </li> <li> <b>Measure T-3, End of Trip Facilities.</b> Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.           <p><i>While there is no transit bus service on Merrill Avenue, the Riverside Transit Agency's Route 10 and Route 20 run along Central Avenue and Magnolia Avenue, with the nearest bus stop one block south of the site, through the Riverside Plaza. The proposed project would provide marked crosswalks on Merrill Avenue to facilitate pedestrian crossing between the site and Riverside Plaza.</i></p> </li> <li> <b>Measure T-4, Promotional Transportation Demand Management.</b> Encourage transportation demand management strategies.           <p><i>The proposed project would be located on a site with opportunities for residents, employees, and visitors of the proposed project to walk, bike, or use public transit to conveniently reach places of employment, entertainment, and schools, which, in turn, would reduce vehicle trips and associated GHG emissions.</i></p> </li> <li> <b>Measure T-6, Density.</b> Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.           <p><i>The proposed project would provide housing and employment opportunities at an infill site near existing employment-generating uses including Riverside Plaza and adjacent commercial uses, with a residential density of 34 units per acre.</i></p> </li> <li> <b>Measure T-7, Mixed Use Development.</b> Provide for a variety of development types and uses.           <p><i>The proposed project is a mixed-use (residential and retail uses) and infill development that would be located near a school and adjacent to commercial retail uses and places of employment.</i></p> </li> <li> <b>Measure W-1, Water Conservation and Efficiency.</b> Reduce per capita water use by 20 percent by 2020.           <p><i>The proposed project would include pre-wired electric vehicle charging parking spaces, as required by the CalGreen Code.</i></p> </li> </ul>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><i>The proposed project would implement water conservation measures, as required by the CalGreen Code and City ordinances (e.g., Water Efficient Landscape Ordinance (Municipal Code Chapter 19.570) and Water Conservation Ordinance (Municipal Code Chapter 14.22). The City's Urban Water Management Plan outlines the programs that the City is implementing to achieve the 20 percent reduction by 2020. Project compliance with City regulations and participation in City conservation programs, which include future increases in the use of recycled water and continued implementation of water conservation measures, would allow the City to maintain a per capita water use that meets its water conservation goals.</i></p> <ul style="list-style-type: none"> <li>• <b>Measure SW-1, Yard Waste Collection.</b> Provide green waste collection bins community-wide.</li> </ul> <p><i>Landscape maintenance at the proposed project would be provided by the property manager, which would allow for separate green waste collection and disposal.</i></p> <ul style="list-style-type: none"> <li>• <b>Measure SW-2, Food Scrap and Compostable Paper Diversion.</b> Divert food and paper waste from landfills by implementing commercial and residential collection programs.</li> </ul> <p><i>The proposed project would provide separate recycling bins for residential and commercial uses, in accordance with Chapter 19.554 of the RMC.</i></p> <p>The RRG-CAP projects that implementation of the State, regional, and local measures would allow the City to meet its 2020 GHG reduction target, but would fall short of its 2035 target. The RRG-CAP expects that State programs and regulations related to new technologies and market development would be expanded in the future to reach the long-term 2035 GHG reduction targets. Additional programs and regulations are also needed and are expected to focus on City efforts towards the following:</p> <ul style="list-style-type: none"> <li>• Reductions in VMT</li> <li>• Low-carbon fuels and vehicles (e.g., biofuels, electric vehicles)</li> <li>• Low-carbon electricity (e.g., renewables)</li> <li>• Energy efficiency</li> </ul> <p>City programs would include a higher renewables portfolio standard for the Riverside Public Utilities (RPU), more stringent energy efficiency standards and incentives, and land use changes to promote compact development at higher intensities, mixed-use developments, and transit-oriented developments. The combination of future State, regional, and local efforts would allow the City to meet its 2035 GHG reduction target.</p> <p>While the proposed project was not considered in the growth projections for the City that were used in the 2016–2040 RTP/SCS and GHG projections under the business-as-usual scenario in the RRG-CAP, it embodies the smart growth principle for mixed-use and high-density developments that would realize GHG emissions reductions through reduced vehicle use. As such, the proposed project would not increase GHG emissions over those projected in the RRG-CAP but would support the City's future efforts for reducing VMT from the development of the site with a mixed-use development that would otherwise not occur under its current Commercial land use designation and zoning.</p> <p>Thus, the proposed project supports the goals and policies of the City's RRG-EPAP/CAP and SCAG's 2016–2040 RTP/SCS, thereby also supporting SB 375, AB 32, and SB 32 goals. The proposed project would not conflict with any State plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The impact associated with the generation of GHG emissions from the proposed project would be <b>less than significant</b> directly, indirectly, and cumulatively.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>8. HAZARDS &amp; HAZARDOUS MATERIALS.</b> Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>8a. Response:</b> (<i>Source: General Plan 2025 Public Safety Element; GP 2025 FPEIR; City of Riverside Emergency Operations Plan (EOP); Riverside Operational Area – Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP); Office of Emergency Services’ (OES) Strategic Plan; and RMC Chapter 9.48 – Unified Hazardous Materials Programs and Section 19.590.030 - Hazardous and Toxic Materials</i>)</p> <p><b>Less Than Significant Impact.</b> The Public Safety Element of the General Plan 2025 and Section 5.7 of the FPEIR for the General Plan 2025 generally discussed hazards to the environment or the public through the transport, use, or disposal of hazardous materials that are typically associated with the operation of non-residential uses, such as industrial and some commercial uses that use hazardous materials in large quantities. The site is not included in the lists of hazardous material facilities in the City, as provided in the FPEIR of the General Plan 2025. Various federal, State, and local regulations are in place to prevent public safety hazards from improper use, handling, storage, transport, and disposal of hazardous materials. Chapter 9.48 of the RMC sets regulations for the City’s hazardous materials programs, and Section 19.590.030 establishes performance standards for hazardous and toxic materials. The City’s Emergency Operations Plan (EOP), Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP), and Strategic Plan address the City’s planned responses to emergencies and hazards, including those involving hazardous materials.</p> <p>Demolition and construction activities for the proposed project would be short-term and phased over approximately 20 months; and the transport, use, and disposal of hazardous materials as part of these activities would be temporary. The construction contractor would have to comply with existing regulations regarding hazardous material use, storage, disposal, and transport to preclude any major threats to public health and safety. These regulations include, but are not limited to, the Toxic Substances Control Act, Hazardous Material Transportation Act, Resource Conservation and Recovery Act, California Hazardous Waste Control Act, California Accidental Release Prevention Program, the City’s hazardous materials programs in Chapter 9.48 of the RMC, and the Performance Standards for hazardous and toxic materials in Section 19.590.030 of the RMC.</p> <p>Consistent with existing residential and commercial development in the vicinity of the project site, once constructed, the proposed uses would use hazardous materials primarily for maintenance activities. The proposed project would utilize hazardous materials during construction activities and for maintenance of the proposed buildings, swimming pool, and other site improvements. The proposed mixed-use project would not involve the transport, use, or disposal of any hazardous material in large quantities because the proposed uses are limited to 108 residential units and a 1,200-square-foot commercial retail space. Routine maintenance activities for the residential and retail uses may include the storage and use of hazardous materials such as cleansers, solvents, pesticides, pool cleaning supplies, paint, fertilizers, and similar materials. These materials would be in limited quantities (i.e., less than 55 gallons of a liquid, 500 pounds of a solid, 200 cubic feet of compressed gas, or any amount of an extremely hazardous substance per Chapter 9.48 of the RMC). The Homeowners Association’s maintenance contractor would have to comply with existing regulations regarding hazardous material use, storage, disposal, and transport as identified above.</p> <p>Therefore, the proposed project would not pose a significant threat to the public related to on-site hazardous material use, storage, and disposal. As such, impacts related to the transport, use, or disposal of any hazardous material would be <b>less than significant</b> directly, indirectly and cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>8b. Response:</b> (Source: GP 2025 FPEIR Tables 5.7 A – D; RMC Chapter 9.48 – Unified Hazardous Materials Programs and Section 19.590.030 – Hazardous and Toxic Materials; Pipeline and Hazardous Material Safety Administration (PHMSA) National Pipeline Mapping System; and Southern California Gas’ (SCG) Natural Gas Pipeline Map)</p> <p><b>Less Than Significant Impact.</b> The site is not included in the lists of hazardous material facilities in the City, as provided in the FPEIR of the General Plan 2025. The parking lot and undeveloped area on the site do not use hazardous materials or generate hazardous waste. Additionally, no hazardous material pipelines are located on or near the site. Based on review of the PHMSA National Pipeline Mapping System and SCG Natural Gas Pipeline Map, the nearest transmission pipeline is a natural gas pipeline owned by the Southern California Gas Company (SCG) running along Arlington Avenue (approximately 0.7 mile south of the site). The nearest SCG high pressure distribution line runs along Riverside Avenue, 560 feet east of the site. The proposed project does not include any construction activities, including excavation, or other project features, that would affect the high pressure distribution line in Riverside Avenue. Improvements on Merrill Avenue near Riverside Avenue are limited to lane restriping.</p> <p>As previously identified under Threshold 8a, the proposed project would utilize hazardous materials during construction and maintenance activities. Compliance with existing regulations regarding hazardous material use, storage, disposal, and transport, including Chapter 9.48 and Section 19.590.030 of the RMC, would preclude any major threats to public health and safety due to upset or accident conditions.</p> <p>Due to the size and type of land uses proposed, hazardous material use would be in limited quantities and would be conducted in compliance with applicable federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous materials and hazardous waste. Impacts associated with potential upset and accident conditions involving the release of hazardous materials into the environment would be <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>8c. Response:</b> (Source: General Plan 2025 Public Safety and Education Elements, Figure 5.13-2 – Riverside Unified School District (RUSD) Boundaries, and Table 5.13-D RUSD Schools)</p> <p><b>No Impact.</b> The Pachappa Elementary School is located 0.12 mile southeast of the site, across Riverside Avenue. All other schools are more than 0.25 mile from the project site. The proposed project is a mixed-use development with 108 multi-family residential units and 1,200 square feet of retail uses that would not involve any uses or activities that would emit or require the handling of hazardous materials in measurable quantities (refer to the discussion provided in Threshold 8a above). The proposed project would not result in hazardous emissions that may affect students at the Pachappa School. The use, storage, and transport of any hazardous materials used at the site would also be made in compliance with the applicable federal, State, and local laws and regulations. Therefore, the proposed project would have <b>no impact</b> regarding emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school directly, indirectly, and cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>8d. Response:</b> <i>(Source: General Plan 2025 Figure PS-5 – Hazardous Waste Sites; GP 2025 FPEIR 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; DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List); Phase I ESA and Limited Phase 2 ESAs prepared by Converse in 2005-2008; and Phase I ESA Update and Phase II ESA Report prepared by G3SoilWorks in April/June 2017 [included in Appendix E])</i></p> <p><b>Less Than Significant Impact.</b> Figure PS-5 – Hazardous Waste Sites in the General Plan 2025 does not identify the site as a hazardous waste site. The General Plan FPEIR also does not include the site in the lists of Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), Toxics Release Inventory (TRI), Department of Toxic Substances Control (DTSC) Envirostor, and California Accidental Release Prevention (CalARP) Risk Management Program (RMP) facilities.</p> <p>Further, based on a currently review of available data, the project site is not included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CALEPA 2017). Specifically, the project site is not listed on the California Department of Toxic Substances Control's (DTSC's) Hazardous Waste and Substances Site List - Site Cleanup (Cortese List), the list of Leaking Underground Storage Tank (LUST) sites, the list of sites identified with waste constituents above hazardous waste levels outside the waste management unit, the list of Cease and Desist Orders and Cleanup and Abatement Orders from the State water boards, and the list of hazardous waste facilities where the DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.</p> <p>However, the Project Applicant/Developer for the proposed project commissioned preparation of a Phase I ESA Update and a Phase II ESA for the project site, which was completed by G3SoilWorks in April/June 2017 and is included in Appendix E3 of this Initial Study. In summary, this effort included: review of geologic and hydrologic information for the project site and vicinity; visual site reconnaissance; interviews with knowledgeable persons regarding the site; review of available file information; review of available historical aerial photographs and maps; environmental record search to identify Recognized Environmental Conditions (RECs) associated with the site and adjacent properties; geophysical studies to identify potential underground storage tanks (USTs), waste oil tanks, and underground hydraulic lifts; and subsurface investigation and analytical testing.</p> <p>The updated review of hazardous materials databases found that certain parcels on the project site were included on government databases. The database results are summarized below, and the referenced parcels are shown on Exhibit 20:</p> <ul style="list-style-type: none"> <li>• <b>3575 Merrill Avenue</b> - California Hazardous Material Incident Report System (CHMIRS) and Environmental Data Resource (EDR) Historical (HIST) AUTO Tracking System for the former automotive service business.</li> <li>• <b>3631 Merrill Avenue</b> - HIST UST <u>Historic UST Registered Database</u> and <u>EDR Emissions Inventory Data</u> (EMI) listing for a former underground storage tank; <u>California Facility and Manifest Data</u> (CA HAZNET) list for waste generation of solids or sludges with halogenated organic compounds and halogenated solvents (chloroforms, methyl chloride, perchloroethylene, etc.); EDR HIST CLEANER Tracking System for the former dry cleaning business; and EDR HIST AUTO Tracking System for the former auto detailing business.</li> <li>• <b>3645 Merrill Avenue</b> - CA HAZNET: <u>Facility and Manifest Data</u> list for storage and use of waste oil and mixed oil use/disposal and for recovery of reclamation for reuse including acid regeneration, organics recovery, etc. associated with the former auto service business.</li> </ul>				





Source: G3SoilWorks, Inc. 2017

## Previous Commercial Uses

Merrill Avenue Brownstones Project

Exhibit 20



(10/04/2017 MMD) R:\Projects\PEL\_Pelican\3PEL201001\Graphics\IS-MND\ex\_Previous\_CommercialUses.pdf



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> <li>• <b>3661 Merrill Avenue</b> - CA HAZNET: <a href="#">Facility and Manifest Data</a> list for disposal of aqueous solution with total organic residues less than 10 percent, and EDR HIST AUTO Tracking System for the former tire and automotive service business.</li> <li>• <b>3573-3607 Merrill Avenue</b> - Independently listed on the CA HAZNET: <a href="#">Facility and Manifest Data</a> list for 2007 for generation of asbestos containing waste and other inorganic solid waste, likely associated with the site demolition process.</li> </ul>				
<p>As identified, the site listings are associated with previous uses at the project site, which have been removed. Prior to demolition of the commercial structures, a Phase I ESA was completed in 2005 for the project site and abutting parcels (Converse 2005, see Appendix E1 of this Initial Study). The 2005 Phase I ESA also identified past and current land uses on the site that included tire and automotive shops, an auto dealership, drive-through dairy, car wash, dry cleaner, audio shop, plasma center, pool supplies, and a gas station. These uses included several hydraulic lifts, underground storage tanks, dry cleaning machine, wastewater clarifier, waste oil tanks, and drum storage area. Some of the hydraulic lifts and USTs had been removed before 2005. The 2005 Phase I ESA identified RECs at three parcels within the project site (3575, 3631, and 3661 Merrill Avenue), and recommended that the RECs be addressed in a Phase II ESA. No RECs were identified for the other parcels at the project site and no further assessment was recommended or required. Limited Phase II ESAs were subsequently prepared between 2006 and 2008 by Converse Consultants and are summarized herein.</p> <ul style="list-style-type: none"> <li>• The Phase II ESA prepared for the former smog and service station (at 3575 Merrill Avenue) indicated the presence of stained soils near the waste oil storage drums, but the Total Petroleum Hydrocarbon (TPH) in the soils was below regulatory levels. Subsequent soil testing of the area in and near the TPH-impacted soils also indicated that the maximum concentration of TPH in the oil range for shallow soils was below the Maximum Soil Screening Levels (MSSL) for TPH, as established by the RWQCB; and the TPH concentrations in the gasoline and diesel ranges were below the Practical Quantification Limits (PQL). Further assessment was not recommended.</li> <li>• The Limited Phase II ESA for the former dry cleaner (at 3631 Merrill Avenue) indicated the presence of tetrachloroethene (PCE) at a maximum concentration of 0.056 milligrams per kilogram (mg/Kg), which is below the USEPA's Preliminary Remediation Goal (PRG) for residential uses of 0.48 mg/Kg and the California Modified PRGs for residential properties. However, elevated levels of pH were reported. Further analysis of pH to evaluate the pH levels on site was recommended.</li> <li>• The Limited Phase II ESA for the former audio shop (at 3645 Merrill Avenue) evaluated the subsurface soils near the locations of former hydraulic lifts and a waste oil UST that were removed from the site (see Appendix E2 of this Initial Study). The geophysical survey, soil borings, and trenching discovered a waste oil UST with the top of the tank at 2.5 feet bgs and the bottom at 7 feet bgs. Soil testing indicated TPH and PCE levels were below PQLs. The UST was later removed and excavated soils transported for off-site disposal.</li> </ul> <p>It should also be noted that prior to commercial development on the site, portions of the site were utilized for agricultural production (e.g., orchard and grain crops) from at least 1948 to the early 1960s. Activities commonly associated with agricultural uses include the use and storage of hazardous materials and petroleum products (e.g., agricultural chemicals). Information is not available as to the potential historical usage of pesticides, fertilizers, or insecticides as part of past agricultural use. However, the residual concentrations of these hazardous materials, if present, are not typically at concentrations that would require cleanup by a regulatory agency. The Phase I ESA prepared by Converse Consultants in 2005 identifies that grading activities associated with the development of the site with commercial structures likely reduced the levels of agricultural chemical residues that may be found in the soils to below levels of concern, and no further action is warranted.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The Phase I ESA Update and a Phase II ESA prepared by G3SoilWorks in 2017 concluded the following with respect to the properties at 3631, 3661, and 3645 Merrill Avenue:</p> <ul style="list-style-type: none"> <li> <b>3631 Merrill Avenue.</b> Based on published reports/records, the property at 3631 Merrill Avenue formerly maintained underground storage tanks, a waste oil tank, underground hydraulic lifts, and dry cleaning apparatus. Records from the County of Riverside identify that the underground storage tanks were previously removed from the site without further action required. No records were available that document removal of the underground hydraulic lifts. The geophysical survey performed did not identify any anomalies consistent with underground storage tanks or waste oil tanks at the site. The geophysical survey identified the limits of the excavation for the removal of these items and numerous linear anomalies suggestive of abandoned utility lines. The soil samples obtained from soil borings from the approximate location of the former UST did not contain detectable concentrations of petroleum hydrocarbons or VOCs above the testing reportable limits; and, as such, these soils represent a low environmental risk to the site. </li> <li> <b>3661 Merrill Avenue.</b> Based on the published reports/records, the property at 3661 Merrill Avenue formerly maintained underground hydraulic lifts. No records were found for the removal of these hydraulic lifts. The geophysical survey did not identify any anomalies consistent with underground hydraulic lifts at the site. </li> <li> <b>3645 Merrill Avenue.</b> Based on the published reports/records, the property at 3645 Merrill Avenue formerly maintained underground hydraulic lifts and a waste oil tank. The Riverside County Department of Environmental Health indicates that a 500-gallon waste oil tank was removed in 1990 and that a second 500-gallon waste oil tank was removed in 2007. No records were found for the removal of the hydraulic lifts. The geophysical survey did not identify any anomalies consistent with underground hydraulic lifts at the site; however, a single shallow anomaly was detected (refer to Figure 3 in Appendix E3 of this Initial Study). The soil samples obtained from soil borings from the approximate location of the anomaly (area of former underground hydraulic lifts) did not contain detectable concentrations of petroleum hydrocarbons or VOCs above the testing reportable limits; and, as such, these soils represent a low environmental risk to the site. </li> </ul> <p>It should also be noted that 3553 Merrill Avenue (America's Tire) located immediately east of the project site is listed on the CA HAZNET: <u>Facility and Manifest Data</u> list for storage and use of waste oil and mixed oil use/disposal associated with the existing auto service business. The property is also listed on the HIST UST Historic UST Registered Database for a former underground storage tank and on the CHMIRS listing. Numerous other sites were found on referenced agency lists within designated distances of the project site. This is an indication of the mixed commercial and retail land uses that are present within the immediate surrounding area of the project site. Based on their distances from the project site, elevation, and or case status, the sites listed in the database report do not appear to represent significant environmental concerns to the project site or proposed uses.</p> <p>The proposed project would have a <b>less than significant impact</b> related to creating any significant hazard to the public or environment directly, indirectly, and cumulatively.</p>				

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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>8e. Response:</b> (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas; RCALUCP; Draft Vision 2030 - March JPA General Plan; and AirNav Flabob Airport and Riverside Municipal Airport)</p> <p><b>Less Than Significant Impact.</b> The nearest airport to the site is Flabob Airport, located approximately 2.3 miles northwest of the site. This airport is a privately-owned airport with two runways and has 86 aircraft based on the field. It had an average of 21 operations per day in 2016. The Riverside County Airport Land Use Compatibility Plan (RCALUCP) shows that the site is located outside the compatibility zones and airspace penetration area for this airport. The site is also located outside the planning area for the March Air Reserve Base.</p> <p>The Riverside Municipal Airport is a City-owned airport located approximately 3.1 miles southwest of the project site. This airport has four runways and has 194 aircraft (i.e., airplanes and helicopters) based on the field. It had an average of 288 operations per day in 2016. The RCALUCP shows that the site is located in Zone E – Other Airport Environs, which includes areas with no development density or intensity limitations. However, Riverside County Airport Land Use Commission (RCALUC) review is required for structures over 100 feet tall; and stadiums, amphitheatres, and concert halls are discouraged in Zone E. The project site is also located within the airspace penetration area of this airport, where objects over 1,050 feet above msl would pose obstructions to air navigation. The project site has a ground elevation of approximately 840 to 850 feet above msl, and the proposed project does not propose any structure that would be over 100 feet or a land use that would accommodate a large number of people (e.g., stadiums, amphitheatres, and concert halls). Rather, the proposed structures on the site would be up to 44 feet tall, and 108 residential units and 1,200 square feet of retail uses are proposed. Therefore, the proposed project would not be exposed to aircraft hazards and would not adversely affect aircraft or airport operations at the Riverside Municipal Airport.</p> <p>Impacts related to hazards from airports are <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>8f. Response:</b> (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas and RCALUCP)</p> <p><b>No Impact.</b> Because the project site is not located near a private airstrip and does not propose a private airstrip, the proposed project would not expose people residing or working on site and in the City to hazards related to a private airstrip and would have <b>no impact</b> directly, indirectly, or cumulatively.</p>				
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>8g. Response:</b> (Source: Site Visit; GP 2025 FPEIR Chapter 5.7 – Hazards and Hazardous Materials; City of Riverside's EOP; Riverside County Operational Area – Multi-Jurisdictional LHMP; OES Strategic Plan; and Standard Drawings for Construction)</p> <p><b>Less Than Significant Impact.</b> The proposed project would be served by an existing, fully improved street (Merrill Avenue) to the south and an alley to the north, as well as a network of nearby local streets (De Anza Avenue, Riverside Avenue, and Magnolia Avenue). These streets have been designed to meet the Riverside Public Works and Fire Departments' specifications for emergency vehicle access. The roadway improvements on Merrill Avenue have also been designed to comply with City standards.</p>				

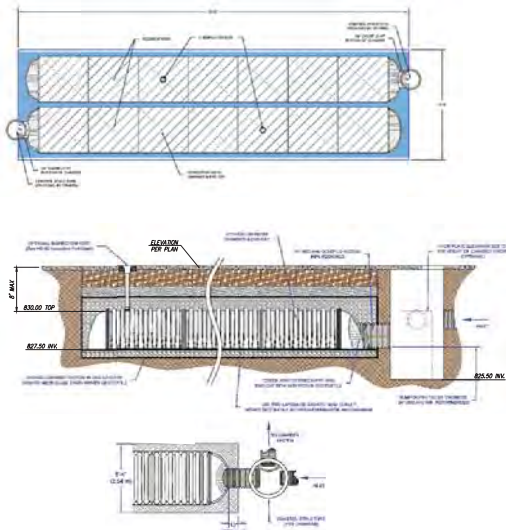
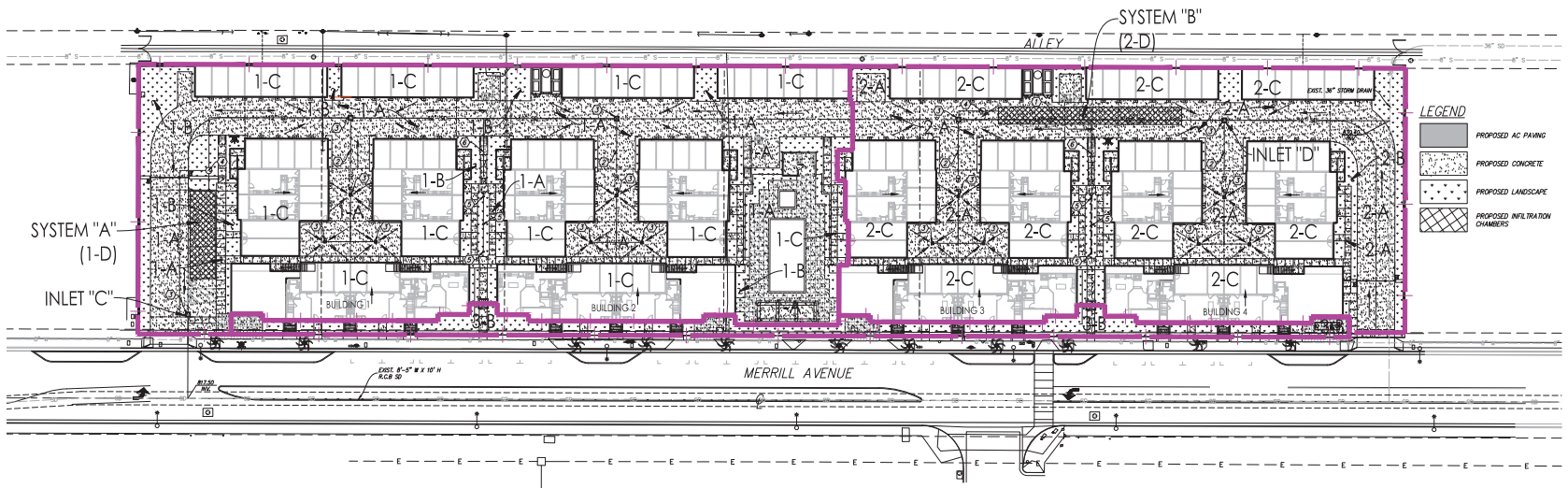
ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Emergency evacuation in the City would be conducted under the supervision of the City's Police Department, Fire Department, and/or OES in accordance with the City's Emergency Operations Plan, the Riverside County Operational Area – Multi-Jurisdictional LHMP, and the California OES Strategic Plan. Since Merrill Avenue is not a designated evacuation route in the City, no impact on emergency evacuation would occur with the proposed project and the proposed improvements on Merrill Avenue.</p> <p>As part of the proposed project's construction, temporary street lane closures would be necessary for utility connections and roadway improvements along Merrill Avenue. Any street closure would be of short duration so as not to interfere or impede with any emergency response or evacuation in the surrounding areas, and at least one lane of travel would be maintained in each direction at all times. Temporary street closure would comply with the Standard Specifications for Public Works Construction (Greenbook) (as amended and adopted by the City), which contains standards for maintenance of access; traffic control; and notification of emergency personnel. Therefore, the proposed project would have a <b>less than significant impact</b> directly, indirectly, and cumulatively to an emergency response or evacuation plan.</p>				
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>8h. Response:</b> <i>(Source: General Plan 2025 Figure PS-7 – Fire Hazard Areas and CalFire Very High Fire Hazard Severity Zones in LRA)</i></p> <p><b>No Impact.</b> The site is located in an urbanized area and there are no large undeveloped areas and steep slopes on or near the site that may pose wildfire hazards. The project site and the surrounding areas are not in designated Fire Hazard Areas, as shown in Figure PS-7 of the General Plan 2025 or in a Very High Fire Hazard Severity Zone (VHFHSZ), as identified by the California Department of Forestry and Fire Prevention (CalFire). Rather, the site is within a Non-VHFHSZ area. The nearest VHFHSZ is located 3.2 miles east of the site, at the hills near Alessandro Boulevard. Since the proposed project would not be exposed to nor would it create wildfire hazards, <b>no impact</b> related to wildland fires would occur either directly, indirectly, or cumulatively.</p>				



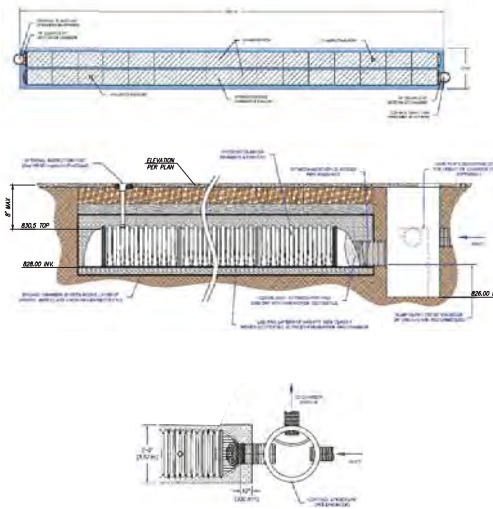
ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>9. HYDROLOGY AND WATER QUALITY.</b> Would the project:				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9a. Response:</b> (<i>Source: General Plan 2025 Open Space and Conservation Element Figure OS-9 – Watersheds; General Plan 2025 FPEIR Figure 5.8-1 and Table 5.8-A – Beneficial Uses Receiving Water; Santa Ana Region Basin Plan; USEPA Section 303(d) List; RMC Chapter 14.12; NPDES Construction General Permit; and Hydrology and Hydraulics Study and Preliminary Water Quality Management Plan prepared by Psomas in May 2017 [included in Appendix F]</i>)</p> <p><b>Less Than Significant Impact.</b> The project site is located within the Santa Ana River watershed (GP 2025 Figure OS-9 – Watersheds and FPEIR Figure 5.8-1 - Watersheds). The beneficial uses of the Santa Ana River include agriculture; groundwater recharge; water-contact recreation; non-contact water recreation; warm freshwater habitat; wildlife habitat; rare, Threatened, or Endangered species; and spawning, reproduction, and development. The USEPA Section 303(d) List shows that Reach 3 of the Santa Ana River (where storm water from the site is conveyed) is considered impaired for copper, lead, and pathogens; but no Total Maximum Daily Loads (TMDLs) have been established for these pollutants.</p> <p>During the construction phase, pollutants such as loose soils and organic materials, oil and grease, vehicle fluids, paint, and other solvents, may enter the City’s storm drainage system and contribute to the impairment of the Santa Ana River. Project construction activities are required to be conducted in compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (NPDES No. CAS000002, Water Quality Order No 2009-009-DWQ<sup>3</sup>, or the latest approved general permit). The NPDES Construction General Permit requires construction activities that involve the disturbance of one acre or more of total land area to prepare and implement a SWPPP that contains BMPs that would have to be implemented during construction activities so as to reduce or eliminate construction-related pollutants in the runoff. Compliance with the NPDES Construction General Permit would effectively control erosion and sedimentation and other construction-related pollutants from entering the storm drainage system during construction activities at the site.</p> <p>The project site is currently a paved parking lot (three parcels) on the eastern portion and undeveloped (three parcels) on the western portion (approximately 53.8 percent impervious surface). Storm water pollutants from the site under existing conditions include bacteria and viruses, metals, toxic organic compounds (e.g., petroleum hydrocarbons), trash and debris, and oil and grease. No structural or non-structural BMPs are present/implemented at the existing parking lot.</p> <p>Upon construction of the buildings and site improvements for this project, the permeable area of the project site would decrease from 46.2 percent to 13.2 percent. Also, long-term changes in storm water runoff quality would occur with the proposed project, associated with proposed driveways, internal roads and parking areas, trash collection areas, and landscaped areas on the site. Storm water pollutants that may be generated by the proposed project would be associated with the residential and retail uses of the property and would include bacteria and viruses, heavy metals, nutrients, pesticides, toxic organic compounds, sediments, trash and debris, oxygen-demanding substances, and oil and grease associated with the internal road and parking spaces and proposed landscaped areas, outdoor activity areas, and trash storage areas.</p> <p>Under the NPDES, a Municipal Separate Storm Sewer System Permit (MS4 Permit) has been issued to the Riverside County Flood Control and Water Conservation District (RCFC&amp;WCD), the County of Riverside, and co-permittees in the Santa Ana River Basin Region (including the City of Riverside). In compliance with the MS4 Permit, Chapter 14.12 of the RMC contains the City’s regulations for storm water and runoff pollution control, which prohibit specific types of discharges into the storm drainage system and require the implementation of construction and post-construction BMPs. A Preliminary Water</p>				

<sup>3</sup> NPDES No. CAS000002, Water Quality Order 2009-0009- DWQ, SWRCB NPDES General Permit for Storm Water Discharges Associated with Construction Activity (adopted by the SWRCB on September 2, 2009, and effective on July 1, 2010). This order was amended by 2010-0014-DWQ, which became effective on February 14, 2011, and 2012-0006-DWQ, which became effective on July 17, 2012. In accordance with the language set forth in Order No. 2009-0009-DWQ, this permit has been administratively extended indefinitely.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Quality Management Plan (WQMP) for the proposed project has been prepared that identifies water quality BMPs that would be constructed, maintained, and implemented on site to reduce pollutants in the storm water.</p> <p>The Preliminary WQMP proposes that storm water pollutants from the proposed project be treated through the incorporation of the site design, source control, and treatment control BMPs. As proposed in the Preliminary WQMP (Appendix F of this Initial Study) and shown in Exhibit 21, the proposed project would include two storm water treatment chambers (for hydrodynamic separation of pollutants) and two underground infiltration chambers (linear chambers with a pervious bottom consisting of an angular stone foundation base on a geotextile layer) that would capture storm water on the site through grate inlets and allow for pollutant removal and ground infiltration. The storm water treatment chambers and underground infiltration chambers would be provided in the internal road at the northeastern section of the site and in the parking spaces at the southwestern corner of the site. Overflows from the northeastern underground infiltration chamber would be directed into the existing storm drain line at the eastern property boundary. Overflows from the southwestern underground infiltration chamber would be directed into the box structure in Merrill Avenue.</p> <p>The storm water treatment chambers would remove coarse sediment, debris, and free floating oil in the storm water runoff. The underground infiltration chambers would percolate storm water. Since the on-site drainage system would provide a longer travel time and decrease runoff flows, no increase in the runoff volumes and rates would be generated by the proposed project and that would be discharged into the Santa Ana River.</p> <p>The proposed project would also comply with Chapter 14.12 of the RMC, which sets storm water discharge prohibitions and regulations to reduce pollutants in the storm water, including requirements for swimming pool discharge and waste discharges into the City's sewer system. In addition, non-structural BMPs are outlined in the Preliminary WQMP and include storm drain inlet signage; restrictions on pesticide use, swimming pool discharge, trash storage areas, rooftop equipment roofs and sweeping activities; drainage system maintenance; and the provision of educational materials to operators, occupants, and employees. Permanent structural BMPs in the WQMP shall be constructed as part of the proposed project, and non-structural BMPs shall be implemented during long-term use and occupancy of the proposed project.</p> <p>With project compliance with the MS4 Permit, NPDES Construction General Permit, and the City's storm water regulations through implementation of the SWPPP and WQMP, the proposed project would result in a <b>less than significant impact</b> directly, indirectly or cumulatively as it relates to any water quality standard or waste discharge.</p>				
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9b. Response:</b> (Source: General Plan 2025 Figure PF 1.1 – Water Basins Groundwater Recharge Areas; RPU Map of Water Supply Basins and Urban Water Management Plan; DWR Water Data Library; Preliminary Infiltration Assessment and Preliminary Geologic/Geotechnical Investigation prepared by G3SoilWorks in May 2017 [included in Appendix C]); and Limited Phase 2 ESAs prepared by Converse in 2006 to 2008 [included in Appendix E])</p> <p><b>Less than Significant Impact.</b> The project site is underlain by the Riverside South Groundwater Basin (Riverside 2016b) that is part of the Riverside Arlington Subbasin of the Upper Santa Ana Valley Groundwater Basin (G3SoilWorks 2017a). Recharge of this basin occurs by underflows from basins to the north, the Santa Ana River, and percolation of surface water runoff (G3SoilWorks 2017a). Groundwater was not encountered in soil borings up to 10 to 15 feet bgs at the site (Converse 2005, 2007) and was not encountered at 51.5 feet bgs during the geotechnical site investigation (G3SoilWorks 2017b). Groundwater has been recorded to be present approximately 124 feet bgs in an area south of the site; 73 feet bgs in an area north of the site; and 51 feet bgs in an area west of the site (Converse 2005, 2007). It was historically encountered at 70 to 75 feet bgs at the intersection of Merrill Avenue and Magnolia Avenue and 78 to 79 feet to the northeast of the site</p>				



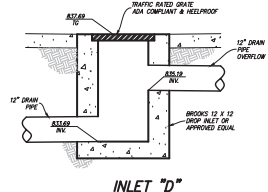
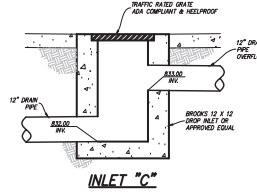
**SYSTEM "A"**



**SYSTEM "B"**

LOT DRAINAGE MANAGEMENT AREAS		
DMA ID	SURFACE TYPE	AREA (SQ. FT.)
1-A	CONCRETE OR ASPHALT	30,335
1-B	LANDSCAPE	8,030
1-C	ROOFS	33,753
1-D	INFILTRATION CHAMBERS	871
2-A	CONCRETE OR ASPHALT	18,301
2-B	LANDSCAPE	5,571
2-C	ROOFS	37,754
2-D	INFILTRATION CHAMBERS	1,286
3-B	LANDSCAPE-SWELL TREATMENT	7,341

BMP LEGEND	
①	PROPOSED 12" STORM DRAIN PIPE
②	PROPOSED 6" STORM DRAIN PIPE
③	DIRECTION OF FLOW
④	PROPOSED DRAINAGE MANAGEMENT AREA BOUNDARY
⑤	PROPOSED DRAINAGE MANAGEMENT AREA IDENTIFICATION
⑥	PROPOSED BROOKS BOX
⑦	PROPOSED AQUA SWIRL HYDRODYNAMIC SEPARATOR
⑧	PROPOSED ATRIUM GRATE
⑨	PROPOSED 6" STORM DRAIN PIPE



## Proposed Water Quality BMPs

Merrill Avenue Brownstones Project

Source: Psomas 2018

Exhibit 21



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ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>(G3SoilWorks 2017a, 2017c). Proposed excavation activities would not extend deep enough to affect underlying groundwater resources. Also, the proposed project would not interfere with groundwater recharge since the site does not serve as a recharge basin and no groundwater well is proposed as part of the proposed project. The proposed project would not directly deplete groundwater supplies or interfere substantially with groundwater recharge such that a net deficit in aquifer volume or a lowering of the local groundwater table level would result.</p> <p>Water service to the proposed project would be provided by the City, which obtains its water supply from local groundwater resources (e.g., Bunker Hill, Riverside North, and Riverside South subbasins). Additional water supply is available from the Rialto-Colton groundwater basin, recycled water from the City's Regional Water Quality Control Plant (RWQCP), and imported water from the Metropolitan Water District of Southern California. The RPU Urban Water Management Plan (UWMP) states that nearly 75,126 acre-feet of groundwater was extracted by RPU in 2015 to meet demand, with 2040 demand estimated at 124,703 acre-feet to be met with increased groundwater extraction, recycled water use, and imported water supplies (Riverside 2016b).</p> <p>While an indirect demand for groundwater supplies would occur with the proposed project, this demand (estimated at 75,037 gallons per day, or 84 acre-feet per year - see discussion under Threshold 18b) would represent a limited amount of the City's total water supply (75,126 acre-feet per year in 2015 and 124,703 acre-feet per year in 2040) or the volume of water pumped from local groundwater basins (74,926 acre-feet in 2015 and projected at 96,573 acre-feet per year in 2040). The proposed project would be connected to the City's sewer system, which would allow for recycled water production. The proposed project would also comply with NPDES and WQMP requirements for continued on-site infiltration of storm water and to ensure the proposed project would not adversely affect or substantially deplete underlying groundwater supplies or interfere substantially with groundwater recharge. Therefore, there would be a <b>less than significant impact</b> to groundwater supplies and recharge either directly, indirectly, or cumulatively.</p>				
<p>c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9c. Response:</b> <i>(Source: Hydrology and Hydraulics Study and Preliminary Water Quality Management Plan prepared by Psomas in May 2017[included in Appendix F])</i></p> <p><b>Less Than Significant Impact.</b> Under existing conditions, storm water flows toward the southwest portion of the project site, which is undeveloped, and percolates into the ground, while a small area at the northeastern section of the site drains into a ribbon gutter along the alley to the north. Runoff that does not percolate into the ground flows to Merrill Avenue and into the municipal storm drain system. In the long term, drainage patterns on the site would change with the introduction of impervious surfaces (e.g., buildings, internal road, pathways, garages, hardscapes, etc.). As proposed, runoff from the developed site would be conveyed to the existing storm drain line at the eastern property line (which discharges into the box structure in Merrill Avenue) and to the box structure in Merrill Avenue, which, in turn, conveys storm water westerly to regional drainage facilities and then ultimately to the Santa Ana River, consistent with existing conditions.</p> <p>The proposed project would also involve outdoor activities (e.g., pool and recreation area use, landscape maintenance, outdoor trash storage areas, vehicle use and parking) that may lead to the introduction of pollutants in the storm water. These pollutants may include heavy metals, nutrients, trash and debris, oil and grease, toxic organic compounds, bacteria/viruses, sediment, pesticides, oxygen-demanding substances, and loose soils. Controls for erosion, siltation and other pollutants associated with long-term implementation of projects are addressed in the Preliminary WQMP for the proposed project and as part of the City's grading permit process.</p> <p>With an increase in impervious area on the site from 53.8 percent to 86.8 percent, the potential for long-term erosion would decrease. The remaining 13.2 percent of the site would also be landscaped to prevent erosion. As previously identified, the Preliminary WQMP for the proposed project includes the provision of storm water treatment chambers that would remove pollutants from the storm water and underground infiltration chambers to retain storm water for ground infiltration in order to prevent an increase in the existing runoff volume and rate.</p>				



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<p>The Hydrology and Hydraulics Study indicates that existing runoff flows are estimated at 0.34 cubic feet per second (cfs, 10-year storm) and 0.53 cfs (100-year storm) at the alley to the north and a total of 3.09 cfs (10-year storm) and 5.00 cfs (100-year storm) in Merrill Avenue. With the proposed on-site underground infiltration chambers, future runoff flows are estimated at 0.0 cfs (10-year and 100-year storm) at the alley to the north and a total of 2.89 cfs (10-year storm) and 4.62 cfs (100-year storm) in Merrill Avenue. The decreases in runoff flows would prevent erosion or siltation at downstream channels and rivers in the long-term.</p> <p>As previously discussed, the proposed project is subject to NPDES Construction General Permit requirements, and coverage under the Construction General Permit requires the proposed project to prepare and implement a SWPPP for the reduction of pollutants in storm water runoff during construction. Implementation of the erosion control and sediment control BMPs in the SWPPP would prevent the alteration of downstream channels and rivers or erosion and siltation at these channels and rivers during the short-term construction phase of the proposed project.</p> <p>Changes in drainage patterns would be confined to the site, and off-site discharge would be made at the existing storm drainage lines at the eastern property line and in Merrill Avenue. With runoff flows into the box structure in Merrill Avenue at lower rate and volume than existing conditions, there would be no alteration of the course of or substantial erosion or siltation at downstream drainage channels or rivers. Therefore, the proposed project would have a <b>less than significant impact</b> directly, indirectly, or cumulatively to existing drainage patterns.</p>				
<p>d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9d. Response:</b> <i>(Source: Hydrology and Hydraulics Study and Preliminary Water Quality Management Plan prepared by Psomas in May 2017 [included in Appendix F])</i></p> <p><b>Less than Significant Impact.</b> The proposed project would result in changes in on-site drainage patterns due to the construction of structures and site improvements. Approximately 86.8 percent of the site would be covered with buildings, parking areas, internal roads, and other impervious areas; and 13.2 percent would be pervious (i.e., landscaped areas), compared to 46.2 percent pervious under existing conditions. The runoff from the project site in the existing and developed conditions have been calculated in the Hydrology and Hydraulics Study, and the on-site storm drain system has been designed to accommodate the 10-year and 100-year storm flows. Storm water from building roofs and impervious areas would be directed into grate inlets with underground storm drain lines leading to storm water treatment chambers that would reduce pollutants in the storm water and that would be connected to the underground infiltration chambers to allow for ground infiltration. These treatment and infiltration chambers would decrease the off-site runoff flow volume and rate compared to existing conditions.</p> <p>The change in drainage patterns would be localized (internal to the site) and relatively minor. Existing runoff flows to the alley (0.34 cfs during a 10-year storm and 0.53 cfs during a 100-year storm) would be eliminated; and, instead, storm water runoff flows from the site would be directed to the storm drain line at the eastern edge of the site and into the storm drain box culvert in Merrill Avenue. Thus, with implementation of the proposed project, no increase in runoff volume and no change in off-site drainage patterns that could affect the course of water flows in the area would occur. Also, no flooding on-site or off-site would occur as a result of the proposed project; and there would be <b>less than significant impact</b> directly, indirectly, or cumulatively since the change in the on-site drainage pattern would not result in flooding on- or off-site.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9e. Response:</b> <i>(Source: Hydrology and Hydraulics Study and Preliminary Water Quality Management Plan prepared by Psomas in May 2017 [included in Appendix F])</i></p> <p><b>Less Than Significant Impact.</b> An 8.4-foot by 10-foot reinforced concrete box structure is located in the center of Merrill Avenue, and a 36-inch storm drain line is located in a 20-foot-wide easement at the eastern property line. As discussed under Thresholds 9c and 9d above, storm water runoff from the site flows toward Merrill Avenue, with a minor amount flowing toward the alley north of the site. With the project, the proposed storm drain system would convey storm water into two treatment chambers that would reduce pollutants in the storm water and that would be connected to the underground infiltration chambers to allow for ground infiltration. Overflows from the infiltration chambers would be conveyed to the storm drain line at the eastern edge of the site and into the storm drain box culvert in Merrill Avenue. This would eliminate runoff into the alley and decrease runoff rates and volumes in Merrill Avenue. Since the runoff from the site would be reduced over existing flow rates and volumes, new or upgraded off site storm drain lines would not be needed.</p> <p>Construction of the proposed project would have the potential to contribute sediment, trash, debris, and other pollutants into the storm drain lines serving the site and that eventually enter the downstream Santa Ana River. As discussed under Threshold 9a, the proposed project is subject to the NPDES Construction General Permit, which requires preparation of an SWPPP and implementation of BMPs would reduce the potential for construction debris and other pollutants to enter the City's storm drain lines and the Santa Ana River. Construction impacts would be temporary and less than significant.</p> <p>As discussed under Threshold 9a, the on-site storm drainage system that would be installed concurrently with the construction of this project has been designed to remove pollutants through storm water treatment chambers, would allow continued ground percolation of storm water through infiltration chambers, and would decrease the existing runoff volumes and rates. Therefore, the proposed project would not create or contribute storm water runoff exceeding capacity of existing storm water drainage systems nor provide substantial additional sources of polluted runoff. There would be a <b>less than significant impact</b> directly, indirectly, or cumulatively.</p>				
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>9f. Response:</b> <i>(Source: RMC Chapter 14.12; NPDES Construction General Permit; and Preliminary Water Quality Management Plan prepared by Psomas in May 2017 [included in Appendix F])</i></p> <p><b>Less Than Significant Impact.</b> The project site is over one acre in size and is required to obtain coverage under the NPDES Construction General Permit, including preparation and implementation of an SWPPP during construction activities on the site. As discussed above, erosion-control, sediment-control, tracking control, hazardous material and waste management, and other BMPs in the SWPPP that would be implemented during construction would reduce the potential for construction debris and other pollutants to enter the City's storm drain lines and the Santa Ana River. Impacts would be temporary and less than significant.</p> <p>The Preliminary WQMP for the proposed project has been prepared in accordance with the Riverside County MS4 Permit, on which the City is a co-permittee, and associated requirements and regulations to reduce storm water pollutants from the proposed project in the long term. The Preliminary WQMP identifies potential pollutants that may enter the storm water and selects appropriate site design, source control, and treatment control BMPs that would be incorporated into the project design to reduce these pollutants. It includes the provision of two storm water treatment chambers and two underground infiltration chambers and the implementation of various non-structural BMPs during long-term occupancy and operation of the proposed project to reduce pollutants in the storm water. With implementation of the BMPs identified in the Preliminary WQMP, as conceptually approved by the City, impacts related to degradation of water quality are considered <b>less than significant</b> directly, indirectly, and cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>9g. Response:</b> (Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas and FEMA Flood Hazard Map No. 06065C0710G)</p> <p><b>No Impact.</b> The project site is not located in or near the 100-year floodplain, as identified by the Federal Emergency Management Agency’s (FEMA’s) Flood Insurance Rate Map. The project site is within Zone X, which includes areas outside the 500-year floodplain (Map Number 06065C0710G). Figure PS-4, Flood Hazard Areas, in the Public Safety Element of the City’s General Plan 2025, shows the project site is located outside the 1-percent and 0.2-percent annual chance of flood (100-year and 500-year floodplains, respectively). The proposed project would not place housing within a 100-year flood hazard area and would not expose the proposed housing units to flood hazards. There would be <b>no impact</b> directly, indirectly, or cumulatively.</p>				
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>9h. Response:</b> (Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas and FEMA Flood Insurance Rate Map No. 06065C0710G)</p> <p><b>No Impact.</b> As discussed above, FEMA’s Flood Insurance Rate Maps show that the project site is outside the 100-year and 500-year floodplains. Figure PS-4 - Flood Hazard Areas in the Public Safety Element of the City’s General Plan 2025 also shows the site is located outside the 1-percent and 0.2-percent annual chance of flood and outside the Department of Water Resources’ Awareness Floodplain. The proposed structures and site improvements would not be located within flood hazard areas. Therefore, the proposed project would not place a structure within a 100-year flood hazard area that could impede or redirect flood flows; and <b>no impact</b> would occur directly, indirectly, or cumulatively.</p>				
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>9i. Response:</b> (Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas; FEMA Flood Hazard Map No. 06065C0710G; and USACE National Inventory of Dams)</p> <p><b>No Impact.</b> The project site is not located within or near a flood hazard area as depicted on General Plan 2025 FPEIR Figure 5.8-2 – Flood Hazard Areas and in the FEMA’s Flood Insurance Rate Map (Map Number 06065C0710G). No dams have been identified near the project site in the USACE National Inventory of Dams. Figure PS-4, Flood Hazard Areas, in the Public Safety Element of the City’s General Plan 2025, shows the project site is located outside the inundation areas of dams located in and near the City. In addition, no levees are on or near the site that may potentially fail and result in flooding on the site. As such, no flooding or inundation hazards to persons or property on the project site would occur in the event of dam or levee failure. The proposed project would not place a structure within a dam inundation area that would expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Therefore, <b>no impact</b> directly, indirectly, or cumulatively would occur with the proposed project.</p>				
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>9j. Response:</b> (Source: GP 2025 FPEIR Chapter 7.5.8 – Hydrology and Water Quality; General Plan 2025 Public Safety Element Figure PS-4 – Flood Hazard Areas; Preliminary Geologic/Geotechnical Investigation prepared by G3SoilWorks in May 2017 [included in Appendix C]); and USGS National Map Viewer)</p> <p><b>No Impact.</b> A seiche is the resonant oscillation of a body of water, caused by earthquake shaking (waves). Seiche hazards exist where ground shaking can cause water to splash out of an open body of water and inundate nearby areas and structures. The project site is not exposed to inundation hazards due to a seiche since the site is not located near a large open body of</p>				

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<p>water, such as Lake Mathews (approximately 7.4 miles south-southwest), Lake Evans (approximately 2.6 miles north-northeast), Mockingbird Reservoir (approximately 4.5 miles south-southwest), Woodcrest Dam (approximately 3.7 miles south), Perris Reservoir (approximately 13.0 miles southeast), or the Santa Ana River (approximately 1.6 miles northwest).</p> <p>Tsunamis are seismic sea waves generated by undersea earthquakes or landslides that occur in coastal areas; the City of Riverside is not located in a coastal area. The project site is located approximately 37 miles inland and, thus, is not subject to tsunami hazards. Also, no steep slopes are on or near the site that may pose mudflow hazards, and the site is not on or near Lake Hills, Norco Hills, the Box Springs Mountain area, or any of the arroyos that run through the City. Rather, the site and the surrounding area have a generally flat topography within an urbanized area that is not near the coast, hillsides, or water bodies. Therefore, <b>no impact</b> related to the potential for seiche, tsunami, or mudflow would occur with the proposed project either directly, indirectly, or cumulatively.</p>				
<b>10. LAND USE AND PLANNING.</b> Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>10a. Response:</b> <i>(Source: General Plan 2025 Land Use and Urban Design Element and Figure LU-2 – Urban Design Framework; Conceptual Site Plan; and City of Riverside Magnolia Center Neighborhood Map)</i></p> <p><b>No Impact.</b> The project site is located within the Magnolia Center Neighborhood, which is a commercial hub south of the City’s downtown area. The site is at the northeastern section of this neighborhood, south of the UPRR tracks and an alley and north of Regal Cinemas 16 and the parking lot of the Riverside Plaza shopping center. America’s Tire Company and two restaurants are east of the site, and VIP nightclub and Staples are west of the site. Farther north of the project site, beyond the UPRR tracks and along Elizabeth Street are the RPU substation, Inland Valley Realtors Association office, residential uses, and a vacant office building.</p> <p>Riverside Plaza is identified as a regional activity node in the General Plan 2025 Land Use and Urban Design Element, and the proposed mixed-use project would support this activity node. Development of the proposed project would not displace existing residences (as no residences are present on the site or adjoining the site). The proposed project would not divide or disrupt the physical arrangement of residential areas farther to the north and northeast of the site. The proposed project is also an infill project that would be served by fully improved public streets and utility infrastructure and does not involve the subdivision of land or the creation of streets that could alter the existing surrounding pattern of development or an established community. Therefore, <b>no impact</b> directly, indirectly, or cumulatively to an established community would occur with the proposed project.</p>				
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>10b. Response:</b> <i>(Source: General Plan 2025, Land Use and Urban Design Element Figure LU-10 – Land Use Policy Map, and Table LU-5 – Zoning/General Plan Consistency Matrix; Magnolia Avenue Specific Plan; Title 19 – Zoning Code; and Zoning Map of the City of Riverside)</i></p> <p><b>Less than Significant Impact.</b> The project site is designated as Commercial in the City’s Land Use Policy Map (General Plan 2025 Figure LU-10). The Commercial designation allows retail, sales, service, and office uses at a maximum floor area ratio (FAR) of 0.5. A General Plan Amendment (GPA) is needed to amend the site’s land use designation to MU-U - Mixed Use – Urban, which allows high-density residential developments at 30 to 40 units per acre and commercial, office, institutional, and business uses, including retail, entertainment, and student-oriented activities at an FAR of 2.0 to 4.0. The site is located adjacent to the Magnolia Avenue Mixed Use Corridor (Figure LU-2). The areas west of the site along Magnolia Avenue are designated as MU-V - Mixed Use – Village and MU-N - Mixed Use – Neighborhood, and the areas north and</p>				



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<p>northeast of the site are also designated MU-N. The proposed GPA to MU-U - Mixed Use – Urban would not conflict with adjacent land use designations in the City’s Land Use Policy Map.</p> <p>The Riverside General Plan identifies objectives and policies that build upon the vision for the City outlined in the General Plan and provide the structure for each of the General Plan’s elements. In addition to the elements mandated by State law, the City’s General Plan includes additional elements to reflect the spirit of the Riverside: Arts and Culture Element, Education Element, Air Quality Element, Parks and Recreation Element, and Historic Preservation Element. The State’s general rule for a General Plan consistency determination is that “an action, program, or project is consistent with the General Plan if, considering all its aspects, it would further the objectives and policies of the General Plan and not obstruct their attainment” (OPR 2003). A detailed assessment of the proposed project’s consistency with applicable objectives and policies from the Riverside General Plan is provided in Table A in Appendix G of this Initial Study. As identified, the proposed project is consistent with the applicable objectives and policies. Notably, the proposed project implements the Riverside General Plan objectives for the Magnolia Center neighborhood: Policy LU-58.7, which calls for supporting and encouraging the redevelopment of the Magnolia Avenue corridor with mixed-use development; Objective LU-67, which addresses the revitalization of Magnolia Center, while maintaining and preserving the low-scale of surrounding residential uses; and Policy LU-68.1, which protects the Magnolia Center’s residential areas from the operational impacts of new commercial and mixed-use development in the neighborhood. A detailed assessment of the proposed project’s consistency with applicable objectives and policies in the Riverside General Plan is provided in Table A in Appendix G of this Initial Study.</p> <p>The site is also included in the Magnolia Center District of the Magnolia Avenue Specific Plan and is designated as Commercial. A Specific Plan Amendment (SPA) would be needed to designate the site as MU-U in Figure 3.9 of the Specific Plan (see Exhibit 13) and revise Table 3.5 to add an MU-U – Mixed-Use Urban designation for the parcels immediately north of Riverside Plaza (encompassing the site). A detailed assessment of the proposed project’s consistency with applicable objectives and policies from the Magnolia Avenue Specific Plan is provided in Table B in Appendix G of this Initial Study. As identified, the proposed project is consistent with the applicable objectives and policies. Notably, the proposed SPA would implement Policy 1.3 of the Specific Plan for emphasizing and encouraging mixed-use development to re-energize the Magnolia Center District and Policy 1.4 for the development of pedestrian-oriented mixed-use projects with supportive retail uses on underutilized sites along the Magnolia Avenue corridor near Riverside Plaza. The proposed project would also comply with applicable development standards and design guidelines in the Specific Plan.</p> <p>The site is zoned CG-SP - Commercial General-Specific Plan (Magnolia Avenue) Overlay Zones, which allows more intense service commercial retail, office, and repair uses, as well as some outdoor retail uses. The proposed project would require a Rezone to the MU-U-SP – Mixed Use-Urban and Specific Plan (Magnolia Avenue) Overlay Zones to match the proposed General Plan and Specific Plan land use designations for the site. The proposed GPA, SPA, and Rezone would not result in land use conflict or incompatibility since the proposed mixed-use project would support and complement adjacent mixed-use and commercial land uses and zones. The proposed project has been designed to comply with the MU-U – Mixed-Use Urban development standards, including minimum lot area, depth and width, and setbacks; maximum building height and floor area ratio; and open space requirements. A variance is proposed for perimeter walls that would exceed the City’s maximum allowable height of six feet. The proposed walls would be up to 14 feet in height to provide noise attenuation for train noise from the railroad tracks to the north, as well as provide privacy and security for the proposed units and common recreation areas.</p> <p>With respect to regional planning, the Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization (MPO) for Riverside, Los Angeles, Orange, San Bernardino, Ventura, and Imperial Counties. The federal government mandates SCAG, as the designated MPO, to prepare plans for growth management, transportation, air quality, and hazardous waste management. In addition, SCAG reviews EIRs for projects of regional significance for consistency with its regional plans. The policies and strategies of SCAG’s regional planning programs, including the Regional Comprehensive Plan (RCP), Regional Housing Needs Assessment (RHNA), and RTP/SCS, are not applicable to the proposed project because the proposed project is not of Statewide, Regional or Areawide Significance. The proposed project would also not exceed the growth and development forecast assumptions used in these regional plans (see discussion under Threshold 13a below).</p>				

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As such, this project would have a <b>less than significant impact</b> on land use and planning as it relates to applicable land use policies, such as the Riverside General Plan 2025, Magnolia Avenue Specific Plan, and Riverside Zoning Code directly, indirectly or cumulatively.				
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>10c. Response:</b> (Source: Western Riverside County MSHCP and RMC Section 16.72.040 – Establishing the Western Riverside County MSHCP Mitigation Fee)</p> <p><b>No Impact.</b> As discussed under Threshold 4f, the project site is located within the planning area boundaries of the Western Riverside County MSHCP but is outside designated Conserved Lands, Conservation Easements, Special Linkage Areas, or Criteria Cells. Thus, development of the project site would not conflict with the Western Riverside County MSHCP, but the Project Applicant/Developer would have to pay the MSHCP local development mitigation fee in accordance with Section 16.72.040 of the RMC. No conflict with the Western Riverside County MSHCP or other HCP or NCCP would occur with the proposed project. There would be <b>no impact</b> directly, indirectly, or cumulatively.</p>				
<b>11. MINERAL RESOURCES.</b> 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>11a. Response:</b> (Source: General Plan 2025 Figure OS-1 – Mineral Resources; Mineral Land Classification of the Greater Los Angeles Area; DOGGR Oil, Gas and Geothermal Fields in California; and DOGGR Well Finder)</p> <p><b>No Impact.</b> The Mineral Land Classification of the Greater Los Angeles Area shows that the project site is designated as Mineral Resource Zone (MRZ) 3—an area containing mineral deposits, the significance of which cannot be evaluated from available data. This designation is also reflected in the General Plan 2025 Figure OS-1 - Mineral Resources. The project area supports urban development, and no mining or mineral extraction activities occur at the site or adjacent to the site. No oil, gas or geothermal fields underlie the project site. Review of the California Division of Oil, Gas, and Geothermal Resources’ (DOGGR’s) Well Finder shows no oil or gas wells are on the project site or in the vicinity of the project site. The nearest well is a dry hole located approximately 6.4 miles north of the project site.</p> <p>The proposed project does not propose the extraction of mineral resources. No mineral resources have been identified on the project site, and no historical use of the site or surrounding area for mineral extraction purposes is documented. The project site is not, nor is it adjacent to, a locally important mineral resource recovery site delineated in the City’s General Plan 2025 Open Space and Conservation Element. Therefore, the proposed project would have <b>no impact</b> on regional or Statewide mineral resources directly, indirectly, or cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>11b. Response:</b> (Source: General Plan 2025 Open Space and Conservation Element and Figure OS-1 – Mineral Resources)</p> <p><b>No Impact.</b> The General Plan 2025 Open Space and Conservation Element states that mining activities are occurring outside the City’s urban center. Figure OS-1 – Mineral Resources in the Open Space and Conservation Element reflects the California Department of Mining and Geology’s (CDMG’s) Mineral Land Classifications and also shows scattered locations of feldspar, silica, limestone, and other rock products in the City. The project site is not located near any identified mineral resources or extraction areas or in areas identified to have deposits of feldspar, silica, limestone, and other rock products. Thus, the proposed project would not result in the loss of availability of a locally important mineral resource or mineral</p>				

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<p>recovery site nor would it affect access to and the availability of underlying mineral resources. <b>No impact</b> on local mineral resources directly, indirectly, or cumulatively would occur.</p>				
<p><b>12. NOISE.</b> Would the project result in:</p>				
<p>a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>12a. Response:</b> (<i>Source: General Plan 2025 Noise Element, Figure N-3 – 2003 Railway Noise, Figure N-7 – 2025 Railroad Noise, Figure N-8 – Riverside and Flabob Airport Noise Contours, and Figure N-10 – Noise/Land Use Noise Compatibility Criteria; General Plan 2025 FPEIR Table 5.11-E – Interior and Exterior Noise Standards; RMC Title 7 – Noise; and Noise and Vibration Study prepared by Psomas in January 2018 [included in Appendix H]</i>)</p> <p><b>Less Than Significant Impact with Mitigation Incorporated.</b> The City of Riverside’s General Plan 2025 includes a Noise Element, which details the requirements for defining projected future noise conditions and serves as the basis for the City to develop guidelines for identifying compatible land uses and establishing development standards (City of Riverside 2007a). Exhibit 22 shows the Noise/Land Use Noise Compatibility Criteria developed by the City for noise exposure limits at residential uses. Because multi-family residential development is not specifically referenced, the land use category that is applied to the project is the “Infill Single Family Residential” use. For this category, noise levels up to 65 dBA CNEL are classified as “Normally Acceptable,” and noise levels between 65 and 75 dBA CNEL are classified as “Conditionally Acceptable” (Riverside 2007a). The “Office Buildings, Business, Commercial, Professional” land use category is applicable to the proposed retail uses. The established “Normally Acceptable” and “Conditionally Acceptable” noise levels for these uses is the same as for Infill Single Family Residential. The proposed project’s compatibility is assessed against noise produced from existing and future roadway vehicles and railway trains.</p> <p><i>Roadway Noise to On-site Receptors.</i> The existing average daily traffic volume (ADT) on Merrill Avenue between De Anza Avenue and the Mall East driveway ranges from approximately 5,200 to 6,000 vehicles, and the existing noise level along the project site is estimated at 61 dBA CNEL at 50 feet from the roadway centerline. The forecasted long-term buildout with project ADT is 7,000 to 8,500 vehicle trips per day (Psomas 2018f). The proposed project would not change the posted speed limit of Merrill Avenue adjacent to the project site (35 miles per hour) or change the mix of cars, buses, and trucks. Therefore, it is estimated the traffic noise level would increase by approximately 0.4 dBA, and the future noise level on the southern building facades on the project site would be approximately 64.5 dBA CNEL. The noise level at the facades of the proposed buildings on Merrill Avenue would be less than 65 dBA CNEL for the Normally Acceptable category for residential and commercial uses in terms of noise compatibility.</p> <p>Title 24 of the California Code of Regulations, also known as the California Building Standards Code, establishes building standards applicable to all occupancies throughout the State. Section 1207.11.2 requires that residential structures other than detached single-family dwellings be designed to prevent the intrusion of exterior noise so that the interior noise attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room. Section 1207.12 states, “if interior allowable noise levels are met by requiring that windows be unopenable or closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior requirement. The ventilation system must not compromise the dwelling unit or guest room noise reduction.”</p> <p>Typical exterior to interior noise attenuation provided by residential structures is at least 25 dBA. Because the facade of the project facing Merrill Avenue is exposed to noise levels of 67.7 dBA CNEL, a 25-dBA reduction in noise from the proposed structures would result in noise levels of 42.7 dBA CNEL, which is below the State’s interior noise limit of 45 dBA CNEL. Therefore, the proposed land uses would be compatible with the Riverside General Plan and State interior noise standards, and there would be a less than significant impact.</p>				

Land Use Category	Community Noise Equivalent Level (CNEL) or Day-Night Level (Ldn), dB						
	55	60	65	70	75	80	85
Single Family Residential*							
Infill Single Family Residential*							
Commercial- Motels, Hotels, Transient Lodging							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Amphitheaters, Concert Hall, Auditorium, Meeting Hall							
Sports Arenas, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Rec., Cemeteries							
Office Buildings, Business, Commercial, Professional							
Industrial, Manufacturing Utilities, Agriculture							
Freeway Adjacent Commercial, Office, and Industrial Uses.							

**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 satisfactory, 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.

Source: Riverside General Plan 2025, Nov 2007

## Noise/Land Use Noise Compatibility Criteria

## Exhibit 22

Merrill Avenue Brownstones Project





ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><i>Train Noise to On-site Receptors.</i> The proposed project would be exposed to train noise from the railroad tracks north of the site. Daily train movements on these tracks are variable depending on freight businesses and are estimated at approximately 20 to 30 trains per day on average.</p> <p>The City of Riverside Quiet Zone Projects are part of the City's efforts to mitigate the adverse noise impacts from train traffic within the City. Quiet zones fulfill FRA crossing guard requirements, such that trains no longer need to sound the train horn at an at-grade crossing. It is anticipated that Quiet Zones would be established for the at-grade crossings at Panorama Road in late 2018 or early 2019 and at Brockton and Palm Avenues in 2021. The estimated noise levels from train operations with and without implementation of the planned Quiet Zones are assessed below.</p> <p>Noise attenuation would be provided by structural elements of the project's design (refer to Project Design Feature [PDF] NSE-1). As previously described (refer to Exhibit 10), 17- to 19-foot-high garages and a 14-foot-high block wall between the gaps in the garages would be constructed along the northern side of the site. There would also be solid walls constructed along the eastern and western site boundaries (refer to Exhibit 10). The western site boundary wall would also be constructed to a height of 13 feet to match the 13-foot high building wall of the adjacent existing commercial structure to the west. South of the existing building wall, a 6-foot-high wall would be constructed until the northern edge of the sidewalk at Merrill Avenue. The eastern site boundary wall would "step-down" from the northern to southern property boundaries; it would be constructed to a height of 14 feet for a length of 60 feet from the northern boundary wall, 12 feet high for a length of 20 feet, 10-feet for a length of 5 feet, and 8 feet to the proposed security gate (to be located 45 feet from the curb face on Merrill Avenue). South of the security gate, the wall would be 3 feet high until it reaches the northern edge of the sidewalk at Merrill Avenue. These proposed structures would provide more noise attenuation compared to 6-foot-high walls that are typically used to reduce noise levels at existing residential and commercial uses along the UPRR right-of-way. In addition, the garages are located at the northern property line such that noise-sensitive residential uses are set back farther to allow for greater distance-related noise attenuation.</p> <p>To quantify noise exposure levels at the project site from the UPRR, a three-dimensional noise model – SoundPlan was used. This model takes into account topographical elevations and noise attenuation provided by ground cover and structures (including solid walls), in addition to the varying elevations of receptors at the project site. This model also takes into account reflectivity of exterior surfaces of structures. Use of this model allows for the exact heights of all structures used for noise attenuation to be taken into account. The modelling effort assumed an average of 14 freight trains and 6 passenger trains per day. The higher number of freight trains (which generate more noise than passenger trains) was used to derive a more conservative estimate of train noise. The calculated train noise are higher than the actual 24-hour noise monitoring levels; however, no adjustments were made.</p> <p>Noise levels at specific points on the site were quantified and presented in Table 8 for exterior uses, with the highest noise levels for the day, evening, night, and the calculated CNEL periods. This assumes that the Quiet Zones for train operations at nearby at-grade crossings are not in place.</p>				

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 8  
TRAIN NOISE EXPOSURE AT PROJECT SITE  
WITHOUT QUIET ZONE**

<b>Location</b>	<b>Day 7 AM – 7 PM</b>	<b>Evening 7 PM – 10 PM</b>	<b>Night 10 PM – 7 AM</b>	<b>CNEL (24-Hour Adjusted)</b>
<b>Northern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	NA	NA	NA	NA
1 <sup>st</sup> Floor Facade	66.9	64.3	63.5	70.8
2 <sup>nd</sup> Floor Balconies	70.1	67.5	66.7	74.0
3 <sup>rd</sup> Floor Balconies	70.1	67.6	66.8	74.0
<b>Eastern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	66.2	63.6	62.9	70.1
2 <sup>nd</sup> Floor Balconies	67.6	65	64.2	71.5
3 <sup>rd</sup> Floor Balconies	66.1	63.7	62.9	70.1
<b>Western Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	65.4	62.8	62.1	69.3
2 <sup>nd</sup> Floor Balconies	67.8	65.3	64.5	71.8
3 <sup>rd</sup> Floor Balconies	65.8	63.3	62.6	69.8
<b>Southern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	62.7	59.8	60.8	67.7
2 <sup>nd</sup> Floor Balconies	62.9	60.1	61.0	67.8
<b>Pool Area</b>	60.1	57.6	57.1	64.2
Source: Psomas 2018e				

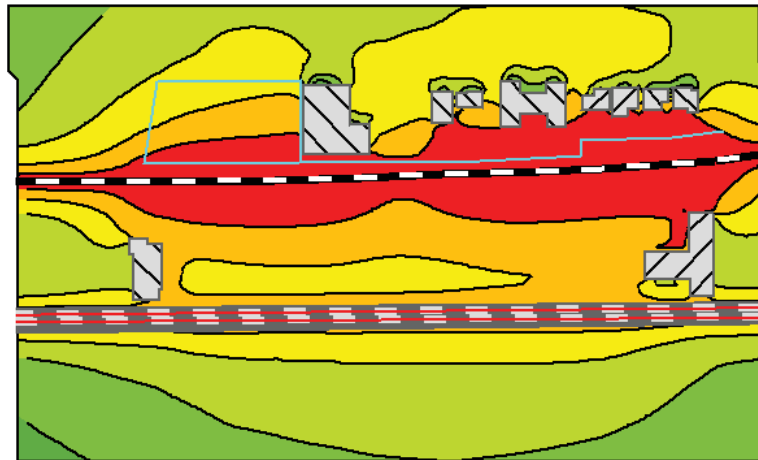
As mentioned previously, the CNEL is the calculated weighted 24-hour noise levels with artificial penalties to noise occurring in the evening of +5 dB and +10 dB for noise occurring at night. These penalties reflect the increased sensitivity of people to noise occurring during those time periods. The CNEL is also the noise metric used by the City to assess noise compatibility for residential uses. As shown in Table 8 above, noise exposure levels are lowest on the first floor (due to the proposed garages and perimeter walls) and increases on the second and third floors of the proposed project structures. This is due to the diminishing noise attenuation provided by intervening structures as the receptor increases in height relative to the train noise along the UPRR tracks. The noise levels provided in Table 8 do not represent the same location for the first, second, and third floors because some of the analyzed noise receptor locations are not present on each of those floors (for instance, balconies are only provided on the second and third levels).

As previously discussed and shown in Exhibit 22, noise levels between 65 and 75 dBA CNEL are considered Conditionally Acceptable for the proposed project. For the Conditionally Acceptable category, new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design; conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

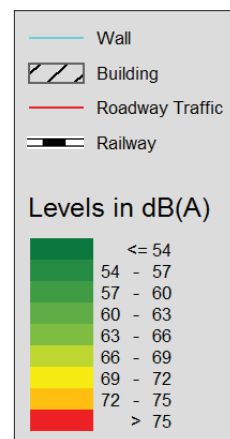
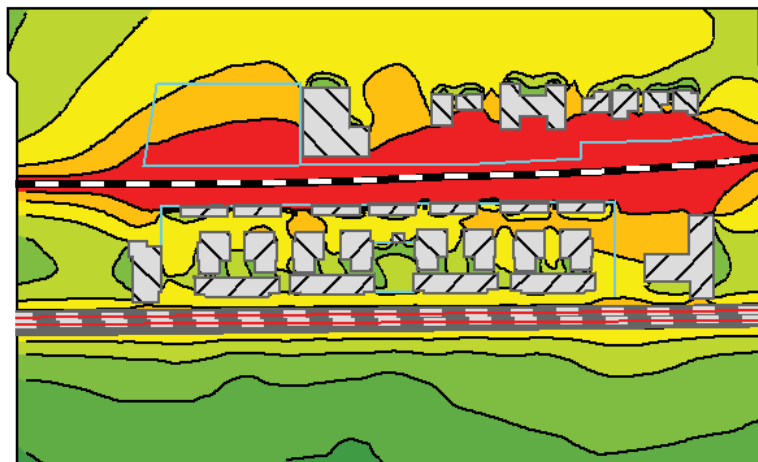
A noise contour map was developed from the SoundPlan modeling. Exhibit 23 illustrates the noise exposure that would occur at ground level at the project site without implementation of the City's Quiet Zones, with and without the proposed project. As shown, train noise levels at the analyzed locations along the southern property boundary are estimated to range from 59.8 to 67.8 dBA CNEL and would be considered Conditionally Acceptable for the proposed residential and commercial uses. The train noise levels along the northern, eastern and western facades of the project site are estimated to range from 69.3 to 74.1 dBA CNEL and would be below the 75-dBA noise limit for residential uses, but within the

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Conditionally Acceptable category. As previously identified, the project’s design incorporates 17- to 19-foot-tall garages and 14-foot walls along the northern property boundary, which provides substantial and sufficient noise attenuation to meet the City’s exterior noise compatibility uses for residential uses at the ground level. As shown in Exhibit 23, noise levels would be less than 75 dBA CNEL within the project site.</p> <p>While exterior uses would be below the City’s noise compatibility limit of 75 dBA CNEL, the interior residential noise exposure limit established by Title 24 of the California Code of Regulations is 45 dBA CNEL. Typical exterior to interior noise attenuation provided by residential structures is at least 25 dBA. If the proposed project’s exterior walls, windows, and doors provide 25 dBA of noise attenuation from the exterior noise level of approximately 74 dBA CNEL, interior noise levels would be 49 dBA CNEL. This 49-dBA CNEL noise level would exceed the State of California’s interior noise limit of 45 dBA CNEL. As such, Mitigation Measure (MM) NSE-1 is necessary to reduce noise levels to below the interior noise exposure limit through use of building methods that would provide at least 30-dBA CNEL of attenuation. These methods typically include, but are not limited to the use of sound-rated windows and sliding doors, as well as modification of wall assemblies (e.g., increasing mass and sound absorptive materials, sealing gaps and leaks). Implementation of MM NSE-1 would ensure compliance with the City’s and State’s interior noise exposure limit and would result in less than significant interior noise impacts from train noise.</p> <p>With implementation of the City’s Quiet Zones and elimination of the need to sound the train horn, noise levels would be reduced by approximately 10-20 dB at the site, depending on the amount of attenuation that would be provided by project’s perimeter walls and garages. This reduction in noise levels is substantial and is considered to at least halve the perceived noise level. With implementation of the Quiet Zones for nearby at-grade crossings, the exterior noise levels at the project site would be reduced substantially. Table 9 shows the noise levels that would occur at the project site from train noise without the sounding of the train horn. As shown, noise levels at the analyzed locations would be substantially below the 75 dBA noise limit for residential uses, and within the “Normally Acceptable” category for Infill Single-Family Residential uses (less than 65 dBA), with the exception of the southern facade. The southern façade would have noise levels of 68 dBA CNEL. The 25-dBA exterior to interior noise reduction would reduce interior noise levels to 43 dBA CNEL which is below the State’s interior noise standard of 45 dBA CNEL. A noise contour map was also developed from the SoundPlan modeling with train noise without the sounding of the train horn. Exhibit 24 illustrates the noise exposure that would occur at ground level and shows that noise levels would be substantially less than 75 dBA CNEL within the project site. Noise levels at the ground floor of the northern facade of the project’s residential buildings are estimated to be approximately 52 dBA CNEL and 53 dBA CNEL on the ground floors of the western and eastern facades. These noise levels would be within the Normally Acceptable category.</p>				

Without Project



With Project



## Noise Levels without a Train Quiet Zone

Merrill Avenue Brownstones Project

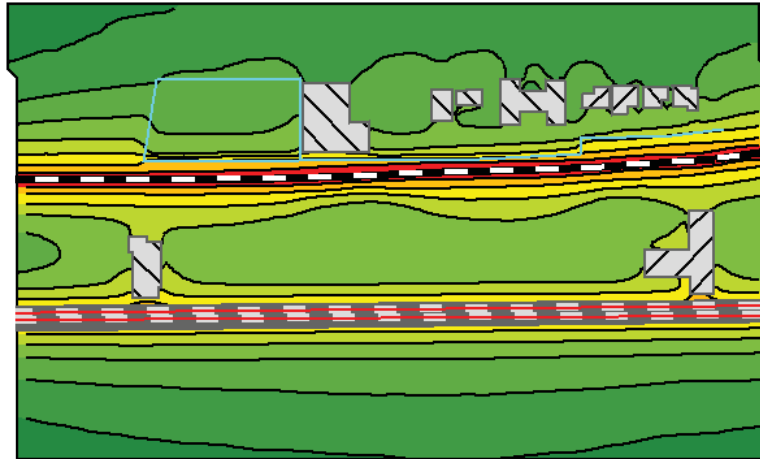


Exhibit 23

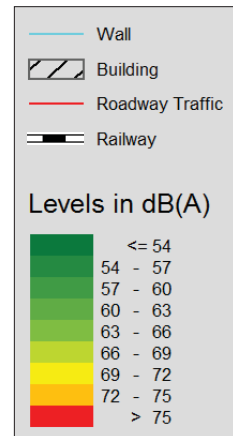
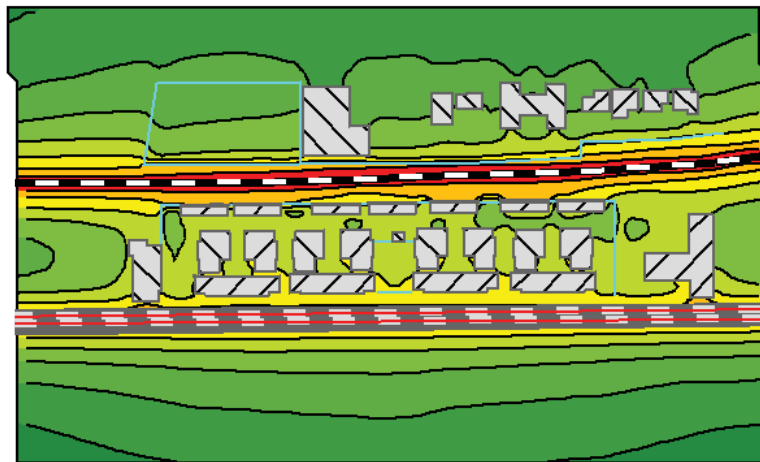




Without Project



With Project



## Noise Levels with a Train Quiet Zone

Merrill Avenue Brownstones Project



Exhibit 24



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<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 9  
TRAIN NOISE EXPOSURE AT PROJECT SITE  
WITH QUIET ZONE**

<b>Location</b>	<b>Day 7 AM – 7 PM</b>	<b>Evening 7 PM – 10 PM</b>	<b>Night 10 PM – 7 AM</b>	<b>CNEL (24-Hour Adjusted)</b>
<b>Northern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	NA	NA	NA	NA
1 <sup>st</sup> Floor Facade	46.2	45.8	45.4	52.2
2 <sup>nd</sup> Floor Balconies	53.6	53.5	52.8	59.6
3 <sup>rd</sup> Floor Balconies	58.1	58.1	57.4	64.2
<b>Eastern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	51.8	49.5	51	57.7
2 <sup>nd</sup> Floor Balconies	55.5	53.5	54.3	61.1
3 <sup>rd</sup> Floor Balconies	56.4	54.7	55.1	61.9
<b>Western Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	51.5	48.9	50.7	57.4
2 <sup>nd</sup> Floor Balconies	53	50.9	52.2	58.9
3 <sup>rd</sup> Floor Balconies	55.8	54	54.6	61.4
<b>Southern Facade of Project Residences</b>				
1 <sup>st</sup> Floor Patios	63.1	60.1	61.6	68.4
2 <sup>nd</sup> Floor Balconies	63.2	60.3	61.7	68.4
<b>Pool Area</b>	51.7	49.2	51.2	57.8
Source: Psomas 2018e				

Estimated noise levels with implementation of the Quiet Zone at Brockton Avenue and Panorama Road, and installation of the proposed noise attenuation features would be in compliance with the City's and State's interior noise exposure limit and would result in less than significant interior noise impacts from train noise. As such, less than significant noise impacts would occur from exposure to train noise at exterior areas when the sounding of train horns is not required. Thus, if FRA Quiet Zones are established at the UPRR crossings at Brockton Avenue and Panorama Road before Project construction, MM NSE-1 would no longer be necessary.

*Project Construction Phase Noise.* The proposed project would generate noise associated with on-site construction vehicles, equipment and activities and off-site trucks used to haul building materials and soils. Section 7.35.010 B 5 of the Riverside Noise Ordinance limits construction noise to between 7:00 AM and 7:00 PM on weekdays, between 8:00 AM and 5:00 PM on Saturdays, and at no time on Sundays or federal holidays. The proposed project would comply with the time restrictions on when construction can occur, as identified within Section 7.35.010 B 5 of the Riverside Noise Ordinance.

The City's Noise Ordinance also sets exterior and interior noise standards for noise generated to various land use categories. These noise limits apply to the generation of noise and not to land use compatibility with ambient background noise. The exterior noise standards in Table 10 are applied as follows:

“Unless a variance has been granted as provided in this chapter, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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1. The exterior noise standard of the applicable land use category, up to five decibels, for a cumulative period of more than thirty minutes in any hour; or
2. The exterior noise standard of the applicable land use category, plus five decibels, for a cumulative period of more than fifteen minutes in any hour; or
3. The exterior noise standard of the applicable land use category, plus ten decibels, for a cumulative period of more than five minutes in any hour; or
4. The exterior noise standard of the applicable land use category, plus fifteen decibels, for the cumulative period of more than one minute in any hour; or
5. The exterior noise standard for the applicable land use category, plus twenty decibels or the maximum measured ambient noise level, for any period of time.”

**TABLE 10  
CITY OF RIVERSIDE EXTERIOR NOISE STANDARDS**

<b>Land Use Category</b>	<b>Time Period</b>	<b>Noise Level (dBA)</b>
Residential	Night (10 PM to 7 AM)	45
	Day (7 AM to 10 PM)	55
Office Commercial	Any time	65
Community Support	Any time	60
dBA: A-weighted decibels Source: Riverside 2014 (Table 7.25.010A).		

Table 11 shows the City’s interior noise standards.

**TABLE 11  
CITY OF RIVERSIDE INTERIOR NOISE STANDARDS**

<b>Land Use Category</b>	<b>Time Period</b>	<b>Noise Level (Dba)</b>
Residential	Night (10 PM to 7 AM)	35
	Day (7 AM to 10 PM)	45
School	7AM to 10 PM (while school is in session)	45
Hospital	Any time	45
dBA: A-weighted decibels Source: Riverside 2014 (Table 7.30.015).		

These standards are applied as follows:

“A. No person shall operate or cause to be operated, any source of sound indoors which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

1. The interior noise standard for the applicable land category area, up to five decibels, for a cumulative period of more than five minutes in any hour;
2. The interior noise standard for the applicable land use category, plus five decibels, for a cumulative period of more than one minute in any hour;

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>3. The interior noise standard for the applicable land use category, plus ten decibels or the maximum measured ambient noise level, for any period of time.</p> <p>B. If the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five-decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.</p> <p>C. The interior noise standard for various land use districts shall apply, unless otherwise specifically indicated, within structures located in designated zones with windows opened or closed as is typical of the season.”</p> <p>As discussed under Threshold 12d below, construction noise would be temporary and, with compliance with the City’s construction time limits, would be limited to the least noise-sensitive portions of the day and would not generate atypically high construction noise levels. Impacts would be less than significant.</p> <p><i>Project Operational Phase Noise.</i> Operational noise sources associated with the proposed project would include, but not be limited to, mechanical equipment (e.g., HVAC units); landscape maintenance equipment; vehicles entering and leaving the site; and trash collection activities.</p> <p>As proposed, HVAC units would be roof-mounted and would be surrounded by a parapet and metal screening. The units would be located at least 60 feet from the nearest property lines. These stationary sources of noise are required to comply with the noise limits established under Title 7, Noise Control of the Riverside Municipal Code, as discussed above. The Riverside Noise Ordinance states that noise in commercial zones shall not exceed 65 dBA at the property lines of offsite commercial uses. This noise limit would be easily achieved for typical large commercial HVAC equipment with the proposed installation without any special noise requirements. A typical 20-ton HVAC unit would have a noise level of 59 dBA at 60 feet without considering noise reductions from parapets, screening, and the barrier effect of a rooftop installation. Noise from driveway access, loading and unloading, trash disposal, and landscape maintenance activities would occur intermittently and would not exceed the Noise Ordinance limits. The Noise Ordinance allows noise events to exceed the continuous noise limits when noise events occur for less than 30 minutes in an hour. Noise from on-site sources would therefore be less than significant.</p> <p>The Noise and Vibration Analysis concludes that the project has the potential to expose persons to interior noise levels from trains in excess of standards established in the General Plan 2025, but with implementation of PDF NSE-1 and MM NSE-1, the interior noise levels at the dwelling units can be reduced to meet the Title 24 interior noise standard of 45 dBA <u>after mitigation</u>. Therefore, the impacts are considered <b>less than significant</b> with mitigation on the exposure of persons to or the generation of noise levels in excess of established City standards and regulations either directly, indirectly, or cumulatively.</p> <p><b>Project Design Feature</b></p> <p><b>PDF NSE-1</b> As shown in Exhibit 10, solid walls and or other structures shall be installed along the northern, eastern and western property boundaries to provide noise reduction from the rail line north of the project site.</p> <ul style="list-style-type: none"> <li>• <b>Northern Property Boundary.</b> 17- to 19-foot-high garages and a 14-foot-high block wall between the gaps in the garages shall be constructed along the northern property boundary.</li> <li>• <b>Western Property Boundary.</b> The western site boundary wall shall be constructed to a height of 13 feet until it meets the building wall of the adjacent existing commercial structure to the west. South of the existing building wall, a 6-foot-high wall would be constructed until the northern edge of the sidewalk at Merrill Avenue.</li> <li>• <b>Eastern Property Boundary.</b> The eastern site boundary wall shall be constructed to a height of 14 feet for a length of 60 feet from the northern boundary wall, then 12 feet high for a length of 20 feet, 10-feet for a length of 5 feet, and 8 feet to the proposed security gate (to be located 45 feet from the curb face on Merrill Avenue). South of the security gate, the wall shall be 3 feet high until it reaches the northern edge of the sidewalk at Merrill Avenue.</li> </ul>				



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

**MM NSE-1** Prior to issuance of building permits, if Federal Administration Quiet Zones have not been established at the UPRR crossings at Brockton Avenue and Panorama Road, the Property Owner/Developer shall demonstrate to the City that exposed residential exterior window/wall assemblies facing the railroad tracks provide a Sound Transmission Class (STC) rating of a least 30 dB. The building plans submitted to the City for review and approval shall identify the STC rating of the materials used to construct the northern exterior windows/wall assemblies to demonstrate that the proposed building construction would provide an interior noise level of 45 dBA CNEL, or less, in compliance with interior noise standards in Title 24 of the California Code of Regulations.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

☐
☐
☒
☐

**12b. Response:** (*Source: General Plan 2025 Noise Element Figure N-3 – 2003 Railway Noise, Figure N-7 – 2025 Railroad Noise, and Figure N-8 – Riverside and Flabob Airport Noise Contours; General Plan 2025 FPEIR Appendix G – Noise Existing Conditions Report; Noise and Vibration Analysis prepared by Psomas in January 2018; and Evaluation of Vibration Environment prepared by ATS Consulting in October 2017 [included in Appendix H]*)

**Less Than Significant Impact.**

#### *Vibration from On-site Uses*

Groundborne vibration generated by construction activities is usually highest during pile-driving, blasting, soil-compacting, jack-hammering, and demolition-related activities. No pile-driving or blasting activities would occur with the proposed project. However, the proposed project would require asphalt demolition, excavation, and soil compaction activities.

*Vibration Thresholds.* The City of Riverside has not developed applicable standards for structural damage from vibration. The California Department of Transportation (Caltrans) has set thresholds for the potential for vibration damage as shown in Table 12 (Caltrans 2013b).

**TABLE 12  
VIBRATION DAMAGE THRESHOLD CRITERIA**

Structure and Condition	Maximum ppv (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
ppv: peak particle velocity; in/sec: inch(es) per second		
Note: Transient sources create a single isolated vibration event (e.g., blasting or drop balls). Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.		
Source: Caltrans 2013b.		

Existing residential and commercial structures surround the project site, including residences to the north across the alley and railroad tracks. None of these structures are designated as City of Riverside Cultural Heritage Landmarks nor are they part of

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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a historic district (Riverside 2017h). Based on the categories in Table 12, thresholds for the potential for vibration damage are categorized into transient and continuous/frequent intermittent sources. Transient sources are those that generate a single isolated vibration event, such as blasting. Continuous/frequent intermittent sources include impact pile drivers and vibratory compaction equipment. The off-site residential buildings located to the north of the project site are not considered historic or fragile or extremely susceptible to vibration damage. A vibration level of 0.3 peak particle velocity (ppv) inch per second (in/sec) is considered a conservative threshold for a potentially significant structural damage vibration impact for older, but not historic, residential buildings; and a threshold of 0.5 ppv in/sec is appropriate for off-site modern commercial buildings located to the west, east, and south of the project site.

The City of Riverside has not established applicable standards for human annoyance from vibration. As such, thresholds for vibration annoyance established by Caltrans are shown in Table 13 (Caltrans 2013b). Based on the guidance in Table 13, the “strongly perceptible” vibration level of 0.9 ppv in/sec is used in this analysis as threshold for a potentially significant vibration impact for human annoyance.

**TABLE 13  
VIBRATION ANNOYANCE THRESHOLDS**

<b>Average Human Response</b>	<b>ppv (in/sec)</b>
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035
ppv: peak particle velocity; in/sec: inch(es) per second	
Source: Caltrans 2013b.	

*Construction-Related Vibration.* As stated above, construction of the proposed project would not require pile-driving or blasting, which are generally the sources of the most severe vibration. However, conventional heavy construction equipment would be used for asphalt demolition, ground excavation, and export of excavated materials. Additionally, compactors would likely be used for subgrade compaction. Table 14 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment at a distance of 25 feet.

**TABLE 14  
VIBRATION LEVELS DURING CONSTRUCTION**

<b>Equipment</b>	<b>ppv at 25 ft (in/sec)</b>
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
ppv: peak particle velocity; ft: feet; in/sec: inch(es) per second.	
Source: Caltrans 2013b.	

Table 15, Structural Damage Criteria at Sensitive Uses, shows the peak particle velocity levels (ppv) relative to structural damage to sensitive uses from vibration activities. As shown, all vibration levels would be below the structural damage threshold at adjacent off-site structures. As such, vibration impacts related to the potential for cosmetic structural damage would be less than significant.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 15  
STRUCTURAL DAMAGE CRITERA AT SENSITIVE USES**

Equipment	Vibration Levels (ppv)			
	Residences to the North of the Project Site	Commercial Use to the East of the Project Site	Retail Use to the South of the Project Site	Commercial Use to the East of the Project Site
	(ppv @ 85 ft)	(ppv @ 15 ft)	(ppv @ 143 ft)	(ppv @ 60 ft)
Vibratory roller	0.033	0.452	0.015	0.056
Caisson Drill	0.014	0.191	0.007	0.024
Large bulldozer	0.014	0.191	0.007	0.024
Small bulldozer	0.000	0.006	0.000	0.001
Jackhammer	0.006	0.075	0.003	0.009
Loaded trucks	0.012	0.164	0.006	0.020
<b>Criteria</b>	<b>0.3</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
<b>Exceeds Criteria?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
ppv: peak particle velocity; Max: maximum; avg: average; ft: feet Source: USEPA 1971 (Calculations can be found in Attachment B of the Noise and Vibration Analysis in Appendix H of this Initial Study).				

Table 16 shows the estimated vibration levels for uses proximate to the project site. As shown in this table, vibration from construction would not exceed the annoyance threshold when construction activities occur under maximum (i.e., closest to the receptor) exposure conditions. These vibration levels represent conditions when construction activities occur closest to receptor locations. Construction-related vibration would be substantially less under average conditions when construction activities are located farther away. Because vibration levels would be below the significance thresholds, vibration generated by the project's construction equipment would not be expected to generate strongly perceptible levels of vibration at the nearest uses and would result in less than significant vibration impacts related to annoyance.

**TABLE 16  
VIBRATION ANNOYANCE CRITERA AT SENSITIVE USES**

Equipment	Vibration Levels (ppv)			
	Residences to the North of the Project Site	Commercial Use to the East of the Project Site	Retail Use to the South of the Project Site	Commercial Use to the East of the Project Site
	(ppv @ 85 ft)	(ppv @ 15 ft)	(ppv @ 143 ft)	(ppv @ 60 ft)
Vibratory roller	0.033	0.452	0.015	0.056
Caisson drill	0.014	0.191	0.007	0.024
Large bulldozer	0.014	0.191	0.007	0.024
Small bulldozer	0.000	0.006	0.000	0.001
Jackhammer	0.006	0.075	0.003	0.009
Loaded trucks	0.012	0.164	0.006	0.020
<b>Criteria</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>	<b>0.9</b>
<b>Exceeds Criteria?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
ppv: peak particle velocity; ft: feet Source: USEPA 1971 (Calculations can be found in Attachment B of the Noise and Vibration Analysis in Appendix H of this Initial Study).				

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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*Operation-Related Vibration.* Operation of the project would not result in the vibration due to the type and size of residential and commercial retail uses proposed. Impacts would be less than significant and no mitigation is required.

#### ***Vibration from Passing Trains***

The Noise Element of the Riverside General Plan shows that the site is and will be exposed to noise from train activity on the UPRR tracks. Exposure of the proposed uses to vibration from train operations at the adjacent railroad is addressed in the Evaluation of Vibration Environment by ATS Consulting, as summarized below.

Vibration occurs from passing trains and is greatest where the trains pass the crossover (located north of the middle of the site) since there is a gap in the tracks where the train wheels cross the tracks. Vibration measurements were made at four locations on the site to determine vibration from freight and Metrolink trains passing along the tracks. Table 17 shows the maximum train vibration levels at different distances from the tracks and the crossover.

**TABLE 17  
MAXIMUM TRAIN VIBRATION LEVELS**

Train	Number of Cars	Lmax, VdB			
		50 feet from tracks	100 feet from tracks	125 feet from tracks	100 feet from Crossover
Freight Train	55	81.2	74.3	71.1	79.3
Metrolink 1	5	15.8	70.3	65.9	74.9
Metrolink 2	5	74.2	70.4	66.8	77.1
Metrolink 3	5	76.4	71.2	67.0	76.8
Metrolink 4	5	78.4	72.0	68.1	75.0
Metrolink 5	5	75.8	69.8	66.4	74.8
Source: ATS 2017					

The measurements show that vibration from trains approaches the Federal Transit Administration (FTA) impact threshold for groundborne vibration at the ground level but does not exceed the impact threshold of 80 vibration velocity decibels [VdB]. Unless building construction results in significant amplification of the ground vibration, a small amplification of the groundborne vibration would mean that the indoor vibration will be approximately equal to the outdoor vibration. Since the residential buildings would be constructed to current building codes (2016 CBC, as adopted by the City of Riverside), which result in relatively stiff structures, and would be located more than 100 feet from the crossover, the anticipated indoor vibration would be below the FTA impact thresholds for residential land uses.

Groundborne noise levels are predicted by adjusting the measured vibration levels using standard a-weighting curves, as well as an adjustment factor called “Krad”, which accounts for the conversion from vibration to sound pressure level. Table 18 shows the calculated maximum train groundborne noise levels at the site.



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 18  
MAXIMUM TRAIN GROUNDBORNE NOISE LEVELS**

Train	Number of Cars	Predicted Groundborne Noise Levels, dBA	
		100 feet	Crossover
Freight Train	55	31.6	36.8
Metrolink 1	5	27.6	33.3
Metrolink 2	5	26.6	34.9
Metrolink 3	5	26.6	35.3
Metrolink 4	5	32.4	34.9
Metrolink 5	5	25.3	34.7
Source: ATS 2017			

As shown, the maximum train groundborne noise levels are below the FTA impact threshold for groundborne noise of 43 dBA for residential land uses.

As summarized above from the Noise and Vibration Analysis and the Evaluation of the Vibration Environment, the project would not result in or be exposed to significant groundborne vibration and groundborne noise levels. Impacts would be **less than significant** directly, indirectly, and cumulatively.

- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

☐
☐
☒
☐

**12c. Response:** (*Source: RMC Title 7 – Noise Code and Noise and Vibration Analysis prepared by Psomas in January 2018 [included in Appendix H]*)

**Less Than Significant Impact.**

#### **Noise Thresholds**

The City has established noise limits for stationary sources of noise within Title 7, Noise Control, of the RMC (see Tables 11 and 12 above). The City considers these noise level limits the limits necessary to maintain the public health, safety, and welfare of the public interest. As such, these noise limits are used as significance thresholds for stationary sources of noise.

Mobile sources of noise, such as project-generated traffic, are regulated by the State of California and the U.S. Environmental Protection Agency (USEPA). However, the term “substantial,” as used in this threshold, is not defined in most environmental compliance guidelines. The EIR for the Riverside General Plan identifies that “most people only notice a change in the noise environment when the difference in noise levels are around 3 dB CNEL”, and “An increase or decrease in noise level of at least 5 dBA is required before any noticeable change in community response would be expected. Therefore, a clearly perceptible increase (+5 dB) in noise exposure of sensitive receptors could be considered significant.” For purposes of identifying substantial increases in traffic noise attributable to the proposed project, a 5 dBA permanent increase in ambient noise levels due to the project is considered a significant impact.

#### **Traffic Noise to Off-Site Receptors**

Psomas conducted ambient noise surveys on April 27 and 28, 2017, at the project site. Noise level measurements were taken using two sound level meters (SLM). Measurements were made at the northern and southern property lines of the project site. For the short-term measurement at the southern project boundary, noise measurements are for the PM peak period (5:00 to 7:00 PM) ranged from a maximum of 89 dB to a minimum of 48 dB.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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The proposed project would generate an estimated 772 new vehicle trips per day (Psomas 2018f) and would add to the existing noise sources. Project traffic would be divided among the adjacent and nearby roadway segments east and west of the project site, including Merrill Avenue (primarily), De Anza Avenue, Riverside Avenue, Magnolia Avenue, and Central Avenue.

Table 19, Project-Generated Traffic Noise Increases, shows the Cumulative without Project and Cumulative Plus Project traffic volumes and the estimated traffic noise increase for the road segments that would have the most project-generated traffic. As shown in Table 19, no traffic noise increases would exceed 0.5 dBA, which is less than the 5-dBA threshold. Thus, noise impacts from project traffic would be less than significant, and no mitigation is required.

**TABLE 19  
INCREASES IN PROJECT-GENERATED TRAFFIC NOISE**

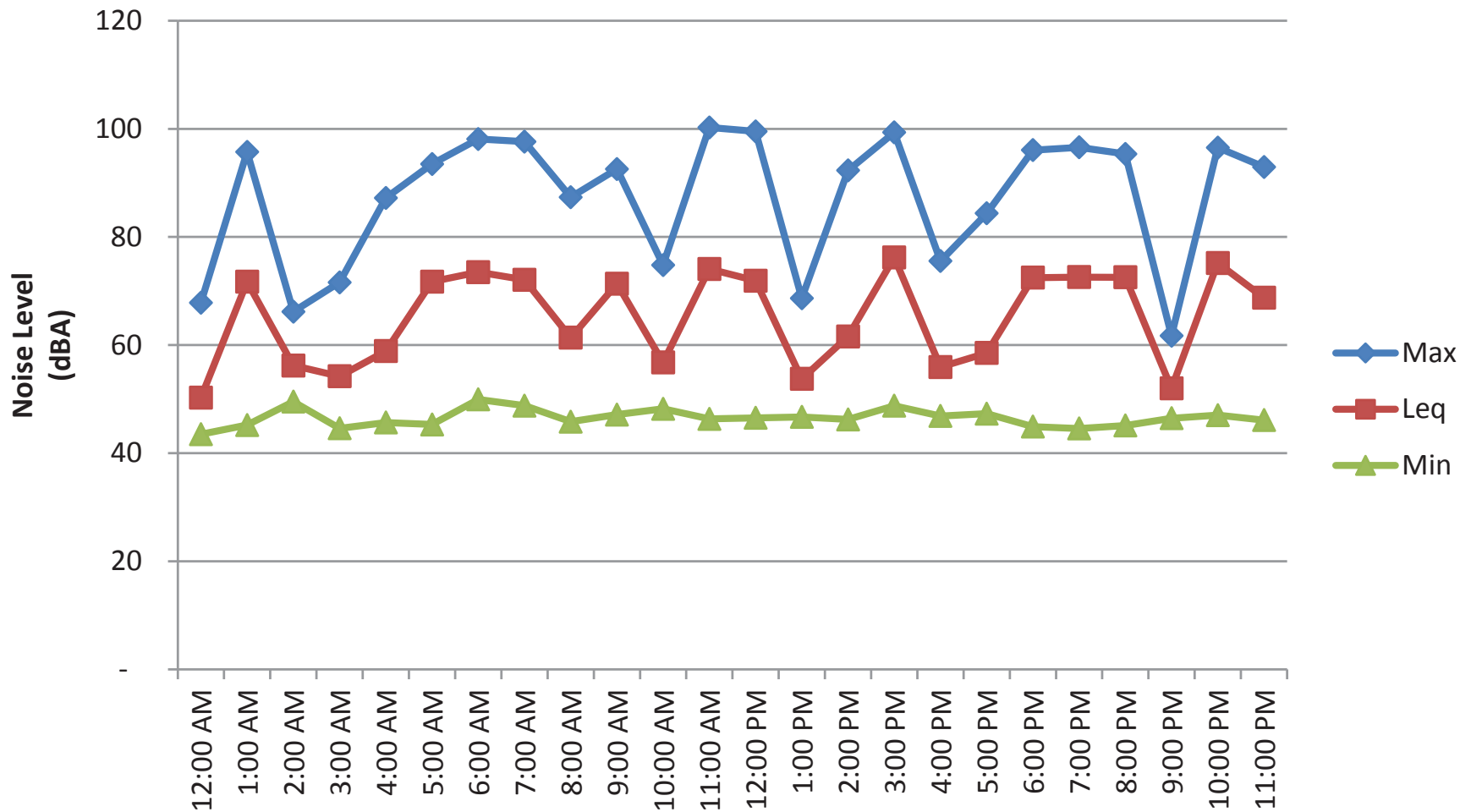
Road/Segment	Traffic Volume <sup>a</sup>			Project Traffic Noise Increase (dBA CNEL)	Cumulative plus Project Traffic Noise Increase (dBA CNEL)
	Existing (ADT)	Cumulative without Project (ADT)	Cumulative plus Project (ADT)		
Merrill Avenue					
Magnolia Ave to De Anza Ave	3,436	3,575	3,729	0.2	0.4
De Anza to Mall West Dwy	5,195	5,405	5,636	0.2	0.4
Mall West Dwy to Mall East Dwy	6,051	6,295	6,835	0.4	0.6
Mall East Dwy to Riverside Ave	6,412	6,671	7,211	0.3	0.5
Riverside Avenue					
Merrill Ave to Central Ave	20,853	21,695	22,081	0.1	0.2
ADT: Average daily traffic volume; dBA: A-weighted decibels; CNEL: Community Noise Equivalent Level; n/o: north of; e/o: east of; w/o: west of; Ave; Avenue; Dwy: driveway.					
Notes: Mall East Dwy is the Plaza east driveway and Mall West Dwy is the Plaza west driveway.					
a. Psomas 2018bf					

#### ***Train Noise to Off-site Receptors from Installation of Noise Barriers***

The long-term noise measurement along the northern project boundary was collected for approximately 24 hours. The average daytime noise levels at this location range from 50 to 76 dBA Leq. The 24-hour weighted noise level at this location is 77 dBA CNEL and mainly due to train passbys. The trains are required under the Federal Railroad Administration (FRA) Train Horn Rule (49 Code of Federal Regulations Part 222) to sound the train horns for at least 15 seconds and no more than 20 seconds in advance of all public at-grade crossings. Public at-grade crossings are located at the railroad crossings with Panorama Road approximately 0.75 mile northeast of the project site, and Brockton and Palm avenues approximately 0.25 mile and 0.50 mile west of the project site, respectively. The sounding of the train horn and locomotive engines result in the high maximum and average noise levels shown in Exhibit 25.

As with the project site, the existing uses north of the project site across the UPRR, including noise-sensitive residential uses, are currently exposed to noise from train activities. The noise analysis addressed the potential for train noise to reverberate into the residences to the north with the construction of the 17- to 19-foot-high garages and 14-foot-high block walls at the northern property boundary, resulting in higher train noise exposure for these residences.

Based on the train noise modeling of the proposed heights and types of noise barriers (i.e., block wall and garages) on the site, reverberation impacts would increase noise levels at off-site uses to the north of the project site by up to 2.0 dB when a train is passing. This assumes non-absorptive masonry surfaces on the walls and garages of the proposed project. The estimated noise increase is not perceptible in outdoor environments. As discussed above, typically, a change in noise levels of 3 dB or more is needed to discern a change in noise levels. Also, the EIR for the Riverside General Plan states that an increase of 5 dB or more in the noise exposure of sensitive receptors would be considered significant. The increase in noise levels due to



## Hourly Noise Levels at Northern Project Site Boundary

Merrill Avenue Brownstones Project

Exhibit 25



(11/09/2017 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_HourlyNoise.pdf

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>the project would be less than 3 dB (and would not be perceptible) and would also be less than 5 dB (and would not be considered significant). Therefore, a significant increase in noise levels to residential uses to the north of the project site would not occur with implementation of the proposed garages and walls along the northern property boundary.</p> <p><b>Recreational Noise to Off-site Receptors</b></p> <p>The proposed project includes a recreational area with swimming pool, cabana, spa and other recreational uses in the center of the site. Noise associated with this use is anticipated to include human speech, laughter, amplified speakers from personal radios, pool pump operation, and water activities. This use would be located adjacent to three-story buildings to the east and west. The proposed cabana building and an 8-foot wall would form the northern boundary of the recreational area. The recreation area would also have an 8-foot wall to the south along Merrill Avenue. The nearest residential uses to the north are located approximately 150 feet away. The presence of the 8-foot wall along the northern boundary of the recreational area, the 17- to 19-foot-high garages at the northern property line of the site, and the distance from the recreational area to the nearest residences would attenuate noise generated by outdoor activities at the project site. The recreational uses are approximately 90 feet from the parking lot of the commercial uses to the south and would have an 8-foot high southern wall. Also, the adjacent commercial uses are not considered to be noise-sensitive. Commercial uses to the east and west of the site are buffered by a distance of 350 to 400 feet and attenuated by three-story structures. Noise associated with the recreation areas is not anticipated to be audible at the off-site commercial uses to the east and west of the site because of the distance and intervening structures. With compliance to the exterior and interior noise limits established under the RMC, noise generation that would occur from the recreation area of the project would result in less than significant noise impacts to off-site land uses.</p> <p>As summarized above, the Noise and Vibration Analysis concludes that permanent ambient noise levels in the project vicinity would increase by less than 0.5 dB due to roadway traffic and approximately 2.0 dB due to train noise reverberation. Because the permanent increase in ambient noise levels as a result of the project is less than +5 dB, impacts related to a permanent increase in ambient noise levels would be <b>less than significant</b> directly, indirectly, and cumulatively. Also, on-site activities, including the use of stationary equipment, would have to comply with the performance standards for noise, as contained in Section 9.590.090 of the RMC that prohibits unnecessary, excessive and annoying noises from all sources. Compliance with this regulation would reduce operational noise impacts and a <b>less than significant impact</b> would occur directly, indirectly, or cumulatively.</p>				
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>12d. Response: (Source: RMC Title 7 – Noise Code and Noise and Vibration Analysis prepared by Psomas in January 2018 [included in Appendix H])</b></p> <p><b>Less Than Significant Impact.</b> Proposed construction activities would temporarily increase noise levels in the vicinity of the project site. In typical construction projects, the loudest noise generally occurs during demolition and grading activities, since they involve the largest equipment. Asphalt demolition for the proposed project would take approximately two weeks. Grading and excavation would occur for approximately four weeks. Subsequently, building construction, paving, and architectural coating activities that would generate less noise than demolition and grading activities would occur for approximately 18 months.</p> <p>Section 7.35.010 B 5 of the Riverside Noise Ordinance limits construction noise to between 7:00 AM and 7:00 PM on weekdays, between 8:00 AM and 5:00 PM on Saturdays, and at no time on Sundays or federal holidays.</p> <p>Table 20 shows both the maximum and average noise levels for construction equipment. Maximum noise levels represent the noise levels from construction equipment occurring nearest to the land uses proximate to the project site. Average noise levels represent the noise exposure to nearby land uses based on the distance to the center of the project site. Average noise levels are shown to depict noise levels that would generally occur at off-site land uses. Noise levels from general project-related construction activities would range from 87 to 94 dBA <math>L_{eq}</math> for the maximum noise levels and 63 to 78 dBA <math>L_{eq}</math> for the average noise levels.</p>				



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 20  
CONSTRUCTION NOISE LEVELS AT ADJACENT USES**

Construction Phase	Noise Levels (Leq dBA)							
	Residences to the North of the Project Site		Commercial Uses to the West of the Project Site		Commercial Uses to the South of the Project Site		Commercial Uses to the East of the Project Site	
	Max (75 ft)	Avg. (155 ft)	Max (25 ft)	Avg (415 ft)	Max (75 ft)	Avg (150 ft)	Max (25 ft)	Avg (390 ft)
Ground Clearing/Demolition	79	73	89	65	79	73	89	65
Excavation	84	78	94	70	84	78	94	70
Foundation Construction	77	71	87	63	77	71	87	63
Building Construction	77	71	87	63	77	71	87	63
Paving and Site Cleanup	84	78	94	70	84	78	94	70
Leq dBA: Average noise energy level; Max: maximum; avg: average; ft: feet Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures. Source: USEPA 1971.								

Because the proposed project would result in construction noise that is limited to the least noise-sensitive portions of the day, in compliance with the City's construction time limits in Chapter 7.35 of the RMC, and would not generate atypically high construction noise levels, project-related construction would be considered **less than significant** directly, indirectly, and cumulatively.

- 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 expose people residing or working in the project area to excessive noise levels?



**12e. Response:** (Source: General Plan 2025 Figure N-8 – Riverside and Flabob Airport Noise Contours and Figure N-9 – March ARB Noise Contour; RCALUCP; Draft Vision 2030 - March JPA General Plan; AirNav Flabob Airport and Riverside Municipal Airport; and Noise and Vibration Analysis prepared by Psomas in January 2018 [included in Appendix H])

**No Impact.** The nearest airport to the site is Flabob Airport, a privately-owned airport located approximately 2.3 miles northwest of the site. The Riverside Municipal Airport is a City-owned airport located approximately 3.1 miles southwest of the site. The site is located within the airport land use plan for the Riverside Municipal Airport but is not located within any of the airport noise contour areas identified in the RCALUCP for either airport, as depicted on Figures N-8 and N-9 of the Noise Element of the General Plan 2025. While aircraft overflights may be audible at the project site, the proposed project would not expose people residing or working in the project area to excessive noise levels related to airport or aircraft noise. Therefore, **no impact** related to excessive noise levels from airports would occur directly, indirectly, and cumulatively on people who would reside or work on the site.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>12f. Response:</b> (<i>Source: General Plan 2025 Noise Element and Public Safety Element Figure PS-6 – Airport Safety Zones and Influence Areas and General Plan 2025 FPEIR</i>)</p> <p><b>No Impact.</b> Per the General Plan 2025 Noise Element, Figure PS-6 – Airport Safety Zones and Influence Areas in the Public Safety Element, and the General Plan 2025 FPEIR, no private airstrips are found within the City that would expose people working or residing in the City to excessive noise levels. Since the project site is not located near a private airstrip and does not propose a private airstrip, the proposed project would not expose people residing or working in the City or on the project site to excessive noise levels related to a private airstrip; and there would be <b>no impact</b> directly, indirectly, or cumulatively.</p>				
<p><b>13. POPULATION AND HOUSING.</b> Would the project:</p>				
a. Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>13a. Response:</b> (<i>Source: General Plan 2025 Table 5.12-B – General Plan Population and Employment Projections– 2025 and Table 5.12-D - General Plan Housing Projections 2025; SCAG’s 2016-2040 RTP/SCS and RTP/SCS Demographics and Growth Forecasts; 5th Cycle Final RHNA Allocation Plan; Department of Finance (DOF) Table E-5 Population and Housing Estimates - 2011-2017; Economic Development Department (EDD) Monthly Labor Force Data for Cities and Census Designated Places (CDP); 2014-2021 Housing Element; and Riverside Municipal Code</i>)</p> <p><b>Less Than Significant Impact.</b> The California Department of Finance (DOF) estimates that, as of January 2017, the City of Riverside had a population of 326,792 residents and a housing stock of 100,113 dwelling units (DOF 2017). The City’s labor force consisted of 151,200 persons, of which approximately 141,800 individuals were employed as of August 2017 (EDD 2017). Currently, no dwelling units, residents, businesses or employees on the project site are associated with its use as an overflow parking lot.</p> <p>The proposed project involves the development of 108 apartment units and a 1,200-square-foot retail area at the site and may directly induce population growth in the City. The proposed project would provide 16 studios, 60 one-bedroom units, and 32 two-bedroom units. Using the City’s 2017 average household size of 3.33 persons per dwelling unit as a conservative estimate (since studios are likely to be occupied by fewer than 3.33 persons per unit), the proposed project would generate approximately 360 residents in the City. This additional population would represent an approximate 0.11 percent increase in the City’s 2017 population of 326,792 persons. The 108 dwelling units would also lead to an increase of 0.11 percent in the City’s current housing stock of 100,113 dwelling units. In addition, the maintenance of common areas of the proposed project and the proposed retail area would provide permanent jobs for area residents. Based on the City’s TDM Regulations (Chapter 19.880 of the RMC) that assume an average floor area of 500 square feet per employee for retail commercial uses, the 1,200-square-foot retail space in the proposed project would generate approximately three employees. Based on TDM average floor area of 250 square feet per employee for office/professional uses, five employees would potentially be generated at the 1,200-square-foot leasing office. A total of eight employees would be working on site, which would be less than 0.1 percent of the City’s 2015 employment base of 139,774 jobs.</p> <p>SCAG regional growth projections included in the 2016/2040 RTP/SCS identify a population of 386,600 residents, 118,600 households, and 200,500 jobs in the City of Riverside by 2040. The proposed project residents would represent less than 0.1 percent of the City’s future 2040 population and less than 0.1 percent of the projected households in the City. The on-site employment (eight employees) would also make up less than 0.1 percent of the City’s 2040 employment base.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The Riverside General Plan 2025 is expected to accommodate a buildout population ranging from of 383,077 to 486,375 residents; 127,692 to 162,125 housing units; and an employment base of 865,341 to 1,177,625 jobs by 2025 within the City and its Sphere of Influence. However, under a worst-case scenario where development occurs at maximum densities allowed under the Planned Residential Development, as many as 585,926 residents and 195,309 housing units could be found in the City and its Sphere of Influence by 2025. While the site was not anticipated to generate residents and housing under the existing General Plan land use designation and zoning, the proposed project's 360 residents would represent approximately 0.09 percent of the City's lowest projected 2025 population (383,077 residents); and the 108 units would represent approximately 0.08 percent of the lowest projected housing stock (127,692 housing units) at buildout. The proposed project would also increase housing opportunities in the City through a variety of housing unit sizes and would provide affordable rental housing options, as well as help meet the City's future housing need for 8,283 new dwelling units under SCAG's Regional Housing Needs Assessment (RHNA) Allocation Plan and consistent with City efforts to accommodate new residential development, as provided in the City's 2014-2021 Housing Element. The eight employees on site would represent a negligible amount of the City's future employment base.</p> <p>Thus, the population increase associated with occupancy of the project's 108 units would be within City and SCAG growth projections and would not induce substantial population growth. Increases in the housing stock, resident population, and employment from the proposed project are considered minimal when compared to the current population and housing stock of the City of Riverside, the projected growth for the City, and buildout estimates.</p> <p>Construction workers at the site would be temporary, would be limited in number, would likely come from the local labor pool, and would not generate a large and steady demand for local goods or services. Once the proposed project is occupied, planned on-site retail uses and existing commercial developments and service companies located south of the site and in other areas near the site in the City of Riverside are expected to meet the demand for goods and services from the project's residents.</p> <p>Additionally, the proposed project is not expected to induce additional growth (i.e., spur new business development in the surrounding area). Additionally, the proposed project does not involve the extension of roads or other infrastructure to unserved areas, which could indirectly induce growth.</p> <p>Impacts related to growth inducement would be <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>13b. Response: (Source: Site Visit)</b>  <b>No Impact.</b> The project site is currently a surface parking lot on the eastern portion and an undeveloped area on the western portion. No housing units or other structures are on the site; and the proposed project would not demolish, displace, or remove existing housing units near the site. Therefore, there would be <b>no impact</b> on existing housing either directly, indirectly, or cumulatively.				
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>13c. Response: (Source: Site Visit)</b>  <b>No Impact.</b> No residents, businesses, or employees are stationed at the project site. The proposed project would not displace residents or households, necessitating the construction of replacement housing elsewhere because the project site is a surface parking lot and undeveloped area. Also, no existing businesses or employees would be displaced or affected by the proposed project. Therefore, this project would have <b>no impact</b> on people that may necessitate the need for replacement housing either directly, indirectly, or cumulatively.				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>14. PUBLIC SERVICES.</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>14a. Response:</b> <i>(Source: General Plan 2025 FPEIR Table 5.13-B – Fire Station Locations and RMC Title 16 – Buildings and Construction and Chapter 16.52 – Development Fees for Fire Stations)</i></p> <p><b>Less than Significant Impact.</b> The proposed mixed-use project would create a demand for fire protection and emergency services that would be provided by the Riverside Fire Department, which is currently staffed by 211 full-time firefighters (2017f). The nearest fire station is the Magnolia Center Fire Station #3 located at 6395 Riverside Avenue, approximately 0.4 mile southeast of the site. The City has 13 other fire stations that may also serve the project in the event of a fire or other emergency.</p> <p>Because the project site is currently unoccupied, few to no service calls are made to the site. Occupancy of the proposed 108 residential units, support uses, and retail space would result in approximately 360 new residents and approximately 8 employees. Although the relatively small number of new residents is not anticipated to generate the need for new firefighters and other personnel, the proposed project would require fire protection services, including administrative tasks associated with approval and construction of the proposed project (e.g., building plan check) and response to fire service calls once the project is occupied. The proposed residential uses could increase service calls by the Riverside Fire Department, including structural fires, emergency medical and rescue services, and public education activities.</p> <p>Design and construction of the project would comply with the California Fire Code Standards, as adopted by the City in Chapter 16.32 of the RMC. This includes standards and requirements for smoke and carbon monoxide alarms, fire sprinkler systems, fire escapes, fire exits, access roads, fire extinguishers, and fire hydrants, among other requirements. The proposed project has been reviewed by the Fire Department during the Development Review process and will be subject to additional review during the Plan Check process. Project compliance with City fire protection requirements would reduce the potential for fire and the demand for fire protection services.</p> <p>The Developer would pay development fees for fire stations in accordance with Chapter 16.52 of the RMC. The collected fees are specifically used for the purchase of land and the construction of fire stations and the acquisition of equipment and furnishings to equip the City's fire stations. This ensures that adequate fire facilities and services are available from the Riverside Fire Department. As such, the proposed project's increase in demand for fire protection services would not require the construction of new or alteration of existing fire protection facilities to maintain an adequate level of fire protection service to the project area. Therefore, no physical impacts associated with the provision of fire protection services would occur.</p> <p>The City Fire Department also implements a number of programs in accordance with General Plan 2025 objectives and policies related to the promotion of fire safety and prevention of fire hazards, including Objective PS-6 and Policies PS-6.1 through PS-6.11, which relate to Citywide efforts related to the provision of fire protection services. These City programs and project compliance with the City's building codes and Fire Department regulations would result in a <b>less than significant impact</b> related to the need for additional fire facilities either directly, indirectly, or cumulatively.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>14b. Response:</b> (<i>Source: General Plan 2025 and Public Safety Element Figure PS-8 – Neighborhood Policing Centers and General Plan 2025 FPEIR Figure 5.13-2 – Policing Centers</i>)</p> <p><b>Less Than Significant Impact.</b> The proposed mixed-use project would be served by the Riverside Police Department for law enforcement and police protection services. The Riverside Police Department has approximately 130 sworn officers, 24 Sergeants, 6 Lieutenant Watch Commanders, 1 Executive Lieutenant, 1 Traffic Lieutenant, and a civilian support staff. Officers are assigned to one of four Neighborhood Policing Centers (NPC) and are accountable for their assigned area (Riverside 2018f). The site is within the North Policing Center, which is served by the Orange and Fairmount Stations located in the Downtown area. These stations are located approximately 1.6 and 1.9 miles north of the site, respectively.</p> <p>Because the project site is currently unoccupied, few to no service calls are made to the site. Anticipated crime and safety issues during construction of the proposed project include theft of building materials and construction equipment, malicious mischief, graffiti, and general vandalism. During operation, the proposed project could create the typical range of police service calls that other similar uses in the City experience. The types of crimes typically associated with residential uses are “crimes against persons,” which include, but are not limited to assault, battery, domestic violence, sexual and child abuse, and robberies. The primary types of crimes experienced in non-residential areas are property crimes (e.g., burglary, larceny, theft/auto theft, arson, shoplifting, vandalism). Residents, employees, visitors, and other individuals that would come to the project site would have to comply with the regulations in the RMC and the California Penal Code, as monitored and enforced by the Riverside Police Department.</p> <p>Although the relatively small number of new residents resulting from occupancy of the proposed project is not anticipated to generate the need for new sworn officers, the proposed project would require police protection services, including administrative tasks associated with approval and construction of the proposed project (e.g., building plan check) and response to police service calls once the units are occupied. This increase in demand for police protection services would not require the construction of new or alteration of existing Police Department facilities to maintain an adequate level of service to the project site and the City. Therefore, no physical impacts associated with the provision of police protection services to the proposed project would occur, and no mitigation is required.</p> <p>It should also be noted that the City’s General Plan encourages the use of Crime Prevention through Environmental Design (CPTED) strategies to reduce the demand for police protection services. The following CPTED principles have been incorporated into the project to ensure greater security and crime prevention through design:</p> <ol style="list-style-type: none"> <li>1) doors and windows that look out to Merrill Avenue, the internal road, detached garages, and common areas</li> <li>2) pedestrian-friendly sidewalk on Merrill Avenue featuring stairs from the sidewalk leading to main entries</li> <li>3) covered stoops at building entries</li> <li>4) nighttime lighting along the internal road, garages, and common areas</li> <li>5) security fences between buildings and perimeter walls</li> <li>6) locked gates across the driveways and pedestrian gates</li> </ol> <p>With the implementation of CPTED principles by individual developments and ongoing Police Department programs that serve to implement the General Plan 2025 Objective PS-7 and Policies PS-7.1 through PS-7.7, which relate to Citywide efforts for crime prevention and public safety, as well as project compliance with existing codes and standards and current Police Department practices, there would be <b>less than significant impacts</b> on the demand for additional police facilities or services either directly, indirectly, or cumulatively.</p>				
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>14c. Response:</b> (<i>Source: General Plan 2025 FPEIR Figure 5.13-2 – RUSD Boundaries, Table 5.13-D – RUSD, Table 5.13-G – Student Generation for RUSD and AUSD By Education Level; RUSD Boundary Maps, School Facilities Needs Analysis, and Long Range Facilities Master Plan; and RMC Chapter 16.56 – School Development Fee</i>)</p>				

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**Less Than Significant Impact.** The site is within the service boundaries of the Riverside Unified School District (RUSD) and is served by Pachappa Elementary School, Central Middle School, and Riverside Polytechnic High School. The RUSD has identified a number of renovation and expansion plans for existing schools in their Long Range Facilities Master Plan, which includes the provision of permanent capacities for 800 students at Pachappa Elementary School, 800 students at Central Middle School, and 2,700 students at Riverside Polytechnic High School. The address, enrollment, and capacities of these schools are provided in Table 21 below.

**TABLE 21  
SCHOOLS SERVING THE SITE**

<b>RUSD School</b>	<b>Address</b>	<b>2017 Enrollment</b>	<b>Capacity</b>
Pachappa Elementary School	6200 Riverside Avenue Riverside, CA 92506	775 students	800 students
Central Middle School	4795 Magnolia Avenue Riverside, CA 92506	617 students	800 students
Riverside Polytechnic High School	5450 Victoria Avenue Riverside, CA 92506	2,617 students	2,700 students
Source: RUSD 2016a, 2017a, b, c			

Several other private schools are located within the Magnolia Center Neighborhood and within 2 miles of the site (e.g., Our Lady of Perpetual Help Catholic School, St. Catherine's Catholic School, Notre Dame High School, Woodcrest Christina Day School, Riverside Montessori Academy, and Montessori Academy – Preschool), which may serve the project.

Occupancy of the project's 108 dwelling units would generate a demand for school services. Based on RUSD's student generation rate for multi-family attached housing units of 0.7528 student per unit, the project would generate a total of 82 students, as shown in Table 22. These students would require school facilities and services from the RUSD.

**TABLE 22  
ESTIMATED STUDENT GENERATION**

<b>Grade and School</b>	<b>Student Generation Rate*</b>	<b>No. of Dwelling Units</b>	<b>No. of Students</b>
K- 6 Elementary School	0.4944 student per unit	108 units	54 elementary students
7-8 Middle School	0.0899 student per unit	108 units	10 middle school students
9-12 - High School	0.1685 student per unit	108 units	18 high school students
Total	0.7528 student per unit		82 students
*Source: RUSD 2016b for student generation rates			

Available capacities at Central Middle School and Riverside Polytechnic High School can accommodate students generated by the project. Available capacity at Pachappa Elementary School is less than the number of students that would be generated by the project. However, the project's 16 studio units are not likely to generate the same number of school-age children as the one- and two-bedroom units. To prevent adverse impacts on school services, the project would pay school impact fees to the RUSD for the proposed residential units and commercial uses.

The Leroy Greene School Facilities Act of 1998 (Sections 17070 et seq. of the California Education Code) provides a comprehensive school facilities financing and reform program, including the collection of school development fees from new development to assist individual school districts fund new school construction and reconstruction/modernization needs. Prior to the issuance of the building permit, the Developer would comply with the Leroy Green School Facilities Act by paying the required school development fee to the RUSD, in accordance with Chapter 16.56 of the RMC. The school

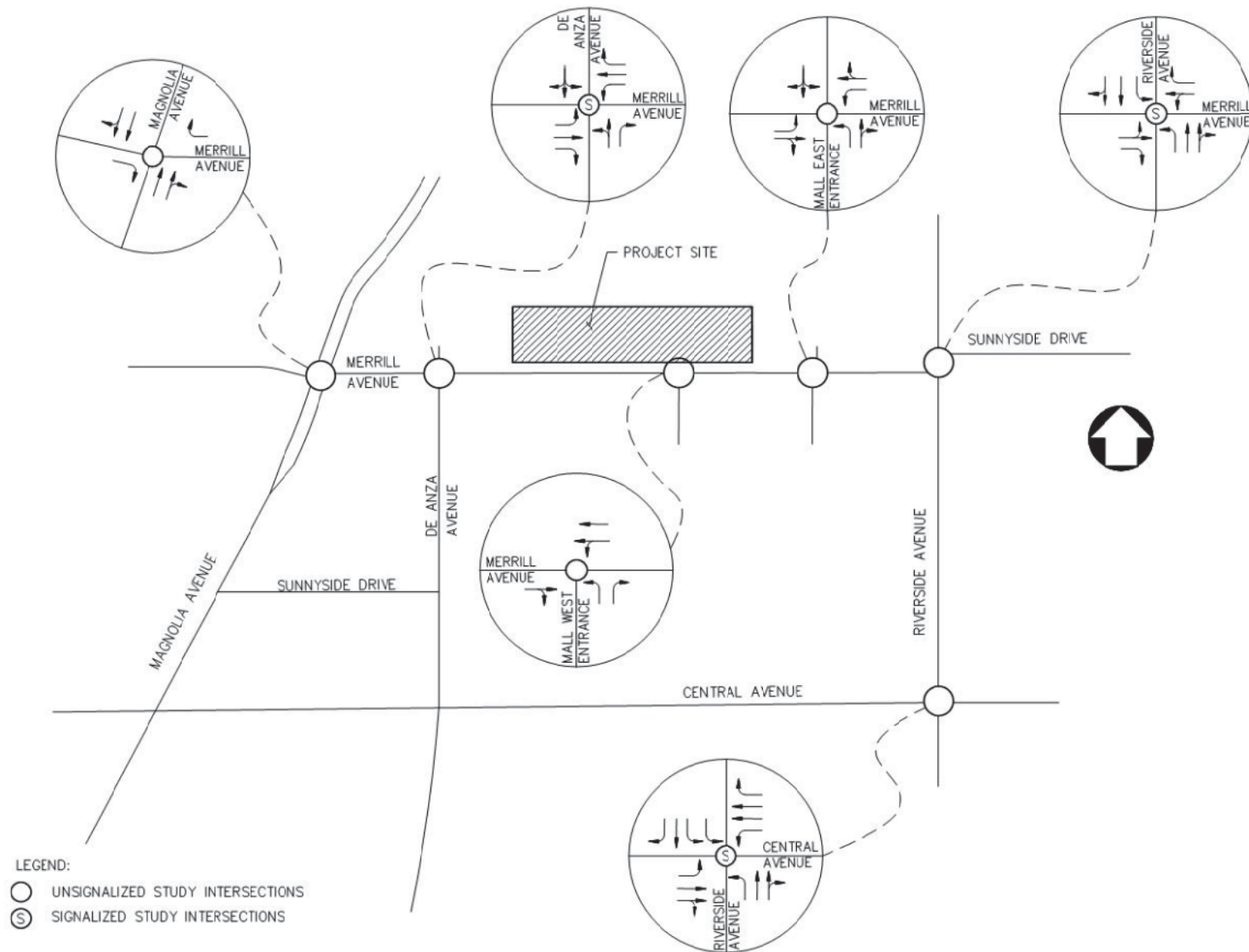
ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
development fees would be used to fund school facilities needed by new developments within the RUSD service area. Thus, the project would have a <b>less than significant impact</b> related to the demand for school facilities or services either directly, indirectly, or cumulatively.				
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>14d. Response:</b> <i>(Source: General Plan 2025 Land Use and Urban Design Element, Parks and Recreation Element, Figure PR-1 – Parks, Open Spaces and Trails, and Table PR-1 – Park and Recreation Facilities; Park and Recreation Master Plan Update; General Plan 2025 FPEIR Section 5.14 – Recreation; Bicycle Master Plan Update: Addendum; and RMC Chapter 16.60 – Local Park Development Fees)</i></p> <p><b>Less Than Significant Impact.</b> The City has 51 parks at various locations throughout the City; these parks serve the recreational needs of residents, employees, and visitors. The project is a proposed residential-commercial mixed-use development consisting of 108 multi-family apartment units, a 1,200-square-foot retail space, a 1,200-square-foot leasing office, and on-site recreational facilities (i.e., swimming pool and spa, fire pit, barbecue area, seating areas, paseos, a 1,200-square-foot fitness center, a 1,200-square-foot club room, and a cabana). The proposed on-site recreational facilities and landscaped areas would cover a total of 19,200 square feet and would serve some of the demand for recreation facilities generated by residents of the project. Consistent with the City’s open space requirements outlined in Table 19.120.050 of the RMC, private open space would also be provided for 92 units in the form of decks and balconies (total of 6,512 sf of private open space).</p> <p>The proposed project would increase the number of residents in the City who may also use nearby City parks and other public and regional parks. The nearest neighborhood parks to the site are Low Park at 6963 Magnolia Avenue, Mountain View Park at 6241 Wiehe Avenue, and Shamel Park at 3650 Arlington Avenue, which range from 0.8 to 0.9 mile from the project site. These neighborhood parks would likely be used by residents of the project, along with other community and City parks, special use parks, open space reserves, County parks, and State parks in the surrounding area and region. As stated in the General Plan 2025 Parks and Recreation Element, the Magnolia Center Neighborhood has no deficiency in neighborhood parks. Due to the small number of new residents that would be introduced by the project, the increase in the use of existing public park facilities by these residents would not be at a level that would require the need for new or physically altered facilities.</p> <p>No trails, trail hubs, or trail access points are present near the project site, but Class 2 bike lanes run along both sides of Magnolia Avenue. Figure LU-6 – Tying the Connections of the General Plan shows proposed Class 2 bike lanes on Central Avenue, and a Class 3 bike route is proposed on Riverside Avenue in the Bicycle Master Plan Update: Addendum. The proposed project includes the signing of Merrill Avenue as a bike route from Riverside Avenue to Magnolia Avenue. Thus, the proposed project would facilitate use of bike lanes in the area.</p> <p>Prior to the issuance of the building permit, the Developer would comply with Chapters 16.44 and 16.60 of the RMC by paying the applicable Park Development Impact Fees for use in the acquisition, development, or expansion of regional and local parks in the City. The Developer would also comply with Chapter 16.76 of the RMC by paying the applicable Trail Development Fee for use in the acquisition and development of trails in the City.</p> <p>With implementation of City programs to meet the General Plan 2025 parkland standard of 3.0 acres per 1,000 residents and related objectives and policies in the Parks and Recreation Element and the Park and Recreation Master Plan Update, along with the proposed project’s provision of on-site recreational facilities for compliance with existing City regulations and standards for the provision of private and common open space areas, and payment of the applicable Park Development Impact Fee and Trail Development Fee by the project, there would be <b>less than significant impacts</b> related to the demand for additional park facilities or services either directly, indirectly, or cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>14e. Response:</b> (<i>Source: General Plan 2025 Figure LU-8 – Community Facilities; General Plan 2025 FPEIR Figure 5.13-5 - Library Facilities, Figure 5.13-6 - Community Centers, Table 5.3-F – Riverside Community Centers, and Table 5.13-H – Riverside Public Library Service Standards; and Riverside Public Library website</i>)</p> <p><b>Less than Significant Impact.</b> The project would generate a demand for other public facilities, including libraries and community centers. The City has eight libraries that are open to the public, with the library collection of approximately 425,000 books and other library materials, 400 computers, and several community meeting rooms. The City also has nine community centers that host recreational programs, classes, activities, and sports and three senior centers.</p> <p>The site is located in an area where existing public facilities are present. Public facilities and services available within the Magnolia Center Neighborhood include the Marcy Branch Library, Janet Goeske Senior Center, and Joyce Jackson Community Center, which are located within 2 miles of the project site. Use of these public facilities by the project residents is not expected to increase in the use of existing libraries and community centers to a level that would require the need for new or physically altered facilities.</p> <p>Payment of the library parcel tax by property owners, as approved under Measure C, allows the City to provide adequate funding for library services. In addition, community service programs and library practices that implement General Plan 2025 Objective PF-10 and Policies PF-10.1 through PF-10.4, which relate to Citywide efforts for the provision of community centers and other public services and facilities, and project compliance with existing regulations and standards would prevent any significant impact on public facilities or services. <b>Less than significant impacts</b> would occur either directly, indirectly, or cumulatively with the project.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>15. RECREATION.</b>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>15a. Response:</b> <i>(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, and Figure CCM-6 – Master Plan of Trails and Bikeways; Park and Recreation Master Plan Update; General Plan 2025 FPEIR Table 5.14-A – Park and Recreation Facility Types and Table 5.14-D – Inventory of Existing Community Centers; RMC Chapter 16.60 - Local Park Development Fees; and Bicycle Master Plan Update: Addendum)</i></p> <p><b>Less Than Significant Impact.</b> Project residents would generate a demand for parks and recreational facilities, as discussed under Threshold 14d above. Nearby parks that may serve residents of the project include Low Park, Mountain View Park, and Shamel Park, along with other City, County, and State parks in the project area. The project would also provide on-site private and common open space areas and recreational facilities in accordance with City standards, including a swimming pool and spa, fitness center, club room, and cabana. In addition, the project would pay applicable Park Development Impact Fees and Trails Development Fee to the City of Riverside Parks, Recreation and Community Services Department for use in the acquisition, development or expansion of regional and local parks and trails in the City. Therefore, the potential increase in use of public recreational facilities and participation in recreational programs resulting from the proposed project would not be at a level that would result in a substantial deterioration of existing facilities; and the impact on parks and recreational facilities would be <b>less than significant</b> directly, indirectly, or cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>15b. Response:</b> <i>(Source: Conceptual Site Plan)</i></p> <p><b>No Impact.</b> The project would include the provision of recreational facilities on site. A swimming pool and spa would be located at the center of the site, with a cabana building north of the pool and a fitness center and club room southeast and southwest of the pool. These recreational facilities would serve residents of the project, and the impacts associated with the construction of these facilities are analyzed in this Initial Study. The project would also pay applicable Park Development Impact Fees to the City, but no off-site construction or expansion of public parks or recreational facilities would occur directly as part of the project. Therefore, there would be <b>no impact</b> directly, indirectly, or cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>16. TRANSPORTATION/TRAFFIC.</b> Would the project result in:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>16a. Response:</b> <i>(Source: General Plan 2025 Circulation and Community Mobility Element Figure CCM-4 – Master Plan of Roadways; General Plan 2025 FPEIR Table 5.15-J – Current Status of Roadways Projected to Operate at LOS E or F in 2025; and Traffic Impact Study prepared by Psomas in January 2018 [included in Appendix I])</i></p> <p><b>Less than Significant Impact with Mitigation Incorporated.</b> A Traffic Impact Study was prepared for the proposed project to determine the impacts of the project on traffic operations, access, circulation, safety, and alternative transportation (Psomas 2018f; see Appendix I of this Initial Study). Following is a summary of the analysis of potential impacts to roadway intersections and roadway segments in the traffic study area resulting from the proposed project. Impacts related to safety are discussed below under Threshold 16.d, and alternative transportation (e.g., transit, pedestrian, and bicycle paths) is discussed below under Threshold 16.f.</p> <p>Regional access to the project site is provided by SR-91, with on- and off-ramps at Central Avenue located approximately 0.4 mile to the southeast. Direct local access to the project site is provided by Merrill Avenue, which runs along the southern boundary of the site. Merrill Avenue is accessed from Riverside Avenue to the east of the project site, Magnolia Avenue to the west (northbound direction only), and De Anza Avenue to the southwest (the northern terminus of this road is Merrill Avenue). A public alley also runs along the northern boundary of the site and serves as a utility corridor and provides rear access to the parcels north of Merrill Avenue, including the site. The study area for the Traffic Impact Study, existing traffic controls, and lane geometrics are provided in Exhibit 26. According to the City’s Circulation and Community Mobility Element of the General Plan, Merrill Avenue is classified as a 66-foot Collector roadway, while Riverside Avenue is classified as an 88-foot Arterial roadway. It should be noted that within its 88-foot right-of-way, Riverside Avenue features a five-lane configuration with two through lanes in each direction and a two-way left-turn lane in the center of the roadway segment between Merrill Avenue and Central Avenue. This configuration is consistent with the City’s 100-foot arterial cross-section, per the Circulation and Community Mobility Element.</p> <p>Existing AM and PM peak-hour traffic volumes were compiled based on turning movement counts collected on Thursday, May 25, 2017; 24-hour, two-way average daily traffic (ADT) counts were collected on the same day. Existing traffic volumes are depicted on Exhibit 27. Based on traffic counts in May 2017, Merrill Avenue had 2017 daily traffic volumes of 3,436 vehicles east of Magnolia Avenue; 5,195 vehicles east of De Anza Avenue; 6,051 vehicles east of the Riverside Plaza driveway; 6,412 vehicles west of Riverside Avenue.</p> <p><b>Construction Traffic</b></p> <p>Construction activities at the project site, which would last approximately 20 months, would lead to heavy truck trips, construction equipment trips, and construction crew vehicle trips that would add to existing traffic volumes in the project area. The greatest number of heavy truck trips would occur during the demolition of the asphalt pavement and during excavation activities. Demolition would last approximately two weeks and would result in the export of approximately 136 truckloads of materials removed (272 one-way trips), or about 28 trucks’ one-way trips per day. Grading and excavation at the project site is anticipated to last approximately four weeks and would require approximately 418 total round trips (834 one-way trips), or approximately 42 one-way trips per day. The remaining construction phases (e.g., site preparation, utility installation, building construction, and interior finishes, among others) would also generate construction traffic, but it would be less than the demolition and export phases.</p>				



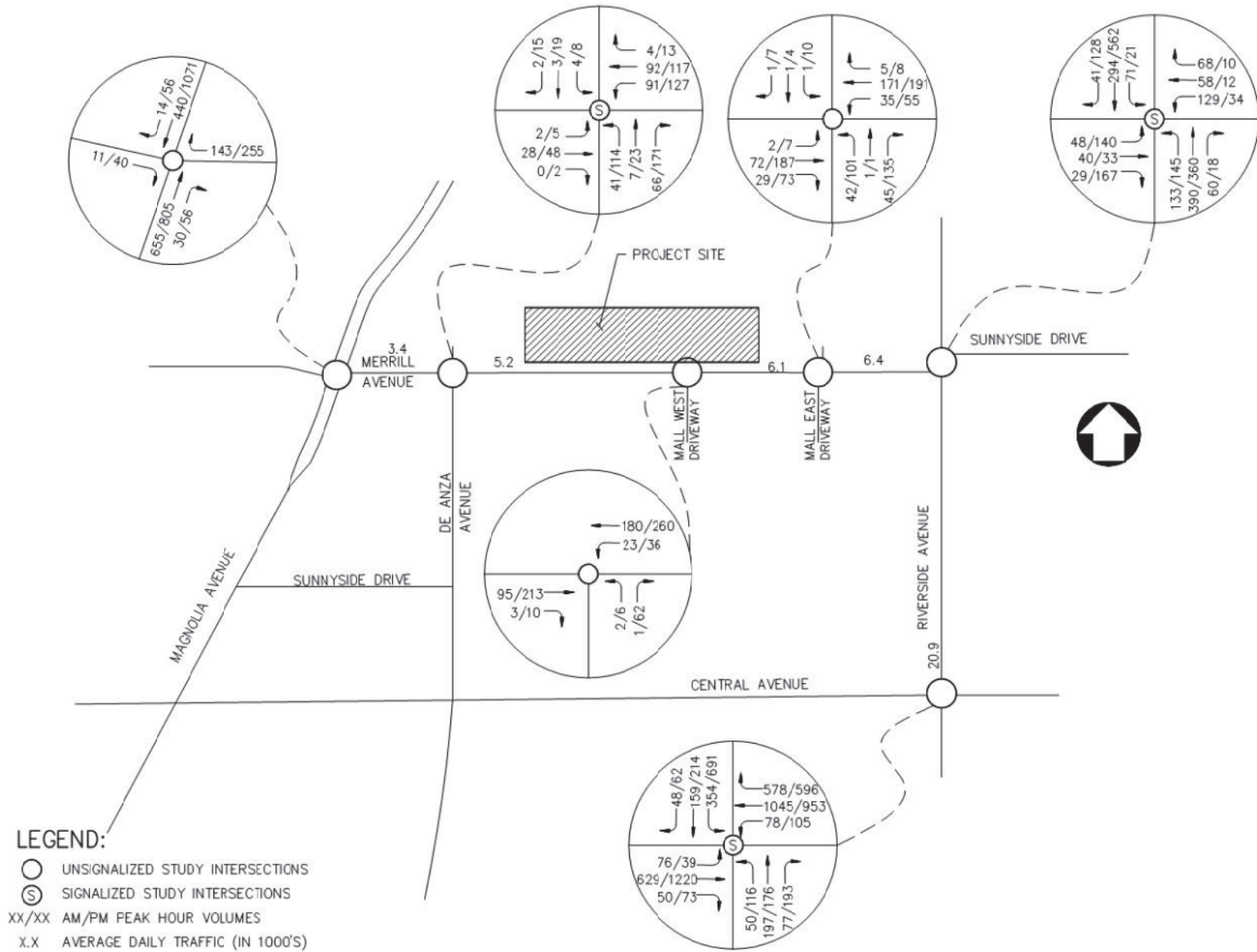
Source: Psomas 2017

## Existing Traffic Controls and Lane Geometrics

Exhibit 26

Merrill Avenue Brownstones Project





Source: Psomas 2017

## Existing Traffic Volumes

Merrill Avenue Brownstones Project

Exhibit 27

PSOMAS



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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Heavy trucks would access the project site from SR-91 via Central Avenue. Trucks would head west on Central Avenue, north on Riverside Avenue and west on Merrill Avenue to the site. Trucks would exit the project site and would head east on Merrill Avenue, south of Riverside Avenue and east on Central Avenue to return to SR-91. Demolition material and soil export trips would occur at regular intervals throughout the day and would not be concentrated during peak hours. Construction workers are expected to be on site prior to the AM peak hour and would leave prior to the start of the PM peak hour. Construction staging and construction employee parking would occur at the project site. Construction traffic using SR-91, major arterials, and local streets would contribute to congestion of these roadways but would not be a substantial percentage of the daily traffic volumes and would be temporary in nature.

The proposed roadway improvements on Merrill Avenue and utility line installation and connections would lead to temporary obstructions of traffic flow on Merrill Avenue. As required by the City, at least one lane of travel remaining open and available at all times, as feasible, in accordance with the Greenbook, as required by the City. The City also requires submission and implementation of a construction Traffic Control Plan or compliance with the Work Area Traffic Control Handbook (WATCH Manual) or Manual on Uniform Traffic Control Devices (MUTCD) to facilitate the movement of traffic through construction areas and to minimize potential disruptions to vehicle traffic along Merrill Avenue and surrounding streets. Therefore, construction-related traffic would not significantly impact roadway operations and would result in a less than significant impact.

#### ***Operational Traffic***

The proposed residential and commercial uses on the site would generate new vehicle trips to and from the site. Table 23 provides the trip generation estimates based on the Institute of Transportation Engineer's Trip Generation Manual (9<sup>th</sup> Edition). As many as 772 new ADT would be generated by the project, with 67 trips during the morning (AM) peak hours and 79 trips during the afternoon/evening (PM) peak hours. It should be noted that to be conservative, no modal split reduction<sup>4</sup> was applied for the proposed project.

**TABLE 23  
PROJECT TRIP GENERATION ESTIMATES**

Land Use Trip Rate	Daily Trip Rate	AM PEAK HOUR			PM Peak Hour		
		%In	%Out	Trip Rate	%In	%Out	Trip Rate
108-unit Apartment	6.65	29%	71%	0.55	59%	41%	0.67
1,200-sf Specialty Retail Use	44.32	50%	50%	6.84	60%	40%	5.02
<b>Total</b>							
<b>Proposed Land Use</b>	<b>Daily Trips</b>	<b>In</b>	<b>Out</b>	<b>Total</b>	<b>In</b>	<b>Out</b>	<b>Total</b>
108-unit Apartment	718	17	42	59	43	30	73
1,200-sf Specialty Retail Use	54	4	4	8	4	2	6
<b>Total</b>	<b>772</b>	<b>21</b>	<b>46</b>	<b>67</b>	<b>47</b>	<b>32</b>	<b>79</b>
sf – square-foot							

<sup>4</sup> Modal split signifies the proportion of traffic generated by a project that would use any of the transportation modes, namely buses, cars, bicycles, motorcycles, trains, carpools, etc.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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For comparison purposes only, the trip generation associated with future development that can be constructed on the site in accordance with the current General Plan land use and zoning designations of C – Commercial and CG-SP is provided in Table 24 below. Development of the site with a mix of retail and restaurant uses (the sizes of potential commercial uses have been calculated to account for the required parking and setback areas) would generate 2,305 trips per day; while development of the site with retail uses (which has a lower trip generation) would generate 1,237 trips per day. Thus, commercial uses on the site would generate more vehicle trips than the proposed mixed-use project.

**TABLE 24  
EXISTING ZONING - COMMERCIAL TRIP GENERATION ESTIMATES**

Land Use	Daily Trip Rate	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
15,000-sf Specialty Retail Use	44.32	665	50	53	103	43	32	75
12,900-sf Sit-down Restaurant	127.15	1,640	92	80	172	129	110	239
<b>Total</b>		2,305	142	133	275	172	142	314
<b>Retail Land Use</b>			<b>In</b>	<b>Out</b>	<b>Total</b>	<b>In</b>	<b>Out</b>	<b>Total</b>
27,900-sf Specialty Retail Use	44.32	1,237	92	99	191	79	61	140
sf – square-foot								

As shown in Table 23, the project would generate 772 daily trips but would not generate more than 100 trips during the peak hours. The City’s Traffic Impact Analysis Guidelines indicated that projects generating between 50 to 100 peak-hour trips may be requested to prepare a local/focused traffic impact analysis. The City has requested preparation of a focused traffic analysis to determine impacts on nearby roadway segments and intersections, as contained in the City-approved scoping agreement (included in Appendix A of the Traffic Impact Study). The traffic study area is shown on Exhibit 26.

The study intersections analyzed include:

- Merrill Avenue at Magnolia Avenue (unsignalized)
- Merrill Avenue at De Anza Avenue (signalized)
- Merrill Avenue at the Mall West driveway (unsignalized)
- Merrill Avenue at the Mall East driveway (unsignalized)
- Merrill Avenue at Riverside Avenue (signalized)
- Riverside Avenue at Central Avenue (signalized)
- Merrill Avenue at the Brownstones West driveway (Proposed)
- Merrill Avenue at the Brownstones East driveway (Proposed)

The roadway segments analyzed include:

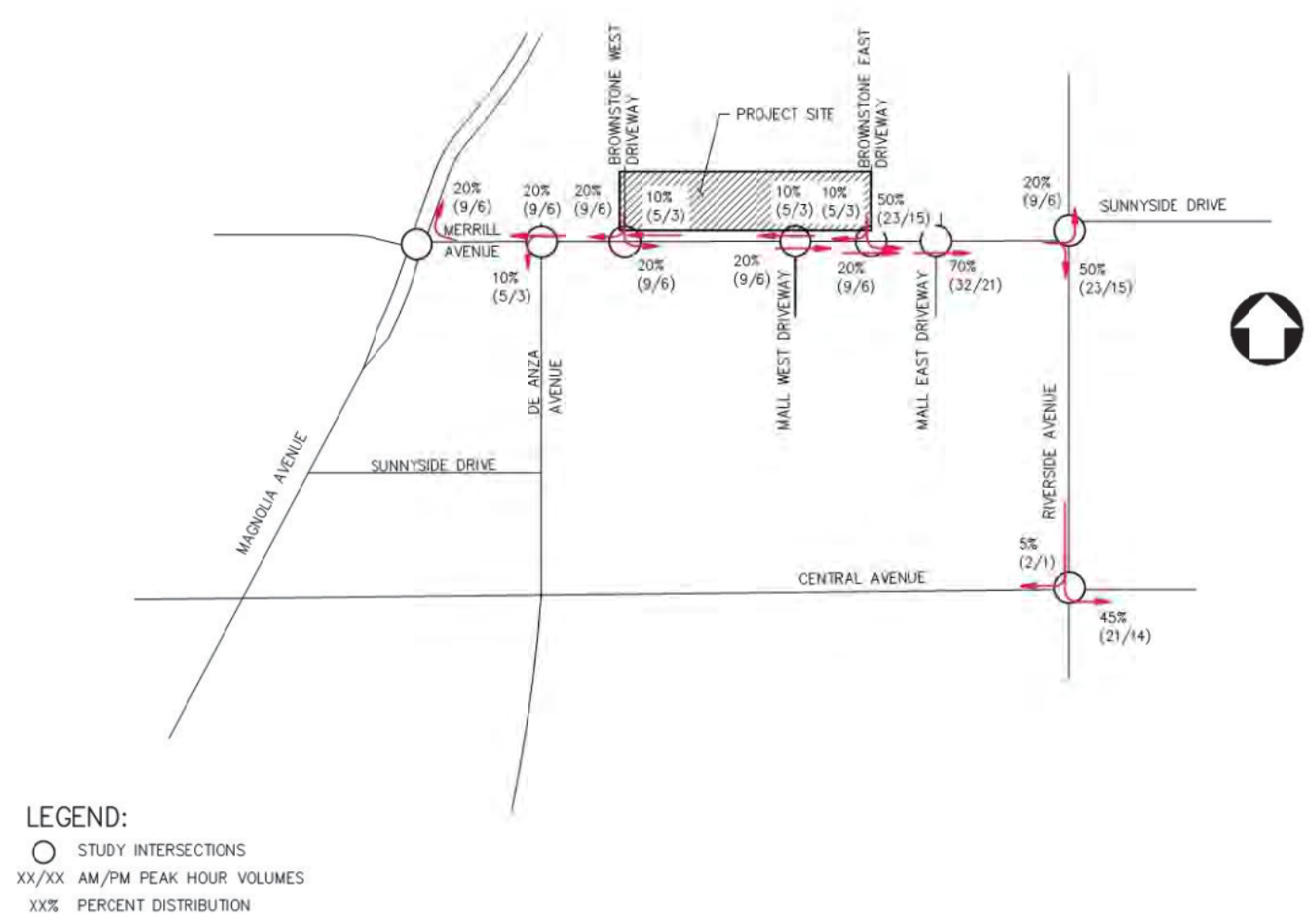
- Merrill Avenue: Magnolia Avenue to De Anza Avenue
- Merrill Avenue: De Anza Avenue to Brownstones West driveway (new)
- Merrill Avenue: Brownstones West driveway to Mall West driveway
- Merrill Avenue: Mall West driveway to Brownstones East driveway (new)
- Merrill Avenue: Brownstones East driveway to Mall East driveway
- Merrill Avenue: Mall East driveway to Riverside Avenue
- Riverside Avenue: Merrill to Central Avenue

The following traffic scenarios were analyzed in the Traffic Study:

- Existing traffic conditions
- Existing traffic conditions with Project trips
- ‘Opening Year’ traffic without Project trips (at year 2019)
- ‘Opening Year’ traffic with Project trips (at year 2019)

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> <li>• Cumulative traffic conditions during the Year of 2019, without project trips</li> <li>• Cumulative traffic conditions during the Year of 2019, with project trips</li> <li>• Build-Out traffic conditions in the Year of 2025, without project trips</li> <li>• Build-Out traffic conditions in the Year of 2025, with project trips</li> </ul> <p>It should be noted that a focused analysis of potential traffic congestion during the holiday peak period was also conducted.</p> <p><b>Existing Conditions</b></p> <p>The existing intersection levels of service (LOS) at study area intersection was calculated based on traffic turning movement counts in May 2017 and the methodology in the 2010 Highway Capacity Manual. Table 25 provided below under the discussion of the Existing With Project traffic analysis scenario shows the traffic control, existing delay, and LOS at six existing study area intersections. Exhibit 27 shows existing roadway and intersection traffic volumes.</p> <p>The City of Riverside sets the maximum allowable LOS at LOS D for study intersections and roadways classified as Collectors or higher. As shown in Table 25, the intersection of Riverside Avenue/Central Avenue operates at LOS E, which exceeds the LOS D standard, during the PM peak hours and is considered deficient under existing conditions. All other study intersections are operating at acceptable LOS.</p> <p>On the study area roadway segments, LOS calculations were computed based on the capacity of the existing roadways in accordance with the City’s guidelines, which are consistent with the 2010 Highway Capacity Manual parameters. Per the City’s General Plan, Merrill Avenue should operate at LOS C or better, and Riverside Avenue should operate at LOS D or better. Each of the study area roadway segments currently operates at LOS C or better under the Existing scenario.</p> <p><b>Project Traffic Distribution</b></p> <p>For each traffic analysis scenario, project-generated trips were distributed to the roadway network serving the site based on existing and proposed land uses on and near the site, access to highways within the community, and existing traffic volumes. It should also be noted that the trip distribution is based on Opening Year conditions, which includes the proposed changes to Merrill Avenue, which were previously described in the Project Description and shown on Exhibit 6. The inbound and outbound patterns are generally the same, with the exception of the intersection of Merrill Avenue and Magnolia Avenue. Turn restrictions at that intersection require that trips from Magnolia Avenue turn onto Merrill Avenue from the south. Exhibits 28a and 28b show the trip distribution for outbound and inbound trips from the project site. An estimated 60 percent of outgoing trips from the proposed project are expected to use the Brownstones East driveway, with 40 percent using the Brownstones West driveway. Approximately 70 percent of the outgoing trips from the project are expected to head eastbound, in the direction of the SR-91 freeway access; and approximately 30 percent are expected to travel westbound onto De Anza Avenue and Magnolia Avenue. Similarly, approximately 70 percent of incoming trips are expected to come from the direction of the SR-91 freeway interchanges at Central Avenue and Arlington Avenue to the east, while approximately 30 percent of the trips are expected to come from west of the site.</p> <p><b>Thresholds of Significance</b></p> <p>According to the City’s guidelines, a proposed project is considered to have a significant impact at a study intersection when the addition of project-related trips causes either peak-hour LOS to degrade from what the City considers acceptable levels (LOS A through D) to unacceptable levels (LOS E to F), or if delay in seconds during peak hours increases by the following thresholds: ten seconds for LOS A or B, eight seconds for LOS C, five seconds for LOS D, two seconds for LOS E, and one second for LOS F.</p>				

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## Outbound Project Trip Distribution

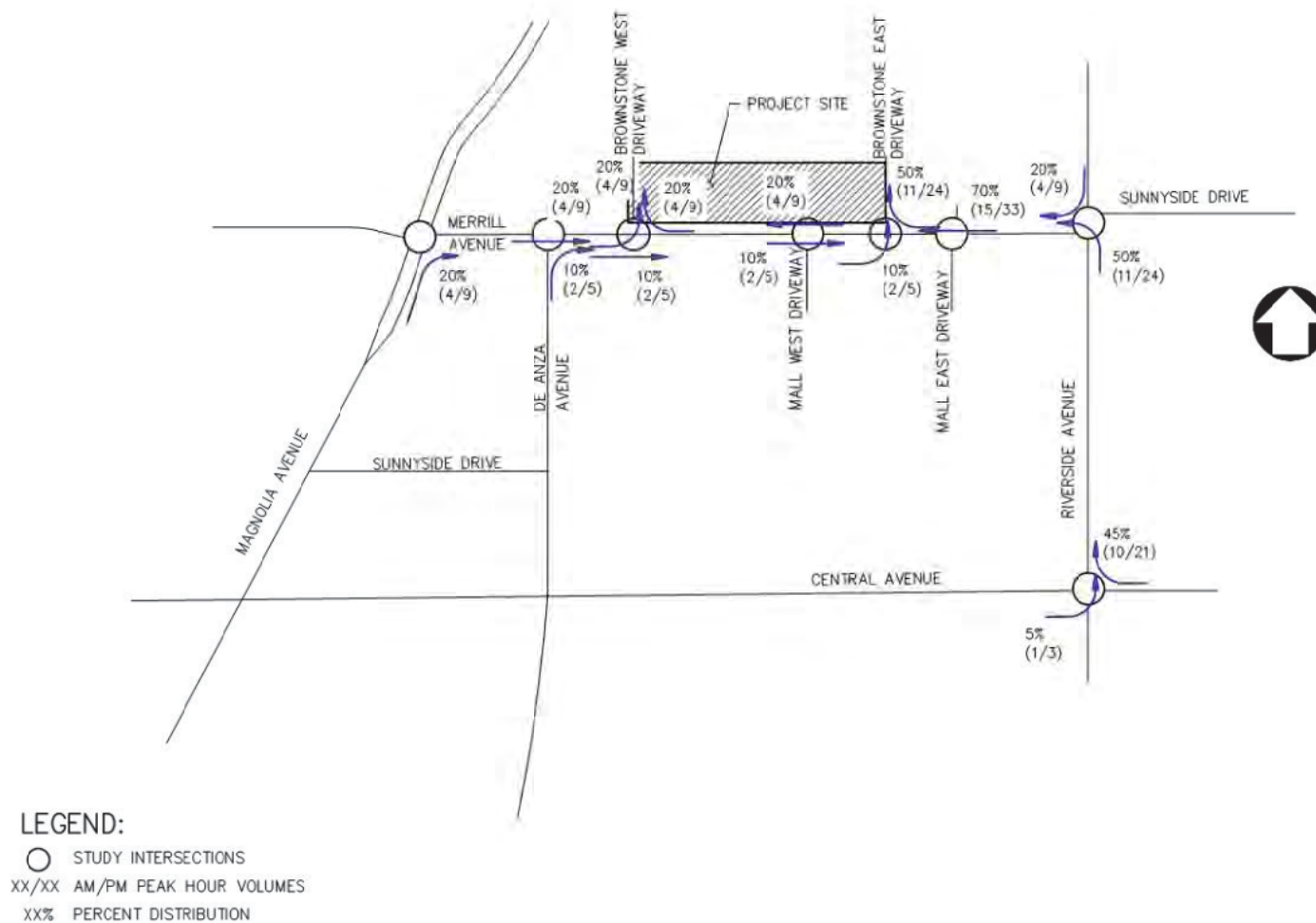
Merrill Avenue Brownstones Project

Exhibit 28a



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Source: Psomas 2017

## Inbound Project Trip Distribution

*Merrill Avenue Brownstones Project*

Exhibit 28b



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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#### Existing with Project Conditions

Exhibit 29 shows the traffic volumes on roadway segments and intersections with the addition of project trips to existing volumes, and Table 25 shows the delay and LOS at the study intersections with and without the project.

**TABLE 25  
EXISTING CONDITION INTERSECTION DELAY AND LEVEL OF SERVICE  
WITH AND WITHOUT THE PROJECT**

Intersection	Traffic Control	Existing Without Project Delay (sec)/LOS <sup>a</sup>		Existing With Project Delay (sec)/LOS <sup>a</sup>		Significant Impact
		AM	PM	AM	PM	
Merrill Avenue						
1. Magnolia Ave	2W	12.0/B	16.2/C	12.1/B	16.6/C	No
2. De Anza Ave	TS	8.3/A	10.7/B	8.3/A	10.8/B	No
3. Mall West Dwy	2W	9.7/A	10.1/B	10.2/B	10.2/B	No
4. Mall East Dwy	2W	10.6/B	14.0/B	11.0/B	15.5/C	No
5. Riverside Ave	TS	28.0/C	23.0/C	28.3/C	26.4/C	No
Riverside Avenue						
6. Central Ave	TS	33.5/C	<b>60.9/E</b>	34.2/C	<b>65.7/E</b>	<b>Yes</b>
Merrill Avenue						
7. Brownstones West Dwy	2W	–	–	9.9/A	10.6/B	N/A
8. Brownstones East Dwy	2W	–	–	10.4/B	11.8/N	N/A
AM – morning peak hour; PM- afternoon/evening peak hour; 2W- two-way stop controlled; TS – Traffic Signal; Ave – Avenue; Dwy – driveway Intersections operating at an unacceptable level of service are shown in <b>bold-faced type</b> .  Notes: Mall East Dwy is the Plaza east driveway and Mall West Dwy is the Plaza west driveway.  Source: Psomas 2018b						

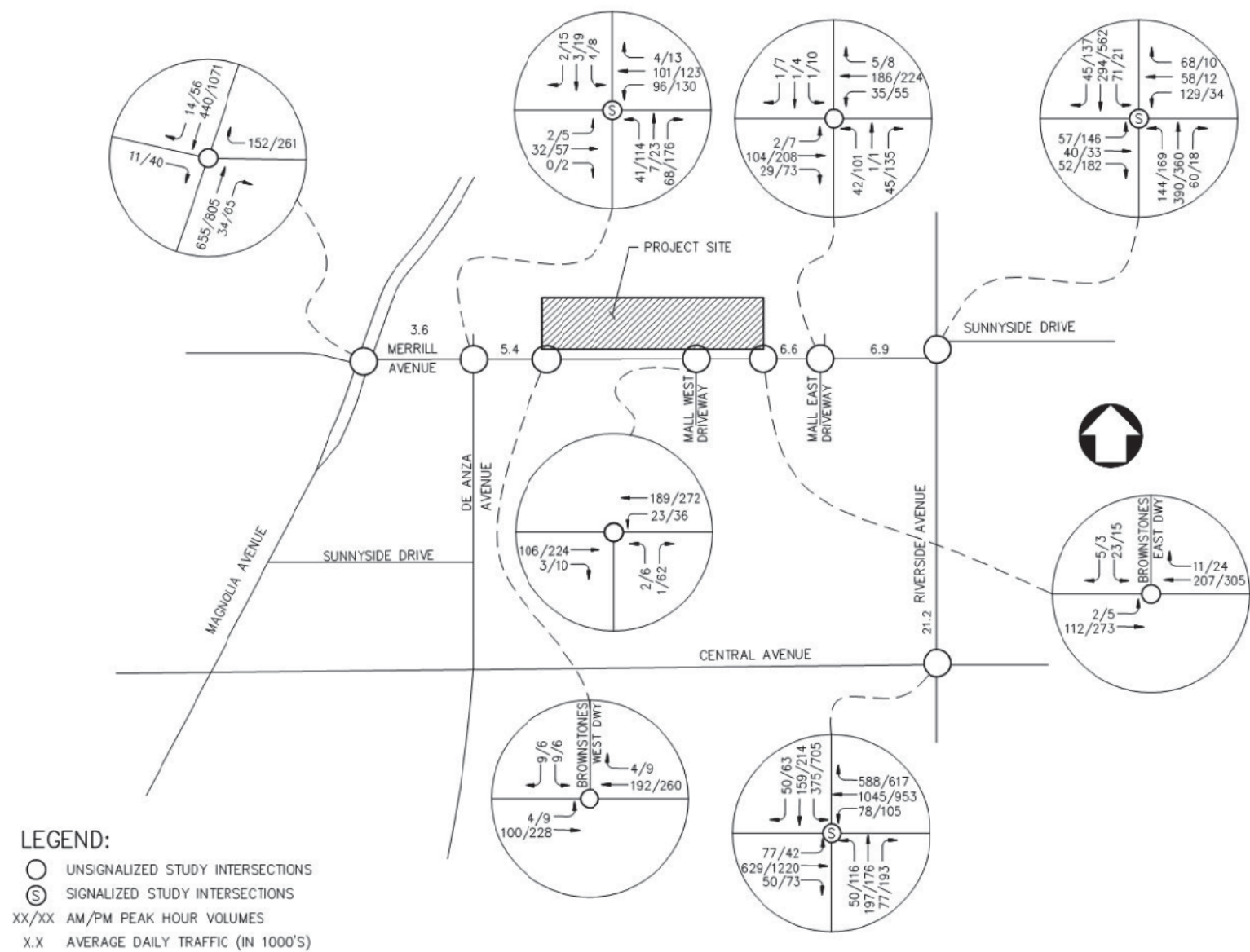
As shown, all intersections would operate at an acceptable LOS (i.e., LOS D or better), with the exception of the Riverside Avenue/Central Avenue intersection, and would have increased delay such that the proposed project would have a significant impact. The Riverside Avenue/Central Avenue intersection currently operates at LOS E during the PM peak hour and would continue to operate at LOS E. The increase in delay at this intersection with the project is more than the City's threshold of 2 seconds (for LOS E); thus, the potential impact is considered significant. The recommended mitigation for this impact is to install an interconnect or fiber optic communication cable on Riverside Avenue between Merrill Avenue/Sunnyside Avenue and Central Avenue to adjust and coordinate the two signal systems (refer to MM TRA-1); the conduit for this infrastructure currently exists and there would be no physical impacts resulting from implementation of this MM. With the implementation of the signal timing adjustment and coordination under MM TRA-1, the delay at this intersection would improve to be less than the delay without the project (to 55.4 seconds/LOS E) and impacts to performance of the circulation system under the Existing With Project condition would be less than significant.

The proposed site driveways would operate at acceptable LOS (LOS A/B during the AM and PM peak hours). Roadway segments would also operate at LOS C or better under the Existing With and Without Project scenarios.

#### Opening Year (2019) Conditions (With and Without the Project)

With project completion anticipated in 2019, the Opening Year scenario assumes an increase in existing traffic volumes by 2.0 percent per year. The Opening Year traffic volumes are shown on Figures 3.5 and 3.6 of the Traffic Impact Study included

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Source: Psomas 2017

## Existing With Project Traffic Volumes

Merrill Avenue Brownstones Project

## Exhibit 29



(11/06/2017 MMD) R:\Projects\PEL\_Pelican\3PEL020100\Graphics\IS-MND\ex\_Existing\_With\_ProjectTrafficVolume.pdf

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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in Appendix I. Table 26 shows the delay and LOS at the study intersections with and without the project. Similar to the Existing Condition traffic analysis scenario, the LOS analysis shows acceptable operations at study intersections without the proposed project, except for the Riverside Avenue/Central Avenue intersection, which would operate at LOS E during the PM peak hour.

**TABLE 26  
OPENING YEAR (2019) INTERSECTION DELAY AND LEVEL OF SERVICE  
WITH AND WITHOUT THE PROJECT**

Intersection	Traffic Control	Opening Year Without Project Delay (sec)/LOS <sup>a</sup>		Opening Year With Project Delay (sec)/LOS <sup>a</sup>		Significant Impact
		AM	PM	AM	PM	
Merrill Avenue						
1. Magnolia Ave	2W	12.2/B	17.2/C	12.4/B	17.6/C	No
2. De Anza Ave	TS	8.3/A	10.8/B	8.3/A	11.0/B	No
3. Mall West Dwy	2W	9.7/A	10.2/B	10.3/B	10.3/B	No
4. Mall East Dwy	2W	10.7/B	14.6/B	11.1/B	16.1/C	No
5. Riverside Ave	TS	28.5/C	23.5/C	28.9/C	27.4/C	No
Riverside Avenue						
6. Central Ave	TS	34.5/C	<b>66.4/E</b>	35.3/D	<b>72.0/E</b>	<b>Yes</b>
Merrill Avenue						
7. Brownstones West Dwy	2W	–	–	9.9/A	10.7/B	N/A
8. Brownstones East Dwy	2W	–	–	10.4/B	11.9/B	N/A
AM – morning peak hour; PM- afternoon/evening peak hour; 2W- two-way stop controlled; TS – Traffic Signal; Ave – Avenue; Dwy - driveway Intersections operating at an unacceptable level of service are shown in <b>bold-faced type</b> .						
Notes: Mall East Dwy is the Plaza east driveway and Mall West Dwy is the Plaza west driveway.						
Source: Psomas 2018b						

As shown, the Riverside Avenue/Central Avenue intersection would operate at LOS E during the PM peak hour under the Opening Year (2019) without Project scenario. With the project, the increase in delay at this intersection with the project is more than the City's threshold of 2 seconds (for LOS E); thus, the potential impact is considered significant. The recommended mitigation for this impact is to install an interconnect or fiber optic communication cable on Riverside Avenue between Merrill Avenue/Sunnyside Avenue and Central Avenue to adjust and coordinate the two signal systems (refer to MM TRA-1). With the implementation of MM TRA-1, the delay at this intersection would improve to be less than the delay without the project (to 61.7 seconds/LOS E) and impacts to performance of the circulation system under the Existing With Project condition would be less than significant.

The proposed site driveways would operate at acceptable LOS (LOS A/B during the AM and PM peak hours). Roadway segments would also operate at LOS C or better under the Opening Year (2019) With and Without Project scenarios.

#### **Cumulative (2019) Conditions (With and Without the Project)**

A number of development projects are proposed near the site and would add vehicle trips to the study intersections and roadway segments that were subject to analysis in the Traffic Impact Study. The addition of these trips to the Opening Year conditions represents the Cumulative Conditions traffic analysis scenario. The cumulative projects are described in Section 3.4 of the Traffic Impact Study included in Appendix I of this Initial Study; the location of the cumulative projects and trip distribution are shown on Figure 3.7 and the cumulative condition traffic volumes are shown on Figures 3.8 and 3.9 of the



<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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Traffic Impact Study. As shown in Table 27, the LOS for the study intersections under this scenario would be LOS D or better without the project, except for the intersection of Riverside Avenue and Central Avenue, which is still expected to operate at LOS E during the PM peak hour.

**TABLE 27  
CUMULATIVE CONDITION (2019) INTERSECTION DELAY AND LEVEL OF SERVICE  
WITH AND WITHOUT THE PROJECT**

Intersection	Traffic Control	2019 Cumulative Conditions Without Project Delay (sec)/LOS <sup>a</sup>		2019 Cumulative Conditions With Project Delay (sec)/LOS <sup>a</sup>		Significant Impact
		AM	PM	AM	PM	
Merrill Avenue						
1. Magnolia Ave	2W	12.3/B	17.4/C	12.5/B	17.8/C	No
2. De Anza Ave	TS	8.3/A	10.8/B	8.3/A	11.0/B	No
3. Mall West Dwy	2W	9.7/A	10.2/B	10.3/B	10.3/B	No
4. Mall East Dwy	2W	10.7/B	14.6/B	11.1/B	16.1/C	No
5. Riverside Ave	TS	28.8/C	23.5/C	29.3/C	27.7/C	No
Riverside Avenue						
6. Central Ave	TS	36.6/D	<b>67.8/E</b>	37.3/D	<b>74.1/E</b>	<b>Yes</b>
Merrill Avenue						
7. Brownstones West Dwy	2W	–	–	9.9/A	10.7/B	N/A
8. Brownstones East Dwy	2W	–	–	10.4/B	11.9/N	N/A
AM – morning peak hour; PM- afternoon/evening peak hour; 2W- two-way stop controlled; TS – Traffic Signal; Ave – Avenue; Dwy - driveway Intersections operating at an unacceptable level of service are shown in <b>bold-faced type</b> .						
Notes: Mall East Dwy is the Plaza east driveway and Mall West Dwy is the Plaza west driveway.						
Source: Psomas 2018b						

With the project, the increase in delay at this intersection is more than the City's threshold of 2 seconds (for LOS E); thus, the potential impact is considered significant. The recommended mitigation for this impact is to install an interconnect or fiber optic communication cable on Riverside Avenue between Merrill Avenue/Sunnyside Avenue and Central Avenue to adjust and coordinate the two signal systems (refer to MM TRA-1). With the implementation of MM TRA-1, the delay at this intersection would improve to be less than the delay without the project (to 64.9 seconds/LOS E); and impacts to performance of the circulation system under the Cumulative With Project condition would be less than significant.

The proposed site driveways would operate at acceptable LOS (LOS A/B during the AM and PM peak hours). Roadway segments under the Cumulative (2019) With and Without Project scenarios would operate at LOS C or better.

#### **Buildout Conditions (With and Without the Project)**

Build-Out (Year 2025) Traffic Conditions were based on forecasted traffic volumes from the City of Riverside's 2025 General Plan, which show a 24.3 percent increase in existing traffic volumes on Central Avenue west of Riverside Avenue. Using the corresponding 2.9 percent per year increase over Cumulative conditions, Year 2025 peak-hour turning movement volumes and roadway segment daily traffic volumes were projected.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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As shown in Table 28, the LOS for the study intersections under this scenario would be LOS D or better without the project, except for the intersection of Riverside Avenue and Central Avenue, which is expected to operate at LOS F during the PM peak hour. With the project, the increase in delay at this intersection (0.8 second) is less than the City's threshold of 1 second (for LOS F); thus, the potential impact is considered less than significant. With implementation of MM TRA-1, the delay would decrease from 146.8 seconds to 138.0 seconds and the LOS would remain at F.

**TABLE 28**  
**BUILD OUT CONDITION (2025) INTERSECTION DELAY AND LEVEL OF SERVICE**  
**WITH AND WITHOUT PROJECT**

Intersection	Traffic Control	2025 Build Out Conditions Without Project Delay (sec)/LOS		2025 Build Out Conditions With Project Delay (sec)/LOS		Significant Impact
		AM	PM	AM	PM	
Merrill Avenue						
1. Magnolia Ave	2W	14.7/B	31.2/D	15.0/C	32.9/D	No
2. De Anza Ave	TS	8.7/A	12.3/B	8.8/A	12.5/B	No
3. Mall West Dwy	2W	10.3/B	10.9/B	11.9/B	11.1/B	No
4. Mall East Dwy	2W	11.4/B	20.1/C	11.9/B	24.4/C	No
5. Riverside Ave	TS	34.9/C	32.2/C	35.7/D	34.5/C	No
Riverside Avenue						
6. Central Ave	TS	52.8/D	146.0/F	53.5/D	146.8/F	No
Merrill Avenue						
7. Brownstones West Dwy	2W	–	–	10.3/B	11.4/B	N/A
8. Brownstones East Dwy	2W	–	–	10.9/B	12.9/B	N/A
AM – morning peak hour; PM- afternoon/evening peak hour; 2W- two-way stop controlled; TS – Traffic Signal; Ave – Avenue; Dwy - driveway Intersections operating at an unacceptable level of service are shown in <b>bold-faced type</b> .						
Notes: Mall East Dwy is the Plaza east driveway and Mall West Dwy is the Plaza west driveway.						
Source: Psomas 2018b						

The proposed site driveways would operate at acceptable LOS (LOS B during the AM and PM peak hours). Roadway segments under the Buildout (2025) With and Without Project scenarios would operate at LOS C or better.

### Holiday Peak Traffic

Due to the site's location near the Riverside Plaza, analysis of traffic demands along Merrill Avenue during the holiday peak times is also provided in Section 3.5 of the Traffic Impact Study for the Existing, Opening Year, and Cumulative Year traffic analysis scenarios. The holiday peak traffic analysis is for informational purposes only, and is not used as the basis for determining traffic impacts and required mitigation pursuant to CEQA. In summary, the analysis concluded that with and without the project, the intersections along Merrill Avenue would operate at an acceptable LOS D or better; and roadway segments along Merrill Avenue between Magnolia Avenue and Riverside Avenue would operate at LOS C or better with and without the project.

In summary, the proposed project would result in a significant impact at the intersection of Riverside Avenue/Central Avenue under the Existing, Opening Year (2019), and Cumulative (2019) traffic analysis scenarios. With implementation of MM TRA-1, which requires signal timing adjustment and coordination, these intersection impacts would be reduced to a less than significant level. Additionally, the City participates in the Western Riverside County Transportation Uniform Mitigation Fee

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>(TUMF) program that collects funds from new development for regional transportation system improvements needed to serve future growth. Prior to the issuance of the building permit, the Developer would comply with Chapter 16.68 of the RMC by paying the applicable TUMF to the City. These fees are used for the improvement of major roadways and freeways in the Western Riverside region. In accordance with Chapter 16.64 of the RMC, the Developer would also pay the applicable traffic signal and railroad signal mitigation fees and transportation impact fees. These fees are used for the installation of traffic signals and railroad signals and for the construction of improvements to increase or improve the capacities of City streets. With payment of applicable fees and implementation of MM TRA-1, the increase in traffic delays due to the project in relation to the existing traffic load and capacity of the street system would be <b>less than significant after mitigation</b> directly, indirectly, or cumulatively.</p> <p><b>Mitigation Measures</b></p> <p><b>MM TRA-1</b> Prior to issuance of the certificate of occupancy of the project, signal timing adjustment and coordination shall be made to the traffic signal at the Riverside Avenue/Central Avenue intersection. These would include installation of an interconnect or fiber optic communication cable on Riverside Avenue between Merrill Avenue/Sunnyside Avenue and Central Avenue to coordinate the two signal systems. Once the two intersections are coordinated, signal timing can be synchronized and changes be implemented at the intersections whereby coordination on southbound traffic along Riverside Avenue will improve overall operations at the Riverside Avenue/Central Avenue intersection.</p>				
b. Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>16b. Response:</b> <i>(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways; General Plan 2025 FPEIR Figure 5.15-4 – Volume to Capacity (V/C) Ratio and Level of Service (LOS) (Typical 2025) and Appendix H – Circulation Element Traffic Study and Traffic Study Appendix; Riverside County Congestion Management Program; and Traffic Impact Study prepared by Psomas in September 2018 [included in Appendix I])</i></p> <p><b>Less Than Significant Impact.</b> The 2011 Riverside County Congestion Management Program (CMP) is intended to “more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality” (RCTC 2011). The CMP has adopted a minimum LOS threshold of LOS E, and if a CMP facility falls to LOS F, a deficiency plan must be prepared to address improvement of the LOS of the facility. The Riverside County CMP includes SR-91 and Magnolia Avenue as Highways and Principal Arterials on the CMP System near the site. Project impacts to the intersection of Merrill Avenue and Magnolia Avenue are analyzed in the Traffic Impact Study included in Appendix I, consistent with the guidelines in the CMP. However, SR-91 in the study area is listed in the CMP report (Table 4-1) as an exempt facility, and no analysis is required.</p> <p>As discussed under Threshold 16a above and shown in Exhibits 29a and 29b, the project would add six to nine vehicle trips to the westbound right-turn traffic and four to nine vehicle trips to the northbound right-turn traffic at the intersection of Merrill Avenue and Magnolia Avenue during the peak hours. Impacts on this intersection would not be significant, since the LOS at this intersection under the Existing (2017), Opening Year (2019), 2019 Cumulative, and 2025 Buildout scenarios would be at LOS D or better with and without the project.</p> <p>The Final Programmatic EIR for the Riverside 2025 General Plan projects approximately 29,000 vehicles per day on Magnolia Avenue in the project vicinity at buildout, which equates to LOS D on a 100-foot Arterial roadway. The proposed project is expected to add approximately 155 daily trips to Magnolia Avenue, which would still allow the roadway to operate at LOS D. Further, it should be noted that in the 2025 General Plan, Magnolia Avenue is planned as a 120-foot Special Boulevard/Parkway, which would increase the capacity of the roadway over that of a 100-foot Collector. Because Magnolia</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Avenue is expected to operate at LOS D in the buildout year with and without the project, it will meet the minimum required operations in the CMP.</p> <p>The roadway capacity of Magnolia Avenue, a Principal Arterial within Riverside County's Congestion Management Program (CMP), is adequate to accommodate the projected traffic volumes from the proposed project. As determined by the Traffic Impact Study prepared for the proposed project, the intersection will operate better than LOS E, which is consistent with the CMP minimum LOS. In addition, the project is consistent with the Transportation Demand Management/Air Quality components of the CMP by providing opportunities for biking and walking to nearby commercial uses and schools. Therefore, the project's increase in traffic volumes in relation to the existing traffic load and capacity of the CMP system is <b>less than significant</b> directly, indirectly, and cumulatively.</p>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>16c. Response:</b> (<i>Source: General Plan 2025 Public Safety Element Figure PS-6 – Airport Safety Zones and Influence Areas; RCALUCP; and Draft Vision 2030 - March JPA General Plan</i>)</p> <p><b>No Impact.</b> The nearest airports to the project site are the Riverside Municipal Airport and Flabob Airport. The RCALUCP shows the project site is outside the runway protection zones and areas within the building restriction line (Zone A), the inner approach and departure zones (Zone B1), areas adjacent to the runway (Zone B2), extended approach and departure zones (Zone C), and primary traffic zone patterns and runway buffer areas (Zone D) of these airports. The site is within Other Airport Environs (Zone E) of the Riverside Municipal Airport but outside Zone E of Flabob Airport. As discussed under Threshold 8e, the project does not propose any structure over 100 feet tall and would not accommodate a large number of people. Thus, the proposed project would not be exposed to aircraft hazards and would not adversely affect aircraft or airport operations. The proposed project would also not directly require air transportation, increase air traffic levels, or change the location of air traffic patterns. As such, this project will have <b>no impact</b> directly, indirectly, or cumulatively on air traffic patterns.</p>				
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>16d. Response:</b> (<i>Source: General Plan 2015 Circulation and Mobility Element; Conceptual Site Plan; and Traffic Impact Study prepared by Psomas in September 2018 [included in Appendix I]</i>)</p> <p><b>Less Than Significant Impact.</b> Merrill Avenue is designated as a 66-foot Collector with two lanes in the City's Master Plan of Roadways (Figure CCM-4 of the Circulation and Community Mobility Element of the General Plan). Thus, the proposed improvements to Merrill Avenue to reduce the number of lanes from three lanes (one eastbound and two westbound) to two lanes (one eastbound and one westbound) from the Plaza west driveway to the Plaza east driveway<sup>5</sup> would be consistent with General Plan Policy CCM-2.1 that calls for completion of the Master Plan of Roadways shown in Figure CCM-4 of the General Plan. As discussed in the Traffic Impact Study, the three-year collision rate for Merrill Avenue (2011-2013) is 0.87, which is under the Statewide average of 1.20 for two and three-lane urban streets, based on 2013 available data obtained from the California Department of Transportation (the latest year for which full collision data is available).</p> <p>As further described in the Project Description and shown in Exhibits 6 and 7, traffic-calming features are proposed along Merrill Avenue, which would consist of (1) restriping the roadway segment of Merrill Avenue from De Anza Avenue to Riverside Avenue from three travel lanes to two travel lanes (which shifts the westbound lane drop to the east, closer to Riverside Avenue); (2) constructing a landscaped raised median along Merrill Avenue between the Mall West Driveway and the project's western entry driveway; (3) providing 18 on-street parking stalls along the curb on the north side of Merrill Avenue adjacent to the project site; (4) striping the two travel lanes as Class 3 bikeways with painted sharrow legends indicating a shared bicycle/vehicle facility; and (5) installing enhanced crosswalks at the Merrill Avenue and Mall West</p>				

<sup>5</sup> Also referred to as Mall East Driveway in this document and in the Traffic Impact Study



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>driveway intersection. These roadway improvements promote walkability and bicycle use, maintain existing access configurations, and improve overall safety within the corridor.</p> <p>The project is also a mixed-use development that would be located on an infill site adjacent to existing commercial uses. This, along with the traffic-calming measures along Merrill Avenue described above, would encourage residents and/or employees to walk or bike to the adjacent commercial areas (for work or shopping) and school and would reduce the need for vehicle use and/or shorten vehicle trips.</p> <p>The project site serves as an overflow parking lot; currently, ten driveways access Merrill Avenue from the project site, which provided ingress/egress to the former commercial uses. As shown on Exhibit 3, the proposed project would decrease the number of driveways to two: one would be at the eastern end of the site, and the other would be at the western end. An internal road and T culs-de-sac would also run through the site to provide access to on-site garages and parking spaces.</p> <p>Queuing, safety, and access evaluations have been conducted for the proposed project, taking into consideration the modifications to Merrill Avenue and proposed project site access. As discussed in the Traffic Impact Study in Appendix I of this Initial Study, the evaluation of the projected 95th percentile queues<sup>6</sup> along Merrill Avenue showed that many of the queues, particularly at the mall and project driveways, would be minimal (less than one vehicle). Queues on Merrill Avenue at De Anza Avenue are expected to be contained within the available turn lane storage lengths (existing and proposed). In addition, the westbound queue on Merrill Avenue at Magnolia Avenue is not expected to interfere with the intersection at De Anza Avenue. Queues on the project site are also expected to be minimal, and the longest projected queue for the shopping center would be at the Mall East Driveway during the holiday peak conditions, at just over six vehicles. This queue can be contained on the drive aisle without interfering with the main shopping center access intersection to the south.</p> <p>The on-site gate across the western driveway would be located past seven parking spaces and a designated turnaround. Any queuing before the gate would be contained within the driveway (which would be approximately 110 feet long between the gate and the curb on Merrill Avenue). This would allow at least five vehicles to queue before obstructing traffic flow on Merrill Avenue. The on-site gate across the eastern driveway would be located approximately 45 feet from the curb on Merrill Avenue and would allow about two vehicles to queue before obstructing traffic flow on Merrill Avenue. With minimal queuing anticipated at these driveways (for incoming vehicles), no obstructions to traffic flow on Merrill Avenue are expected.</p> <p>Discussion of collision rates is provided in the Traffic Impact Study (Appendix I of this Initial Study), which states that the three-year collision rate along Merrill Avenue is under the statewide average and the proposed roadway improvements would further reduce this collision rate.</p> <p>Access to existing commercial land uses on Merrill Avenue would not change over existing conditions except at the VIP nightclub/restaurant. Due to the proposed median island (which is proposed to reduce the risk of a conflict occurring with traffic entering the west driveway at the project site and people leaving the VIP nightclub), vehicles at the driveway at this property would no longer be allowed to turn left across Merrill Avenue. Instead, vehicles would have access through the alley to the north and the Staples parking lot to the signalized intersection at De Anza Avenue, where vehicles would turn left onto Merrill Avenue. All other existing access from adjacent developments on Merrill Avenue would be maintained, as provided in Table 29.</p>				

<sup>6</sup> The 95th percentile queues are those which are exceeded only 5 percent of the time, and are the standard for evaluating required turn lane storage lengths.

<b>ISSUES (AND SUPPORTING INFORMATION SOURCES):</b>	<b>Potentially Significant Impact</b>	<b>Less Than Significant With Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
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**TABLE 29  
EXISTING AND FUTURE ACCESS CONFIGURATIONS**

North/ South of Merrill Avenue	Property/ Establishment	Existing Access Configuration	Future Access Configuration - with proposed improvements on Merrill Avenue	Change
<b>NORTH SIDE</b>	Staples	Full Access - Signalized	Full Access - Signalized	<i>None</i>
	VIP Lounge Club	Full Access	Right-In, Right-Out Only	<i>No left-turn</i>
	America's Tire	Full Access	Full Access	<i>None</i>
	Market Broiler	Full Access	Full Access	<i>None</i>
	Marie Callender's	Full Access	Full Access	<i>None</i>
<b>SOUTH SIDE</b>	Riverside Plaza west driveway - Regal Cinemas	Full Access	Full Access	<i>None</i>
	Riverside Plaza Mall East driveway - CVS Pharmacy	Full Access	Full Access	<i>None</i>
Notes: Mall East Driveway is the Plaza east driveway and Mall West Driveway is the Plaza west driveway.				
Source: Psomas 2018b				

Section 13.06.010 of the RMC prohibits hedges, shrubs, trees, landscaping, earth mounds, or boulders more than 30 inches in height or the limbs of trees less than 84 inches in height to be located between the street and the setback lines of a lot if these landscaping features would obscure or impair the view of intersecting or entering traffic from a street of passing motorists and pedestrians or impair the view of street signs, traffic signs, or other control devices and signs. All construction work and improvements on Merrill Avenue shall be made in accordance with the City's roadway standards and regulations, including Title 13 of the RMC, which requires an encroachment permit from the City and sets regulations for the repair of sidewalks, curbs, and gutters; excavations and utility locations; and parkway landscaping, among others.

The proposed on-street parking on Merrill Avenue adheres to the MUTCD guidelines. As shown in Figure 3B-21 in Section 3B.19 of the MUTCD, on-street parking is permitted between two unsignalized intersections or driveways as long as 20 feet of "No Parking" zones are being allocated upstream and downstream of the junction. This guideline is consistent with the American Association of State Highway and Transportation Officials' *A Policy on Geometric Design of Highways and Streets* and the ITE's *Context Sensitive Approach to Designing Walkable Urban Thoroughfares*, which allows on-street parking up to 20 feet from an unsignalized intersection and 30 feet to a signalized one in an urban setting. Clearances beyond the 20 feet allowed by the MUTCD are being implemented as part of the project, with raised planter islands no more than 30 inches. The on-street parking spaces on the north and south sides of Merrill Avenue have been located where they would not block the sight distances of vehicles turning onto Merrill Avenue (refer to Exhibit 6 for the proposed street layout). Specifically, 70 to 100 feet of "No Parking" zones would be signed or improved with planter islands upstream and downstream of the driveway junctions and the on-street parking limited to 18 spaces on the north side of Merrill Avenue.

As requested by the City, a traffic signal warrant was also conducted for the Mall West driveway/Merrill Avenue intersection. The Merrill Avenue/Mall West driveway is located approximately halfway between the existing signalized intersections on Merrill Avenue at Riverside Avenue and De Anza Avenue and is therefore a better location for a potential traffic signal. The traffic signal warrant analysis for the Cumulative with Project scenario during the holiday peak period (as the most conservative scenario) indicates that a traffic signal is not warranted based on peak-hour traffic volumes and collision data. A multi-stop warrant at the intersection of Merrill Avenue and the Mall West driveway was also requested by the City. Based on the multi-stop warrant criteria in Section 2B.07 of the California MUTCD, multi-way stop control at the Merrill Avenue/Mall Driveway West intersection is not warranted.

As a condition of approval, private roads, driveways, and Merrill Avenue improvements would comply with the City's standards for emergency vehicle access, turning radii, corner visibility, parking, lane width, and other roadway design requirements, subject to approval by the City's Fire Department and Department of Public Works. Specifically, improvements on Merrill Avenue and the proposed internal roads would be constructed in accordance with the City's

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
roadway design standards and Section 18.210.030 of the RMC. With compliance with City standards, and based on the analysis presented above, the proposed project would have a <b>less than significant impact</b> related to increasing hazards through design or incompatible uses either directly, indirectly or cumulatively.				
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>16e. Response:</b> (<i>Source: General Plan 2025 Public Safety Element Figure PS 8.1 – Evacuation Routes; Riverside Municipal Code; City’s Fire Code; and Traffic Impact Study prepared by Psomas in September 2018 [included in Appendix I]</i>)</p> <p><b>Less Than Significant Impact.</b> The project includes a reduction in the number of driveways into the site and construction of an internal road and culs-de-sac to provide access to individual garages. The driveways, internal road, and culs-de-sac have been designed in compliance with Title 18, Section 18.210.030 and the City’s Fire Code (2016 California Fire Code).</p> <p>During the construction of roadway improvements on Merrill Avenue, the project has the potential to obstruct lanes of travel on Merrill Avenue that may have an impact on emergency access. However, the project would be required to provide at least one lane of travel remaining open and available at all times, as feasible, in accordance with the Greenbook, as required by the City. As required by City, compliance with the WATCH or MUTCD Manual or preparation of a Traffic Control Plan that would have to be implemented during construction would facilitate the movement of construction traffic and minimize potential disruptions along Merrill Avenue and surrounding streets. Impacts to emergency access during the construction phase would be less than significant.</p> <p>An internal road and culs-de-sac are proposed on site that would provide access to the buildings and garages and connect to two driveways proposed at Merrill Avenue on the eastern and western ends of the site. The internal road would be 22.5 to 24 feet wide, and each cul-de-sac would be 52.5 feet long and 24 feet wide, with a 161-foot by 26.5-foot turn-around. These roads have been designed to provide adequate access to emergency fire vehicles in accordance with the Riverside Fire Department requirements.</p> <p>Based on review of Figure PS-8.1 – Evacuation Routes in the Public Safety Element of the General Plan, Merrill Avenue is not a designated evacuation route. Thus, the proposed project would not impact emergency evacuation routes in the City. The proposed reduction in the number of travel lanes on Merrill Avenue (from three lanes to two lanes from the Plaza west driveway to the Plaza east driveway), would not adversely affect emergency access to the site or the surrounding areas since access would remain available to adjacent developments and Merrill Avenue is currently a two-lane roadway west of the site (from De Anza Avenue to Magnolia Avenue). Also, emergency access would remain available through the alley along the north side of the site and the parking areas and drive aisles at Riverside Plaza to the south. In addition, as a condition of approval, the proposed internal road, driveways, and Merrill Avenue improvements would comply with the City’s standards for emergency vehicle access, turning radii, corner visibility, parking, lane width, and other roadway design requirements, as reviewed and subject to approval by the City’s Fire Department and Department of Public Works. Thus, the project would have a <b>less than significant impact</b> on emergency access directly, indirectly, or cumulatively.</p> <p>As discussed under Threshold 16e above, compliance with the Greenbook and WATCH or MUTCD Manual or implementation of a construction Traffic Control Plan would prevent obstructions to emergency access during construction. Compliance with the City’s Fire Code would also provide adequate access for emergency vehicles during long-term operation/occupancy of the project. As such, compliance with existing City regulations would reduce impacts related to emergency access and a <b>less than significant impact</b> will occur directly, indirectly, or cumulatively for this project.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>16f. Response:</b> <i>(Source: General Plan 2025 Land Use and Urban Design, Circulation and Community Mobility and Education Elements; General Plan 2025 FPEIR; Bicycle Master Plan Update: Addendum; Riverside Transit Authority (RTA) System Map; RUSD School Locator; and Bicycle Program – Bicycle Safety Classes)</i></p> <p><b>No Impact.</b> While UPPR tracks run along the northern boundary of the site (which are used by Metrolink trains and UPRR freight trains), no train stop is located near the site; and adjacent railroad crossings at Riverside Avenue and Magnolia Avenue are grade-separated from the roads. No trails, trail hubs, or trail access points are near the site; but Class 2 bike lanes run along both sides of Magnolia Avenue. Figure LU-6 – Tying the Connections of the General Plan shows proposed Class 2 bike lanes on Magnolia and Central Avenues, and a Class 3 bike route is proposed on Riverside Avenue in the City’s Bicycle Master Plan Update: Addendum. RTA buses do not currently travel on Merrill Avenue. The nearest bus routes are RTA Route 10 and Route 20 that run along Central Avenue, with stops one block south of the site and along Magnolia Avenue, with stops two to three blocks northeast and northwest of the site.</p> <p>The project, as designed, does not create conflicts with adopted policies, plans, or programs supporting alternative transportation since no train stops, off-site bike lanes, bike routes, bus routes, or bus turnouts, trails, trail hubs, or trail access points are located near the site; and alternative transportation systems would not be affected by the project. Merrill Avenue would be signed as a shared bicycle facility and would facilitate bicycle access between Magnolia Avenue and Riverside Avenue, which would encourage bicycle travel. As a project amenity, a bike storage and maintenance room would be located beside the fitness center or club room and may be used as an active bike shop for residents of the project.</p> <p>The proposed project would not conflict with the existing bus routes on Central Avenue, and the bus stops on Central Avenue and Magnolia Avenue are within walking distance of the project site. Future residents and employees may walk to and from the site using the existing sidewalk on Merrill Avenue and the proposed enhanced crosswalk from the site to Riverside Plaza and across Riverside Plaza to the bus stops on Central Avenue or the existing sidewalks on Merrill and Magnolia Avenues to the bus stops on Magnolia Avenue.</p> <p>Students who currently attend Pachappa Elementary School are not likely to be walking along Merrill Avenue to and from school, since no residential uses are present to the west of the site and more direct routes are available from residential areas to the north and south. Students from the project who would attend Pachappa Elementary School are likely to walk or bike on Merrill Avenue east toward the school. Existing sidewalks on Merrill Avenue would be retained by the project and would promote walking and biking to school by future students who would be living at the project site. The City of Riverside Police Department offers bicycle safety classes, traffic safety classes, and school safety presentations for school-age children to promote walking and biking to school, which may encourage students from the project to walk or bike to and from school.</p> <p>Pedestrians of adjacent commercial uses may be using the sidewalks along the site but in a limited manner due to distance to nearby commercial uses. Residents, employees, and patrons of the project would use the sidewalks along and near the site. Enhanced crosswalks would be provided on Merrill Avenue at the driveway into the Riverside Plaza to connect the project with adjacent commercial uses. The traffic-calming measures that would be implemented along Merrill Avenue as part of the proposed project (e.g., reduction in travel lanes on Merrill Avenue, the provision of on-street parking spaces, installation of a raised landscaped median, and planter areas) are expected to reduce travel speeds along the site and provide a buffer between pedestrians on the sidewalk and vehicles on the road. Thus, the project would encourage pedestrians and promote walking or biking to the nearby school and shopping center. As such, the project will have <b>no impact</b> directly, indirectly, or cumulatively on adopted policies, plans, or programs supporting alternative transportation.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>17. TRIBAL CULTURAL RESOURCES</b>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>17a. Response:</b> <i>(Source: General Plan 2025 Land Use and Urban Design Element Figure LU-5 – Historic Fabric; General Plan 2025 FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas and Appendix D – Cultural Resources Study for the City of Riverside; and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</i></p> <p><b>No Impact.</b> The project site is not located in a City-designated Historical District and Neighborhood Conservation Area (per FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas); is not part of the City’s Historic Fabric (as shown in General Plan 2025 Land Use and Urban Design Element Figure LU-5 – Historic Fabric); and is not recognized or listed as a Historical Cultural Resource (in FPEIR Appendix D – Cultural Resources Study for the City of Riverside).</p> <p>Currently, no structures are on the site; previous commercial buildings have been demolished by the City. As discussed under Threshold 5a above, a cultural resources records search and literature review was completed at the EIC by UCR. No historic resources, including tribal cultural resources, are located at the project site or in the vicinity. Therefore, no impacts on historical resources would occur with implementation of the proposed development at the project site since no historical structures, sites, or districts are on or near the site that may be affected by the project. Consultation with local Native American tribes did not result in the identification of any tribal historical resources that may be adversely affected by the project. As such, the project would have <b>no impact</b> directly, indirectly, or cumulatively.</p>				
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>17b. Response:</b> <i>(Sources: Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</i></p> <p><b>Less than Significant With Mitigation Incorporated.</b> The project area is located in the region known to have been occupied by the Cahuilla Indians. Cahuilla territory was bounded on the north by the San Bernardino Mountains; on the east by the Orocopia Mountains; on the west by the Santa Ana River, the San Jacinto Plain, and the eastern slope of the Palomar Mountains; and on the south by Borrego Springs and the Chocolate Mountains. The area was also within the territory occupied by the Luiseño, named by the Spanish after the Mission San Luis Rey de Francia in the present-day City of Oceanside, where some of their linguistic group frequented. The Luiseño cultural area incorporated southern Riverside County, northern San Diego County, and eastern Orange County; and the area was linguistically comprised of a language of the Shoshonean language family. The site was previously developed with commercial structures that have since been demolished and is currently highly disturbed; no known tribal cultural resources exist on the site.</p> <p>A Sacred Lands File (SLF) search was requested from the NAHC on July 24, 2017. The NAHC indicated that no Native American traditional sites/places are within the project site or the half-mile buffer surrounding the site but provided a list of</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Native American contacts. Inquiry letters were subsequently sent to the 47 listed tribal groups and representatives. Responses were received from representatives of the San Manuel Band of Mission Indians, Viejas Band of Kumeyaay Indians, Rincon Band of Luiseño Indians, Agua Caliente Band of Cahuilla Indians, Soboba Band of Luiseño Indians, and Pala Tribal Band of Mission Indians. The San Manuel Band of Mission Indians, Viejas Band of Kumeyaay Indians, Agua Caliente Band of Cahuilla Indians, and Pala Tribal Band of Mission Indians confirmed that the project site lies outside their reservation area boundaries or traditional use areas and/or recommended that tribes closest to the project site be contacted for consultation. The Rincon Band of Luiseño Indians and Soboba Band of Luiseño Indians requested additional information and continued consultation.</p> <p>AB 52 (Chapter 532, Statutes of 2014), which became effective on July 1, 2015, requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project, if they have requested such notice in writing. Once Native American tribes receive a project notification, they have 30 days to respond as to whether they wish to initiate consultation regarding the project, including subjects such as mitigation for any potential project impacts. If a tribe requests consultation and the lead agency and the tribe ultimately agree on mitigation to address any potentially significant impacts to tribal cultural resources, the mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. The City of Riverside transmitted project notification/consultation letters to the following tribes that have requested such notices on June 22, 2017:</p> <ul style="list-style-type: none"> <li>• Gabrieleno Band of Mission Indians – Kizh Nation</li> <li>• Pechanga Cultural Resources Department</li> <li>• Morongo Band of Mission Indians</li> <li>• San Gabriel Band of Mission Indians</li> <li>• Soboba Band of Luiseño Indians</li> <li>• Rincon Band of Luiseño Indians</li> <li>• Cahuilla Band of Indians</li> <li>• San Manuel Band of Mission Indians</li> <li>• Agua Caliente Band of Cahuilla Indians</li> </ul> <p>SB 18 (California Government Code, Section 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC's SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Because the proposed project involves a General Plan Amendment and Specific Plan Amendment, SB 18 consultation requirements are applicable. The City of Riverside sent project notification/consultation letters to the following tribes on the NAHC Tribal Consultation List on June 22, 2017:</p> <ul style="list-style-type: none"> <li>• Agua Caliente Band of Cahuilla Indians</li> <li>• Augustine Band of Cahuilla Mission Indians</li> <li>• Cabazon Band of Mission Indians</li> <li>• Cahuilla Band of Indians</li> <li>• Campo Band of Mission Indians</li> <li>• Ewiliaapaayp Tribal Office</li> <li>• Jamul Indian Village</li> <li>• La Jolla Band of Luiseño Indians</li> <li>• La Posta Band of Mission Indians</li> <li>• Los Coyotes Band of Mission Indians</li> <li>• Manzanita Band of Kumeyaay Nation</li> <li>• Mesa Grande Band of Mission Indians</li> <li>• Morongo Band of Mission Indians</li> <li>• Pala Band of Mission Indians</li> </ul>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> <li>• Pauma Band of Luiseño Indians – Pauma and Yuima Reservation</li> <li>• Pechanga Band of Mission Indians</li> <li>• Ramona Band of Cahuilla Mission Indians</li> <li>• Rincon Band of Mission Indians</li> <li>• San Fernando Band of Mission Indians</li> <li>• San Manuel Band of Mission Indians</li> <li>• San Pasqual Band of Mission Indians</li> <li>• Santa Rosa Band of Mission Indians</li> <li>• Serrano Nation of Mission Indians</li> <li>• Soboba Band of Luiseño Indians</li> <li>• Sycuan Band of Kumeyaay Nation</li> <li>• Torres-Martinez Desert Cahuilla Indians</li> <li>• Viejas Band of Kumeyaay Indians</li> </ul> <p>Of the tribes contacted pursuant to AB 52 and SB 18, only the Rincon Band of Luiseño Indians and the Soboba Band of Luiseño Indians requested further consultation regarding the project. Formal and confidential consultation between the City and tribal representatives has been completed. The following mitigation measures have been identified to prevent any significant adverse impacts on tribal cultural resources.</p> <p><b>MM CUL-1</b> 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.</p> <p><b>MM CUL-2 Cultural Sensitivity Training:</b> The project Archaeologist and Native American Tribes consulting on the project shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. 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 and submitted to the Archeologist.</p> <p><b>MM CUL-3 Treatment and Disposition of Cultural Resources:</b> 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:</p> <ol style="list-style-type: none"> <li><b>1. Temporary Curation and Storage:</b> During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and</li> <li><b>2. Treatment and Final Disposition:</b> The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: <ol style="list-style-type: none"> <li><b>a.</b> Accommodate the process for onsite 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 cataloging and basic recordation have been completed;</li> <li><b>b.</b> A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other</li> </ol> </li> </ol>				

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<p>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;</p> <p>c. If more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and.</p> <p>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 interested tribes.</p> <p>Impacts on tribal cultural resources would be <b>less than significant after mitigation</b> directly, indirectly, and cumulatively.</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>18. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>18a. Response:</b> (<i>Source: General Plan 2025 Figure PF-2 – Sewer Facilities Map; General Plan 2025 FPEIR Figure 5.16-5 – Sewer Service Areas; RMC Title 14 – Public Utilities; Wastewater Integrated Master Plan and Certified EIR; and Project Conceptual Utility Plan</i>)</p> <p><b>Less Than Significant Impact.</b> As shown on FPEIR Figure 5.16-5, the project site is in the Riverside Public Works Service Area. The proposed project would generate wastewater from kitchens and bathrooms of the individual dwelling units, retail uses, and support facilities (e.g., restrooms at the leasing office and cabana and the swimming pool). The wastewater would be conveyed to a proposed sewer line in Merrill Avenue that would connect to the existing sewer line at the intersection of Merrill Avenue with De Anza Avenue and that conveys wastewater to the Riverside Water Quality Control Plant (RWQCP) for treatment (refer to General Plan 2025 Figure PF-2). No wastewater would be discharged into the storm drain system, unless specifically permitted under Title 14 of the RMC (e.g., swimming pool and spa discharges). The wastewater treatment requirements issued by the Santa Ana Regional Water Quality Control Board (RWQCB) for the RWQCP were developed to ensure that adequate levels of treatment would be provided for the wastewater flows emanating from various land uses in the City and its service area. The residential wastewater from the project would not require treatment beyond the preliminary, primary, secondary, and tertiary treatments currently provided at the RWQCP. Since future retail uses are not known at this time, the type of wastewater generation from retail uses is also unknown. However, the City has adopted regulations that require the pretreatment of wastewater from specific land uses and activities prior to discharge into the sewer system, in order to meet the conditions in the City's NPDES permit. Future commercial retail uses at the project would comply with Chapters 14.04, 14.08, 14.12, and 14.16 of the RMC, which sets standards for sewer connections; imposes sewer service charges to fund sewer services in the City; and regulates sewage disposal and discharges into the sewer system.</p> <p>Since the proposed project would comply with Title 14 of the RMC, pertinent provisions of the NPDES program, and the Riverside County MS4 Permit, as enforced by the City and the Santa Ana RWQCB, the proposed project would not exceed applicable wastewater treatment requirements of the RWQCB with respect to discharges to the sewer system or storm water system within the City and would have a <b>less than significant</b> impact directly, indirectly or cumulatively.</p>				
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>18b. Response:</b> (<i>Source: General Plan 2025 FPEIR Figure 5.16-4 – Water Facilities and Figure 5.16-6 – Sewer Infrastructure; Wastewater Integrated Master Plan; Title: AM 14 Electric Map; RPU 2015 Urban Water Management Plan; and Sewer System Management Plan</i>)</p> <p><b>Less than Significant Impact.</b> The Riverside Public Utilities (RPU) provides water services in the City. The City's water system consists of 55 groundwater wells, 15 reservoirs, and 6 treatment plants. An 8-inch water line along the north side of Merrill Avenue connects to a 6-inch line in Riverside Avenue and a 12-inch line in De Anza Avenue. There is also a 30-inch supply main in Riverside Avenue. The average water demand in the City is 63.6 million gallons per day.</p> <p>Water demand from the proposed project is estimated at 66,240 gallons per day (gpd) based on the City's 2015 average consumption of 180 gallons per capita per day (Riverside 2016b) for 360 residents and 8 employees plus 6,612 gallons for landscape irrigation based on 15,000 gallons per acre per day on a 19,200-square-foot landscaped area. Total water demand is estimated at 72,852 gallons per day or 0.22 acre-foot per day. Swimming pool water is expected to be an intermittent water use (due to water filtration and recirculation systems), with minor daily demand.</p> <p>For domestic water and fire service, the proposed project would be connected to the existing water line in Merrill Avenue. The General Plan Public Facilities and Infrastructure Element estimates the RPU's 2030 water supply at 116,421 acre-feet</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>per year and demand at 104,374 acre-feet per year. The RPU 2015 Urban Water Management Plan (UWMP) anticipated future growth and development in its service area to increase to a 2040 demand of 124,703 acre-feet, which would be met with increased groundwater extraction, recycled water use, and imported water supplies. See additional discussion of the UWMP under Threshold 17d below. The proposed project would also implement various water conservation measures, as required by the CalGreen Code (as adopted into Chapter 16.07 of the RMC) and Chapters 14.20, 14.22, and 19.570 of the RMC related to water service connections, water-efficient landscaping and irrigation, and the City's water conservation program. The project would not require the upgrade of existing water lines or the City's water system facilities. Water service to the project will include the construction of a new water line in Merrill Avenue along the site frontage to connect to the existing water line southwest and southeast of the site, as well as abandonment of the existing water line in the sidewalk at the southern boundary of the site (between the two proposed connections to the City's water line). The proposed water line would not result in any major change to the City's water system and the impacts of construction of this water line have been accounted in the analyses of the project's environmental impacts.</p> <p>Wastewater generation by the project is estimated to be the same as indoor water use at 66,240 gpd, with swimming pool water discharges to the sewer system expected to be intermittent. The project would not be connected to the existing 8-inch sewer line in the alley north of the site. Instead, a new sewer line would be constructed in Merrill Avenue along the site frontage and would connect to the existing 8-inch sewer line in Merrill Avenue at the intersection of De Anza Avenue. This sewer line conveys wastewater to the RWQCP, which is located at 5950 Acorn Street and has a 40-mgd capacity. The RWQCP treated approximately 33 mgd in 2008 and 28 mgd in 2017, indicating a slowdown in population growth and a reduction in wastewater generation through water conservation. Thus, there is existing available capacity at the RWQCP to treat the estimated 66,240 gpd of wastewater from the project, which would represent less than 0.3 percent of both the existing plant capacity and total wastewater volume. Further, the RWQCP is projected to treat 47.3 to 52.2 mgd by 2025 and is currently being upgraded to treat 46 mgd, which would be completed before the end of 2017. The Wastewater Integrated Master Plan also proposes the expansion of the plant to 52.2 mgd to meet future demand, based on a maximum growth rate of 1.5 percent annually, along with other system upgrades to provide adequate sewer services. With implementation of system improvements outlined in the Wastewater Integrated Master Plan, sewer treatment capacity would be available to serve the proposed project in the future. Although the proposed project would require the construction of a new sewer line in Merrill Avenue, it would not require the expansion of wastewater treatment facilities. The potential impacts associated with installation of a sewer line in Merrill Avenue have been addressed in this Initial Study and are primarily related to the temporary disruption of travel lanes along Merrill Avenue (refer to Thresholds 16a and 16e). Further, the Developer would pay applicable sewer service charges to help fund the operating costs and needed sewer system improvements and would comply with sewer discharge regulations in Title 14 of the RMC.</p> <p>The proposed project would have <b>less than significant impact</b> related to the construction of new water or wastewater treatment facilities or the expansion of existing facilities directly, indirectly or cumulatively.</p>				
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>18c. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.16-2 – Drainage Facilities and Hydrology and Hydraulics Study and Preliminary Water Quality Management Plan prepared by Psomas in May 2017 [included in Appendix F])</p> <p><b>No Impact.</b> The proposed project would result in an increase of impervious surface areas on the site. However, it would provide two underground infiltration chambers to retain storm water from a 10-year and a 100-year storm event that would decrease the existing runoff volumes and rates from the site, as outlined in the Hydrology and Hydraulics Study and Preliminary WQMP that have been prepared for the proposed project (see discussion under Threshold 9a) (Psomas 2017a). Existing runoff flows are estimated at 0.34 cfs (10-year storm) and 0.53 cfs (100-year storm) at the alley to the north and a total of 3.09 cfs (10-year storm) and 5.00 cfs (100-year storm) in Merrill Avenue. Future runoff flows are estimated at 0.0 cfs (10-year and 100-year storm) at the alley to the north and a total of 2.89 cfs (10-year storm) and 4.62 cfs (100-year storm) in Merrill Avenue.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Existing storm drainage lines serve the site and the surrounding area. An 8.4-foot by 10-foot reinforced concrete box structure is located in the center of Merrill Avenue and a 36-inch storm drain line is located in a 20-foot wide easement at the eastern property line, which would remain in place with the project (see Exhibit 11). This line extends west from a detention basin that serves the area along Riverside Avenue from Merrill Avenue to the UPRR tracks.</p> <p>As proposed, an overflow pipe from the underground infiltration chamber under the parking area at the southwestern corner of the site would be connected to the box structure in Merrill Avenue; and an overflow pipe from the underground infiltration chamber under the internal road at the northeastern section of the site would be connected to the storm drain line at the eastern property line, which also discharges into the box structure in Merrill Avenue.</p> <p>Since runoff from the project site would not increase with the project, the construction of new storm water drainage facilities or the expansion of existing facilities would not be necessary. Therefore, the project would have <b>no impact</b> related to the construction of new storm water drainage facilities or the expansion of existing facilities directly, indirectly, or cumulatively.</p>				
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>18d. Response:</b> (Source: General Plan 2025 FPEIR Figure 5.16-3 – Water Service Areas, Figure 5.16-4 – Water Facilities, Table 5.16-E – RPU Projected Domestic Water Supply (ac-ft/yr), Table 5.16-F – Projected Water Demand, and Table 5.16-G – General Plan Projected Water Demand for RPU including Water Reliability for 2025 and RPU UWMP)</p> <p><b>Less Than Significant Impact.</b> The City’s 2015 Urban Water Management Plan discusses the existing and projected water demand and available water supplies to meet demand in its service area, under a normal year, single dry year, and multiple dry years. The City’s water supply includes groundwater resources, recycled water, and imported water sources (i.e., rivers, streams, ponds, and springs). In 2015, the City used 74,926 acre-feet of groundwater and 200 acre-feet of recycled water to meet demand. Future supplies would include increased amounts of recycled water and imported water, with water conservation programs to decrease per capita demands. Total water demand is estimated at 72,852 gallons per day or 0.22 acre-foot per day, which would be a minor amount of existing water use in the City.</p> <p>The 2015 UWMP states that the City’s water supplies are adequate to meet future demand under a normal, single dry and multiple dry years. The projected increase in demand was based on SCAG’s 2012 RTP/SCS growth projections, which have since been revised/decreased in the 2016 RTP/SCS to account for the effects of the economic recession. Thus, the UWMP overestimates future water demand in the City, and the water supply would be available to serve the project. Since the UWMP must be updated every five years to include the most recent population trends, it would account for revisions in SCAG’s RTP/SCS growth projections through the years, including decreases in regional growth that are reflected in the 2016 RTP/SCS. Also, the City consults with the Riverside Public Utilities (RPU) regarding development projects considered a “water-demand project” based on criteria outlined in CEQA Guidelines Section 15155, City or County Consultation with Water Agencies, to ensure that sufficient water supplies are available. The proposed project with 108 units and small amount of retail space would not require preparation of a water supply assessment. RPU provided comments during the development review process that have been subsequently addressed through site plan revisions to facilitate water service to the proposed project.</p> <p>Although the water supply would be sufficient to serve the project, if water demand within the RPU service boundaries were to exceed supply, Western Municipal Water District (WMWD) can sell water to RPU. As shown on Table 5.16-I of the GP 2025 FPEIR, WMWD would have 123,784 acre-feet annually to sell to other agencies like RPU. Therefore, water supply may be available for development beyond that anticipated under the General Plan, including the proposed project.</p> <p>This proposed project would generate a demand for water but would have a <b>less than significant impact</b> on water supplies either directly, indirectly, or cumulatively.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>18e. Response:</b> (<i>Source: General Plan 2025 FPEIR Figure 5.16-5 - Sewer Service Areas and Figure 5.16-6 - Sewer Infrastructure and Wastewater Integrated Master Plan</i>)</p> <p><b>No Impact.</b> The project site is located within the sewer service area of the City where existing sewer infrastructure lines are present. The proposed project would not exceed wastewater treatment requirements of the Santa Ana RWQCB, as discussed under Threshold 18a above. Also, the RWQCP has available capacity to treat the current wastewater volume in the City and the projected wastewater volume from the proposed project, as discussed under Threshold 18b above. The Wastewater Integrated Master Plan proposes the expansion of the City's wastewater treatment plant to 52.2 mgd to meet future demand (estimated at an annual growth rate of 1.5 percent), along with other system upgrades to provide adequate sewer services in the City. Therefore, <b>no impact</b> related to wastewater treatment directly, indirectly, or cumulatively would occur with the project.</p>				
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p><b>18f. Response:</b> (<i>Source: General Plan 2025 Public Facilities and Infrastructure Element; General Plan 2025 FPEIR Table 5.16-A – Existing Landfills and Table 5.16-M – Estimated Future Solid Waste Generation from the Planning Area; CalRecycle Facility/Site Summary Details and Jurisdiction Diversion/Disposal Rate; and Agua Mansa Annual EA Notification Report</i>)</p> <p><b>Less than Significant Impact.</b> While the City's Public Works Department collects solid wastes from single-family residential units, multi-family developments have the option to contract with any of the authorized waste haulers in the City: Athens, Burrtec, and CR&amp;R. Waste collection services for the project would be provided by one of these authorized waste haulers. Should Athens or Burrtec serve the project, they would bring collected solid wastes to the Robert Nelson Transfer Station, located at 1830 Agua Mansa Road in Riverside (Athens 2017; Burrtec 2017a). This transfer station is owned by Riverside County and operated by Burrtec. It is permitted to accept 4,000 tons of wastes per day (CalRecycle 2017f). It currently processes approximately 1,800 tons of solid waste per day (Burrtec 2017b).</p> <p>From the transfer station, solid waste is brought to the Badlands Sanitary Landfill in Moreno Valley, which is permitted to accept 4,800 tons per day and has a remaining capacity of 15.7 million cubic yards as of January 2015. This landfill is expected to close in January 2022 (CalRecycle 2017a). Waste may also be brought to the El Sobrante Landfill in Corona or the Lamb Canyon Landfill in Beaumont. The El Sobrante Landfill is permitted to accept 16,054 tons per day and has a remaining capacity of 145.5 million cubic yards as of April 2009. It is expected to close in January 2045 (CalRecycle 2017b). The Lamb Canyon Landfill is permitted to accept 5,500 tons per day and has a remaining capacity of 38.9 million cubic yards as of January 2015. It is expected to close in April 2029 (CalRecycle 2017e).</p> <p>If CR&amp;R serves the project, collected solid wastes would be brought to the Perris Transfer Station and Material Recycling Facility (MRF) located at 1706 Goetz Road in the City of Perris (CR&amp;R 2017). This MRF is permitted to accept up to 3,287 tons of solid waste per (CalRecycle 2017g). From this MRF, waste is disposed at the Badlands Sanitary Landfill, El Sobrante Landfill, or Lamb Canyon Landfill.</p> <p>During operation, the proposed project would generate approximately 2,268 pounds of solid wastes per day from 360 residents, based on the City's 2015 per capita disposal rate of 6.3 pounds per day, and 115 pounds from 8 employees, based on 14.3 pounds per employee per day (CalRecycle 2017c). Therefore, a total of 2,383 pounds per day or 1.19 tons per day would be generated by the proposed project, which would be considered a limited amount of solid wastes when compared to the waste generation of all other existing developments in the City; the capacities of the transfer stations and landfills used by the City and authorized haulers; and the wastesheds of the Badlands Sanitary Landfill, Lamb Canyon Landfill, and the El Sobrante Landfill. The project would also implement waste reduction and recycling programs to reduce its demand for landfill space, as required under the CalGreen Code and City regulations. Specifically, trash and recycling bins and enclosures</p>				



ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>would be provided on site in accordance with the requirements of the Planning Division and Public Works Department, Solid Waste Division, and Chapter 19.554 of the RMC.</p> <p>Inert debris and construction and demolitions (C&amp;D) wastes may also be brought to the Agua Mansa Landfill in Rialto. This landfill is located 5.7 miles northeast of the site, covers 88 acres, and accepted an average of 1,758 tons per day or a total of 439,540 tons in 2015-2016 (CalRecycle 2017d, Agua Mansa 2017). As required by the CalGreen Code, the contractor would implement a Construction Waste Management Plan that would recycle and/or salvage at least 50 percent of the estimated volume or weight of all nonhazardous construction and demolition wastes. Landfill capacity demand during construction would be limited and temporary, and this impact is considered less than significant.</p> <p>Therefore, <b>less than significant impacts</b> to landfill capacity would occur directly, indirectly, or cumulatively with the project.</p>				
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>18g. Response:</b> (<i>Source: CalRecycle Jurisdiction Diversion/Disposal Rate; AB 341; and California Green Building Standards Code</i>)</p> <p><b>No Impact.</b> The California Integrated Waste Management Act under the Public Resource Code requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The City's targets are set at 8.6 pounds per resident per day and 19.5 pounds per employee per day. The diversion goal has been increased to 75 percent by 2020 by SB 341. Further, the Solid Waste Disposal Measurement Act of 2008 (SB 1016) was established to make the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or in some cases employment); and (2) its disposal, as reported by disposal facilities. The City is currently achieving a 60-percent diversion rate, above State AB 939 requirements. In 2015, the City implemented 38 programs to reduce solid waste generation and achieve the increased solid waste diversion required. These programs involve composting, facility recovery, household hazardous waste, policy incentives, public education, recycling, source reduction, special waste materials, and transformation (CalRecycle 2017h). The City had an average disposal rate of 6.3 pounds per resident per day and 14.3 pounds per employee per day in 2015 (last year reported), which exceeds the established disposal rate targets of 8.6 pounds per resident per day and 19.5 pounds per employee per day (CalRecycle 2017c).</p> <p>The CalGreen Code requires all new developments to divert 65 percent of non-hazardous C&amp;D debris for all projects. Chapters 6.04 and 6.05 of the RMC require the collection and recycling of solid wastes in the City and provide regulations for solid waste collection, handling, recycling, and disposal. AB 341 also requires that multi-family developments with more than five units to implement an on-site recycling program. The proposed project would provide two trash storage and recycling areas along the northern property line (between the detached garages). The proposed project would comply with the CalGreen Code requirements for C&amp;D diversion and would comply with AB 341 mandates for recycling service by providing recycling bins at two on-site trash storage areas and contracting for recycling bin collection by the waste hauler. In addition, the project would participate in the City's recycling programs and comply with hazardous waste disposal regulations, as discussed under Threshold 8b above. As such, the project would not conflict with any federal, State, or local regulations related to solid waste. Therefore, <b>no impact</b> related to compliance with solid waste statutes would occur directly, indirectly, or cumulatively with the project.</p>				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>19. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
<p>a. Does the project have the potential to 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, 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?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>19a. Response:</b> (Source: General Plan 2025 Figure OS-6 – Stephens’ Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, and Figure OS-8 – MSHCP Cell Areas; General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 - MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area; Table 5.5-A Historical Districts and Neighborhood Conservation Areas, Figure 5.5-1 - Archaeological Sensitivity, Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity, and Appendix D – Cultural Resources Study; Western Riverside County MSHCP Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools; RMC Title 20 – Cultural Resources; and Phase I Cultural Resources Inventory prepared by Psomas in January 2018 [included in Appendix B])</p> <p><b>Less Than Significant Impact with Mitigation Incorporated.</b> Potential impacts related to habitat of fish or wildlife species were discussed under Thresholds 4a to 4f in Section 4, Biological Resources, of this Initial Study. Impacts were determined to be less than significant with payment of the Western Riverside County MSHCP development mitigation fee and implementation of MM BIO-1, which requires a pre-construction survey for nesting birds on the site and in the construction area and describes the methods for managing any active nest sites, if encountered. Implementation of MM BIO-1 would reduce potential impacts related to nesting birds to a less than significant level. The proposed project would not have the potential to degrade the quality of the environment; would not substantially reduce the habitat of a fish or wildlife species; would not cause a fish or wildlife population to drop below self-sustaining levels; would not threaten to eliminate a plant or animal community; and would not reduce the number or restrict the range of a Rare or Endangered plant or animal.</p> <p>Additionally, potential impacts to cultural, archaeological, and paleontological resources related to major periods of California and the City of Riverside’s history or prehistory were discussed under Thresholds 5a to 5d in Section 5, Cultural Resources and Thresholds 17a and 17b in Section 17, Tribal Cultural Resources of this Initial Study. No impact on historical resources would occur, and impacts would be less than significant with compliance with existing regulations in the event of the discovery of human remains. Impacts on archaeological, tribal cultural resources, and paleontological resources would be minimized and/or avoided through the implementation of MMs CUL-1, CUL-2, CUL-3, and CUL-4, which require retention of an archaeologist and paleontologist, a pre-grade conference/cultural sensitivity training with the construction crew, and evaluation of any archaeological artifact or fossil specimen discovered during construction activities by a qualified archaeologist or paleontologist to determine whether the resource is significant and to develop and implement a mitigation plan that includes a data recovery plan for the salvage, recovery, testing, reporting, and curation of archaeological materials at an appropriate facility.</p> <p>Implementation of the mitigation measures for biological resources and cultural resources and compliance with existing regulations would result in <b>less than significant impacts after mitigation.</b></p>				
<p>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)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>19b. Response:</b> <i>(Source: Traffic Impact Study prepared by Psomas in September 2018 [included in Appendix I])</i>				
<p><b>Less Than Significant Impact.</b> Aside from the project, a number of other private development projects are proposed or planned in the surrounding area (see Traffic Impact Study in Appendix I of this Initial Study). Those nearest the site include a proposed medical-dental office at 7275 Indiana Avenue, a fast food restaurant at 3630 Central Avenue, and a mini-warehouse at 6289 Palm Avenue. If construction of these cumulative projects occurs at the same time as the project, increased pollutant emissions, noise, and traffic from construction activities and truck trips may occur. However, the nearest cumulative project is located over 1,000 feet south of the site (at 3630 Central Avenue), and the two other projects are located farther (ranging from 2,500 to 3,600 feet) from the site. Thus, any overlap in construction schedules would not result in cumulative impacts on the same receptors or intersections.</p> <p>The environmental impacts of these cumulative projects would also add to the long-term operational impacts of the project on a cumulative basis. However, the impacts of the project would be avoided and/or reduced to less than significant levels by the implementation of mitigation measures, as discussed under the environmental analysis under each topical issue above. Since project impacts would be less than significant after mitigation, impacts associated with the project would not result in cumulatively considerable impacts when added to the impacts of other projects planned or proposed in the vicinity of the site. Cumulative impacts would be <b>less than significant</b>.</p>				
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>19c. Response:</b> <i>(Sources: General Plan 2025 FPEIR Section 5 – Environmental Impact Analysis for the General Plan 2025 Program and Air Quality Analysis, Traffic Impact Study, Greenhouse Gas Analysis, and Noise and Vibration Analysis prepared by Psomas in January 2018 [included in the Appendices to this Initial Study])</i>				
<p><b>Less Than Significant Impact with Mitigation Incorporated.</b> Effects on human beings were evaluated as part of the Aesthetics, Air Quality, Hydrology and Water Quality, Noise, Population and Housing, Public Facilities, Hazards and Hazardous Materials, Recreation, and Transportation/Traffic sections of this Initial Study.</p> <p>Potential impacts related to Air Quality, Greenhouse Gas Emissions, and Hazards and Hazardous Materials would be less than significant levels with compliance with existing regulations. Potential impacts related to Noise and Traffic and Transportation would be avoided or reduced to less than significant levels with compliance with existing regulations and the implementation of PDF NSE-1, MM NSE-1, and MM TRA-1. Therefore, potential environmental impacts on human beings, either directly or indirectly, would be less than significant after mitigation.</p> <p>Based on the analysis and conclusions in this Initial Study, the proposed project, with mitigation, would 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 <b>less than significant after mitigation</b>.</p>				

**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).

**TABLE 30**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Implementation Timing</b>	<b>Responsible for Monitoring</b>	<b>Monitoring/Reporting Method</b>
<b>Biological Resources</b>	<b>MM BIO-1</b> To avoid impacts on nesting birds, street trees shall be removed between September 1 and February 15 of the following year. If street tree removal will occur inside the peak nesting season (between February 16 and August 31), a pre-construction survey shall be conducted by a qualified Biologist to identify if there are any active nesting locations on the site and the construction areas. If the Biologist does not find any active nests within this area, then vegetation clearing and construction work will be allowed. If the Biologist finds an active nest within the area and determines that the nest may be impacted by demolition/construction activities, the Biologist will delineate an appropriate buffer zone around the nest depending on the species and the type of construction activity. Demolition/construction activities would be prohibited in the buffer zone until a qualified Biologist determines that the nest has been abandoned.	Prior to vegetation removal or the start of demolition activities	Construction contractor  Biologist	Compliance with Project Conditions of Approval  Final report to City Planning Division from Biologist; if nesting birds are found.
<b>Cultural Resource</b>	<b>MM CUL-1</b> 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.	Prior to issuance of a grading permit	Planning Division  Registered Professional Archaeologist and Paleontologist	Compliance with Project Conditions of Approval  Letter to City Planning Division from Archeologist and Paleontologist
	<b>MM CUL-2 Cultural Sensitivity Training:</b> The project Archaeologist and Native American Tribes consulting on the project shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. 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 and submitted to the Archeologist.	Prior to ground disturbance	Planning Division	Compliance with Project Conditions of Approval
	<b>MM CUL-3 Treatment and Disposition of Cultural Resources:</b> 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:	During ground disturbance	Grading contractor  Registered Professional Archaeologist	Compliance with Project Conditions of Approval



**TABLE 30**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

Impact	Mitigation Measures	Implementation Timing	Responsible for Monitoring	Monitoring/ Reporting Method
	<ol style="list-style-type: none"> <li>1. <b>Temporary Curation and Storage:</b> During the course of construction, all discovered resources shall be temporarily curated in a secure location onsite or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and</li> <li>2. <b>Treatment and Final Disposition:</b> The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: <ol style="list-style-type: none"> <li>a. Accommodate the process for onsite 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 cataloging and basic recordation have been completed;</li> <li>b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore would 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;</li> <li>c. If more than one Native American tribe or band is involved with the project and cannot come to an agreement as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and.</li> <li>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</li> </ol> </li> </ol>			Final report to City Planning Division from Archeologist; if resources are found.

**TABLE 30**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

Impact	Mitigation Measures	Implementation Timing	Responsible for Monitoring	Monitoring/Reporting Method
	<p>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 interested tribes.</p>			
	<p><b>MM CUL-4</b> In the event that any paleontological resources (e.g., plant or animal fossils) are encountered before or during grading, the Property Owner/Developer shall retain a qualified Paleontologist to evaluate unanticipated discoveries and to take appropriate measures to protect or preserve them for study. The Paleontologist shall submit a report of findings that will also provide specific recommendations regarding further mitigation measures (i.e., paleontological monitoring) that may be appropriate. Where mitigation monitoring is appropriate, the program must include, but not be limited to, the following measures:</p> <ul style="list-style-type: none"> <li>• Assign a Paleontological Monitor, trained and equipped to allow the rapid removal of fossils with minimal construction delay, to the site full time during earth-disturbing activities.</li> <li>• Divert earth-disturbing activities away from the immediate area of the discovery until the Paleontological Monitor has completed salvage. If construction personnel make the discovery, the Grading Contractor shall immediately divert construction and notify the Paleontological Monitor of the find.</li> <li>• Prepare, identify, and curate all recovered fossils for documentation in the summary report and transfer to an appropriate depository (e.g., Natural History Museum of Los Angeles County).</li> <li>• Prepare and submit a technical report describing the identification, salvage, evaluation, and treatment of all fossils discovered during</li> </ul>	During ground disturbance.	Grading contractor  Registered Professional Paleontologist	<p>Compliance with Project Conditions of Approval</p> <p>Final report to City Planning Division from Paleontologist; if resources are found.</p>

**TABLE 30**  
**MITIGATION MONITORING AND REPORTING PROGRAM**

Impact	Mitigation Measures	Implementation Timing	Responsible for Monitoring	Monitoring/ Reporting Method
	grading to the City of Riverside. Transfer collected specimens with a copy of the report to the depository.			
Noise	<b>MM NSE-1</b> Prior to issuance of building permits, if Federal Administration Quiet Zones have not been established at the UPRR crossings at Brockton Avenue and Panorama Road, the Property Owner/Developer shall demonstrate to the City that exposed residential exterior window/wall assemblies facing the railroad tracks provide a Sound Transmission Class (STC) rating of a least 30 dB. The building plans submitted to the City for review and approval shall identify the STC rating of the materials used to construct the northern exterior windows/wall assemblies to demonstrate that the proposed building construction would provide an interior noise level of 45 dBA CNEL, or less, in compliance with interior noise standards in Title 24 of the California Code of Regulations.	Prior to issuance of the building permit	Planning Division, Public Works Department and Building and Safety Division	Compliance with Project Conditions of Approval.
Transportation	<b>MM TRA-1</b> Prior to issuance of the certificate of occupancy of the project, signal timing adjustment and coordination shall be made to the traffic signal at the Riverside Avenue/Central Avenue intersection. These would include installation of an interconnect or fiber optic communication cable on Riverside Avenue between Merrill Avenue/Sunnyside Avenue and Central Avenue to coordinate the two signal systems. Once the two intersections are coordinated, signal timing can be synchronized and changes be implemented at the intersections whereby coordination on southbound traffic along Riverside Avenue will improve overall operations at the Riverside Avenue/Central Avenue intersection.	Prior to issuance of the certificate of occupancy	Public Works Department	Compliance with Project Conditions of Approval.

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The following references were used in the preparation of this Initial Study and are available for review at the City of Riverside Planning Division offices at 3900 Main Street, 3<sup>rd</sup> floor in Riverside, California 92522 or at the offices of Psomas at 1500 Iowa Avenue, Suite 210 in Riverside, California 92507 during normal business hours.

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May 4<sup>th</sup>, 2017

Pelican Properties  
Attn: Dick Hamm and Rob Boyer  
1300 Quail Street, Suite 100  
Newport Beach, CA 92660

RE: Revised Merrill Avenue Street Design and Merrill Avenue Brownstones

Dick and Rob,

Thank you sharing your proposed improvements and for providing us an update on your Merrill Avenue Brownstones mixed-use project. We appreciate your reaching out and keeping us informed.

As has been discussed, and at your request for some feedback, the modified Merrill Avenue street section and landscape plan provided at the meeting will be a nice improvement to Merrill Avenue and Riverside Plaza. The new landscaped medians, parking landscape pockets, turn lanes and other traffic calming devices should create a more pedestrian friendly environment while slowing down traffic to a more compatible speed to our uses within Riverside Plaza.

In addition to the Merrill Avenue revised street plan, we are supportive of your project as a whole and feel it will have a positive impact on the surrounding area. We believe the proposed use and timing of this venture will be a win-win situation for our tenants within Riverside Plaza as well as the residents of your project.

Please keep us informed as to the progress of your project and any future modifications to the proposed Merrill Avenue street design or other issues you feel may be of interest to us.

Regards,

A handwritten signature in black ink that reads "Michael Smith".

Michael Smith  
Vice President  
AEW Capital Management