



COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT Planning Division

Draft Initial Study/Mitigated Negative Declaration

WARD: 5

1. **Case Number:** P16-0885 (Tentative Tract Map 37219), P16-0886 (Planned Residential Development), P16-0506 (Design Review), and P17-0874 (VR)
2. **Project Title:** Primrose Residential Project
3. **Lead Agency:** City of Riverside
Community & Economic Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522
4. **Contact Person:** Sean P. Kelleher, Associate Planner
Phone Number: (951) 826-5712
5. **Project Location:** The 9.3-acre site is located west of Myers Street north of Primrose Drive and bisected by Muir Avenue. The project site consists of 10 parcels, that include the following assessor parcel numbers (APN) 234-080-031, 234-080-032 (portion), 234-091-012, 234-091-013 (portion), 234-092-017, 234-092-023, 234-092-024, 234-092-025, 234-092-026, and 234-092-039; and associated with the following four addresses: 9761 Primrose Drive, 3677 Muir Avenue, 3606 Muir Avenue, and 3645 Harrison Street. In addition, the project site is located in Section 18 of Township 3 South, Range 5 West of the San Bernardino Baseline and Meridian.
6. **Project Applicant/Project Sponsor's Name and Address:**

Coastal Commercial Properties
Brett Crowder
1020 Second Street, Suite C
Encinitas, CA 92024
7. **General Plan Designation:** MDR – Medium Density Residential and MU-V – Mixed Use-Village
8. **Zoning:** R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones
9. **Existing Setting:** The project site consists of 10 parcels, of which, two are developed with single family residences, and the remainder are vacant parcels. Existing site landscaping includes areas of ruderal vegetation and ornamental landscaping, including a variety of trees, and bare ground.

10. Description of Project:

The proposed project includes the following entitlements: a Tentative Tract Map (TM-37219) to subdivide ten parcels into 63 residential lots five lettered lots for open space amenities and a vacation to vacate a portion of Muir Avenue. A Planned Residential Development (PRD) and Design Review (DR) for the construction of 63 single family, detached, residences and a variance to allow for reduced project perimeter setbacks on lot 10, consistent with existing development along Myers Street.

The project proposes a density of 6.77 dwelling units per gross acre, with lots ranging in size from 3,140 square feet to 7,902 square feet in size. .

Single-Family Residential

Single-family residences will be two-stories and consist of three different floorplans, as shown in the Table below. Residences will range in size from 1,818 to 2,356 square feet, and will provide between 3 to 5 bedrooms, 2.5 to 4 bathrooms and 2-car garages. Each residence will have a front porch and a back yard totaling a minimum of 640 square feet. The project includes 62 guest parking spaces spread throughout the project area.

	Number of Units	Square Footage	Bedrooms	Bathrooms
Plan 1 Units	17	1,818	3	2.5
Plan 2 Units	23	1,962	3 with den or 4 without den	3
Plan 3 Units	23	2,356	5	4

Onsite Roadways

The project includes development of an interior private street system that will circulate throughout the development and connect with Muir Avenue (public street) from both the north and south sides of the project. A short segment of Muir Avenue, located in the center of the project site will be vacated and converted into common open space for on-site amenities. The private street system includes 4-foot wide concrete sidewalks, a 5-foot wide parkway, curb and gutter.

Recreation and Open Space

The project will include 35,005 square feet of open space recreation areas including:

- A 17,347-square foot ‘pool recreation’ area that includes: a pool, spa, restrooms, barbeques, seating, cabanas, overhead trellis, and an open turf play area;
- A 8,308-square foot ‘fitness park and tot lot’ that includes: fitness equipment, sidewalks, benches, playground equipment, and open space;
- A 2,412-square foot park with a Bocce ball court;
- A 2,608-square foot ‘community garden’ area that includes: open space, garden areas, sidewalks, benches, overhead trellis, and garden art; and
- A 4,330-square foot ‘paseo/tot lot park’ area that will include: garden area, playground equipment, and sidewalks.

Landscaping

The project proposes to install landscape and irrigation in areas visible to the public right-of-way, including: interior project streets; common open space and park areas; residential front yards; and where side on conditions exist. Landscaping includes a variety of drought tolerant shrubs, ground covers, and the following tree sizes and species: 24-inch box Strawberry (*arbutus unedo*), 36-inch box blue palo verde (*cercidium floridum*), 24-inch box Chinese flame (*koelreuteria bipinnata*), 24-inch box white crape myrtle (*lagerstroemia*), 14-foot high date palm (phoenix dactylifera), and 14-foot high California fan palm (*washington filifera*).

Walls and Fences

Walls and fences will be installed throughout the project site and include the following: six-foot high masonry walls along the exterior of the project, between residences and side on conditions to internal streets; and five-foot six-inch high vinyl fences along interior property lines, not visible to the internal street system or the public right-of-way.

Construction Activities

Construction activities include: demolition of two existing residential structures; removal of the residential utility infrastructure; grubbing; grading; excavation and re-compaction of soils; utility and infrastructure installation; building construction; roadway pavement; and architectural coatings. The construction includes cut and fill of 70,663 cubic yards of soils. Grading will balance on-site, with no import or export required. Construction activities are anticipated to last 18 months.

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

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Single-Family Residential and Vacant/Undeveloped	MDR – Medium Density Residential	R-1-7000 - Single-Family Residential Zone
North	Single-Family Residential and Agriculture	MDR – Medium Density Residential and MU-V - Mixed Use - Village	R-1-7000 - Single-Family Residential Zone, R-1-7000-SP – Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones, and R-3-1500-S-2-SP - Multiple-Family Residential, Building Stories (Two Stories), and Specific Plan (Magnolia Avenue) Overlay Zones
East	Single-Family Residential	MDR – Medium Density Residential	R-1-7000- Single-Family Residential Zone
South	Single-Family Residential	MDR – Medium Density Residential	R-1-7000- Single-Family Residential Zone
West	Single-Family Residential and Agriculture	MDR – Medium Density Residential and MU-V - Mixed Use - Village	R-1-7000-SP – Single-Family Residential and 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

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

- a. General Plan 2025
- b. GP 2025 FPEIR
- c. Magnolia Avenue Specific Plan
- d. Air Quality and Greenhouse Gas Emission CalEEMod Outputs, Prepared by Entech 2017

- e. Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017
- f. Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 and Paleontological Resources Assessment, Prepared by Material Culture Consulting, 2016
- g. Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016
- h. Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016
- i. Preliminary Hydrology Study, Prepared by MDS Consulting, 2017; Water Quality Management Plan, Prepared by MDS Consulting, 2017
- j. Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017

14. Acronyms

AQMP -	Air Quality Management Plan
BMPs -	Best Management Practices
CAA -	Clean Air Act
CBC -	California Building Code
CDFW -	California Department of Fish and Wildlife
CEQA -	California Environmental Quality Act
CRHR -	California Registry of Historic Resources
CMP -	Congestion Management Plan
CWA -	Clean Water Act
DTSC -	California Department of Toxic Substances Control
EIR -	Environmental Impact Report
EMWD -	Eastern Municipal Water District
EOP -	Emergency Operations Plan
ESLs -	Environmental Screening Levels
FEMA -	Federal Emergency Management Agency
FPEIR -	GP 2025 Final Programmatic Environmental Impact Report
GIS -	Geographic Information System
GHG -	Greenhouse Gas
GP 2025 -	General Plan 2025
IS -	Initial Study
LHMP -	Local Hazard Mitigation Plan
LID -	Low Impact Development
MBTA -	Migratory Bird Treaty Act
MSHCP -	Multiple-Species Habitat Conservation Plan
NAHC -	Native American Heritage Commission
NCCP -	Natural Communities Conservation Plan
NRHP -	National Registry of Historic Properties
OEM -	Office of Emergency Services
OPR -	Office of Planning & Research, State
PEIR -	Program Environmental Impact Report
PW -	Public Works, Riverside
RCALUC -	Riverside County Airport Land Use Commission
RCALUCP -	Riverside County Airport Land Use Compatibility Plan
RCP -	Regional Comprehensive Plan
RCTC -	Riverside County Transportation Commission
RMC -	Riverside Municipal Code
RPD -	Riverside Police Department
RPU -	Riverside Public Utilities
RTIP -	Regional Transportation Improvement Plan
RTP -	Regional Transportation Plan
RUSD -	Riverside Unified School District

RWQCB	Regional Water Quality Control
SCAB -	South Coast Air Basin
SCAG -	Southern California Association of Governments
SCAQMD -	South Coast Air Quality Management District
SCH -	State Clearinghouse
SKR-HCP -	Stephens' Kangaroo Rat - Habitat Conservation Plan
SRA -	Source Receptor Area
SWPPP -	Storm Water Pollution Prevention Plan
USACE -	United States Army Corps of Engineers
USFWS -	United States Fish and Wildlife Service
USGS -	United States Geologic Survey
UST -	Underground Storage Tank
UWMP -	Urban Water Management Plan
WMWD -	Western Municipal Water District
WQMP -	Water Quality Management Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will 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 _____

For _____ City of Riverside

COMMUNITY & ECONOMIC DEVELOPMENT
DEPARTMENT
Planning Division

Draft Environmental Initial Study/Mitigated Negative

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. **Earlier Analysis Used.** Identify and state where they are available for review.
 - b. **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. **Mitigation Measures.** For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measure which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals

contacted should be cited in the discussion.

- 8) The explanation of each issue should identify:
 - a. the significance criteria or threshold, if any, used to evaluate each question; and
 - b. the mitigation measure identified, if any, to reduce the impact to less than significance.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Will the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>1a. Response: (Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways).</p> <p>No Impact. Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks the view of a vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). The City of Riverside’s General Plan Open Space and Conservation element states that Riverside’s natural features provide a dramatic and varied topographic setting for the community. Scenic resources enhance the visual character of Riverside and provide distinguishing characteristics. The hillsides and ridgelines above Riverside offer scenic benefits to the community, as they serve as landmarks and offer a sense of direction or orientation as people move around the City. The La Sierra/Norco Hills are the nearest scenic vista to the project site, and are located approximately 3 miles to the northwest.</p> <p>Long-distance scenic vistas of these hills can be seen above and beyond the existing residential development and along roadway corridors within the project vicinity. The City’s General Plan 2025 policies aim at balancing development interests with broader community preservation objectives. With implementation of the project, existing views from the street corridors would remain the same. Development of the proposed two-story residences on the project site will not hinder any scenic vistas or panoramic views. Proposed onsite structures will be setback from parcel lines and the parcels will be setback 9-feet from public roadways (4-foot wide sidewalks plus 5-foot wide parkways), and views above and beyond the new residential uses and along road corridors will continue to be of distant hillsides. Thus, the existing long-distance views from public areas, such as roadway corridors, will not be diminished. In addition, the project site and vicinity are not designated by the City’s General Plan for the preservation or uniqueness of scenic views. Therefore, the proposed project will not result in an adverse effect on a scenic vista.</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 type="checkbox"/>	<input checked="" type="checkbox"/>
<p>1b. Response: (Source: California Scenic Highway Mapping System. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed: October 2016; 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, the City’s Urban Forest Tree Policy Manual.)</p> <p>No Impact. There are no officially designated scenic highways near the project site. A portion of State Route 91 (SR-91) that is located to the west of the Interstate-15 (I-15) interchange (approximately 6.5 miles from the project site), is considered an “Eligible State Scenic Highway – Not Officially Designated” by Caltrans. As no designated state scenic highways are located in the visual vicinity of the project site, no impacts to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway will occur from implementation of the proposed project.</p> <p>In addition, the City of Riverside General Plan Magnolia Avenue as a scenic corridor within the City of Riverside. However, the project site is not adjacent to Magnolia Avenue. In addition, any views of the project site from Magnolia Avenue will be along the Muir Avenue corridor. As provided in the Project Description, the project will provide a 9-foot setback from Muir Avenue and a portion of Muir Avenue would be vacated and converted into open greenspace. In addition, Magnolia Avenue is lined with both commercial and residential uses. Thus, the residential views with 9-foot setback and open greenspace would not result in an adverse effect on the Magnolia Avenue scenic corridor. Conversely, development of the project with its standard design measures, open space, and proposed landscaping would improve the views over the existing partially developed area and roadway pavement that is currently viewed from Magnolia Avenue. Therefore, impacts related to scenic highways and corridors would not occur from implementation of the project.</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"/>

1c. Response: (Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways; Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less Than Significant Impact. The project site consists of vacant land and residential property. Two residences and a garage are located on the northwest and southeast portions of the project area. In addition, two parcels in the southern portion of the project area are used for vehicle and material storage (Leighton 2016). The remaining portions of the project site are vacant.

The proposed project will develop 63 single-family residences within the existing residential area. The proposed residences will consist of two-story structures that will incorporate a Spanish, French Country, or Farmhouse architectural design. The residential structures will incorporate concrete tile roofs, wood fascia, stucco, overhangs, wrought iron accents, and fiberglass shutters. These design features will be provided on all building elevations that are visible from public streets, private streets, and along the project boundary. Renderings of the proposed architectural designs are shown in Figure 5, Conceptual Elevations, and the proposed landscaping is shown in Figure 4, Conceptual Landscape Plan. In addition, five landscaped park facilities providing 35,005 square feet will be developed and landscaping will be installed throughout all of the common areas. The proposed project will comply with all pertinent design requirements of the Zoning Code and the Citywide Design Guidelines to assure quality site design and building architecture that is of high quality.

The proposed project will not degrade the existing character of the site and its surroundings because the project will replace the vehicle and material storage areas, vacant space, and the two older residences with a new single-family residential community. The residences include architectural designs and substantial landscaping that will integrate with the existing single-family residences that surround the project area. The existing residential lots that surround the project area are approximately 7,000 square feet in size and are developed with single-story residences. The proposed project will result in residential lots that range from 3,140 square feet to 7,902 square feet in size, and will be developed with two-story residences. Although, some lots will be smaller and residences will be one story taller than the surrounding residences, all of the proposed residences that are adjacent to existing residential uses have been designed with a 20-foot backyard setback, which is consistent with City requirements and similar to the existing setbacks in the area. In addition, the proposed lots on Myers Street have been sized to be consistent with the existing adjacent residential lots and an additional 9-foot setback from the roadways is provided in the form of 4-foot wide sidewalks plus 5-foot wide parkways.

In addition, the proposed community will contain five park areas that will provide 35,005 square feet of open space and recreation, and landscaping along the internal streets and within the open space areas, which will reduce the visual density of the proposed project. As detailed in the Project Description, the proposed landscaping will include a variety of drought tolerant groundcover, shrubs, and tree species. The trees proposed to be installed will range from 24 to 36-inch boxed, which will provide substantial landscaping that will blend into the surrounding residential area. The proposed street trees would be installed in compliance with the City’s Urban Forest Tree Policy Manual that provides guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The City’s Building and Safety Division will review the landscaping plans through plan checks and inspection of the landscaping during installation, which will ensure that all required City requirements related to the street trees are incorporated. Overall, the proposed residential uses will not degrade the existing visual character or quality of the site and its surroundings, and impacts will be less than significant.

d. Create a new source of substantial light or glare which will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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1d. Response: (Source: General Plan 2025, General Plan 2025 FPEIR Figure 5.1-2 – Mount Palomar Lighting Area, Title 19 – Article VIII – Chapter 19.556 – Lighting, and Citywide Design and Sign Guidelines)

Less than Significant Impact. As shown in the City’s General Plan EIR Figure 5.1-2, Mt. Palomar Night Time Lighting Policy Area, the site is not within the Mount Palomar Lighting Area. The project site is partially developed with two residences, and there is currently limited sources of lighting or glare emanating from the project site. However, the project site is surrounded by sources of nighttime lighting that includes street lights along Primrose Drive, illumination from vehicle headlights, exterior residential lighting, and interior illumination passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians.

The proposed project will include installation of new lighting sources on the project site that will include exterior lighting for streetlights and residential security lighting. However, the City’s Municipal Code lighting requirements, included as

Chapter 19.556, establishes design and development standards for lighting that include height, shielding, and location requirements to ensure lighting does not impact existing uses in the project area. Through compliance with the City’s Municipal Code, prior to building permit issuance, impacts related to sources of light will be less than significant.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. The majority of the exterior of the proposed residential structures will consist of stucco, cement tile, brick, wood, and concrete, which are not reflective surfaces. In addition, the residences will not have large expanses of window areas or large parking lot areas, from which sunlight could be reflected. Additionally, the installation of outdoor lighting will be required to meet the requirements of Chapter 19.556, which will reduce the potential to generate glare from new lighting fixtures. As a result, the proposed project will not create a substantial source of glare and impacts will be less than significant.

2. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information 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. Will the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

2a. Response: (Source: California Department of Conservation Farmland Mapping and Monitoring Program, Riverside County Important Farmland 2014. <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Riverside.aspx>)

No Impact. The project site is within an urban and developed area, and is identified by the California Department of Conservation Farmland Mapping and Monitoring Program as Urban and Built-Up Land. The project site is not designated as Prime, Unique, or Farmland of Statewide Importance. Thus, the proposed project will not result in impacts related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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2b. Response: (Source: General Plan 2025 – Figure OS-3 - Williamson Act Preserves, General Plan 2025 FPEIR – Figure 5.2-4 – Proposed Zones Permitting Agricultural Uses, and Title 19)

No Impact. Review of Figure 5.2-2 – Williamson Act Preserves of 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. The project site is zoned R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones. The project site is not zoned for agricultural use. Thus, the proposed project will not result in impacts related to conflict with an existing agricultural zoning or Williamson Act contract, and impacts will not occur.

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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2c. Response: (Source: City of Riverside Zoning Code, Map, GIS Map – Forest Data)				
No Impact. The City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland. The project site consists of disturbed land that has been previously used for agriculture or residential uses. The project site is zoned R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones. The project site is not zoned for forest land or timberland uses. Thus, the proposed project will not result in impacts related to conflict with an existing forest land or timberland zoning, and impacts will not occur.				
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"/>
2d. Response: (Source: GIS Map – Forest Data)				
No Impact. The City of Riverside has no forest land that can support 10-percent native tree cover nor does it have any timberland. The project site consists of disturbed land that has been previously used for agriculture or residential uses; and no forest land exists. Thus, the proposed project will not result in the loss of forest land or conversion of forest land to non-forest use, and impacts will not occur.				
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"/>
2e. Response: (Source: General Plan – Figure OS-2 – Agricultural Suitability, Figure OS-3 – Williamson Act Preserves, and GIS Map – Forest Data)				
No Impact. As described in the responses above, the project is located in an urbanized area of the City designated as “Urban/Built-Out Land” and “Other Land” by the California Department of Conservation and does not support agricultural resources or operations. The project will not result in the conversion of designated farmland to non-agricultural uses. In addition, there are no agricultural resources or operations, including farmlands within proximity of the subject site. The City of Riverside has no forest land that can support 10-percent native tree cover.. Impacts will not occur.				
3. AIR QUALITY.				
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. Will 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"/>
3a. Response: (Source: South Coast Air Quality Management District’s 2012 Air Quality Management Plan and Revised Draft 2016 Air Quality Management Plan; Air Quality Modeling CalEEMod.2016.3.1, January 23, 2017)				
Less than Significant Impact. The project site is located in the South Coast Air Basin, which is under the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, SCAQMD uses City General Plan land use designations to identify growth, which is used to forecast, inventory, and allocate regional emissions from land use and development-related sources. Therefore, if a proposed project will have a development density and vehicle trip generation that is substantially greater than what was anticipated in the General Plan, then the proposed project will conflict with the AQMP. On the other hand, if a project’s density is consistent with the General Plan, its emissions will be consistent with the assumptions in the AQMP, and the project will not conflict with SCAQMD’s attainment plans. In addition, the SCAQMD considers projects consistent with the AQMP if the project will not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.				
The project site has a General Plan land use designation of MDR – Medium Density Residential, which allows up to 8.0 dwelling units per acre, and MU-V - Mixed Use Village, which allows up to 40 dwelling units per acre. Additionally, the site is zoned R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan				

(Magnolia Avenue) Overlay Zones which allow for a density up to 6.2 dwelling units per acre, or up to 8.0 dwelling units per acre with approval of a Planned Residential Development permit. The proposed project is requesting a Planned Residential Development permit and to develop 63 single-family residences on the 9.3-acre project site, which will result in 6.77 single-family dwelling units per gross acre. This will be consistent with the existing General Plan land use and zoning designation for the project site. Therefore, the development density of the proposed project will be consistent with the assumptions in the AQMP, and will not conflict with SCAQMD's attainment plans.

In addition, emissions generated by construction and operation of the proposed project will not exceed thresholds, as described in the analysis below, which are based on the AQMP and are designed to bring the Basin into attainment for the criteria pollutants for which it is in nonattainment. Therefore, because the proposed project does not exceed any of the thresholds it will not conflict with SCAQMD's goal of bringing the Basin into attainment for all criteria pollutants and, as such, is consistent with the AQMP. As a result, impacts related to conflict with the AQMP from the proposed project will be less than significant.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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3b. Response: (Source: South Coast Air Quality Management District's 2012 Air Quality Management Plan and Revised Draft 2016 Air Quality Management Plan; Air Quality Modeling CalEEMod Outputs, January 23, 2017)

Regional Air Quality Thresholds

The analysis methodologies from the SCAQMD CEQA Air Quality Handbook are used in evaluating project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1. Should construction or operation of the project exceed these thresholds a significant impact could occur; however, if estimated emissions are less than the thresholds, impacts will be considered less than significant.

Table AQ-1: SCAQMD Regional Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds (lbs/day)	
	Construction	Operations
Oxides of Nitrogen (NO _x)	100	55
Reactive Organic Gases (ROG)	75	55
Respirable Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55
Oxides of Sulfur (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Lead ^a	3	3
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	

Source: SCAQMD, 2011.

Less than Significant Impact.

Construction

Construction activities will generate pollutant emissions from: (1) site preparation, grading, and excavation; (2) construction workers traveling to and from project site; (3) delivery and hauling of construction supplies to, and debris from, the project site; (4) fuel combustion by onsite construction equipment; (5) building construction; application of architectural coatings; and paving. The amount of emissions generated daily will vary, depending on the intensity and types of construction activities occurring.

It is mandatory for all construction projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM₁₀, and PM_{2.5} emissions from construction activities. Rule 403 requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12-inches, and maintaining effective cover over exposed areas. Compliance with Rule 403 was accounted for in the construction emissions modeling. In addition, implementation of SCAQMD Rule 1108

governing the VOC content of asphalt, Rules 1113 and 1143 that govern the VOC content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling.

As shown in Table AQ-2, CalEEMod results show that maximum construction emissions generated on a peak construction day by the project will not exceed SCAQMD regional thresholds; and therefore, construction activities will result in a less than significant impact. CalEEMod Model runs are provided in Attachment A, that provides a breakdown of emissions.

Table AQ-2: Peak-Day Regional Construction Emissions (lbs/day)

Construction Season	ROG	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
Summer	58.36	95.17	48.34	0.08	29.65	17.68
Winter	58.37	95.18	48.18	0.08	29.65	17.68
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Significance?	No	No	No	No	No	No

Source: Entech 2017, Attachment A.

Operation

The project will result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. Development of the project will generate 609 vehicle trips per day.

Operations emissions associated with the project were modeled using CalEEMod. Model defaults were adjusted to reflect project-specific data, where available, including the size and type of the proposed land use and project specific trip rates. Modeled maximum day operations emissions are presented in Table AQ-3. Significance is determined based on whether, the emissions generated from the project will exceed the regional thresholds identified in Table AQ-1.

Table AQ-3 shows the maximum emissions that will occur from operation of the proposed project. As identified will not exceed SCAQMD’s applicable thresholds for criteria pollutants. Therefore, the project’s operational emissions will be less than significant.

Table AQ-3: Maximum Day Operational Emissions (lbs/day)

Source	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	5.89	1.41	24.88	0.06	2.69	2.69
Energy	0.07	0.60	0.26	0.003	0.05	0.5
Mobile	1.39	6.87	18.82	0.06	4.67	1.30
Total Emissions	7.35	8.89	43.96	0.12	7.41	4.03
SCAQMD Significance Thresholds	55	55	550	150	150	55
Exceed thresholds?	No	No	No	No	No	No

Source: Entech 2017, Attachment A.

As described previously, the emissions generated from the proposed project would not exceed SCAQMD daily thresholds. Therefore, the project will not violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, and will result in less than significant impacts related to an air quality violation.

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"/>
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3c. Response: (Source: South Coast Air Quality Management District’s 2012 Air Quality Management Plan and Revised Draft 2016 Air Quality Management Plan, Air Quality Modeling CalEEMod.2016.3.1, Outputs, January 23, 2017)

Less than Significant Impact. Per the City’s General Plan EIR, AQMP thresholds indicate future construction activities under the General Plan are projected to result in significant levels of NO_x, ROG, PM₁₀, PM_{2.5} and CO. Although long-term emissions are expected to decrease by 2025, all criteria pollutants remain above the SCAQMD thresholds. The portion of the Basin within which the City is located is designated as a non-attainment area for ozone, PM₁₀ and PM_{2.5} under state standards, and as a non-attainment area for ozone, carbon monoxide, PM₁₀, and PM_{2.5} under federal standards.

Because the proposed project is consistent with the General Plan 2025, cumulative impacts related to criteria pollutants as

a result of the project were previously evaluated as part of the cumulative analysis of build out anticipated under the General Plan 2025 Program. As a result, the proposed project would not cause any new significant impacts that were not previously evaluated and for which a statement of overriding considerations was adopted as part of the General Plan 2025 Final EIR. Therefore, cumulative air quality emissions impacts are less than significant.

In addition, SCAQMD’s cumulative air quality impact methodology recommends that if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that are below the SCAQMD’s recommended daily thresholds for project-specific impacts, then it will not result in a cumulatively considerable net increase of the criteria pollutant(s) for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. As shown, in Tables AQ-2 and AQ-3, operation of the proposed project will not exceed SCAQMD’s applicable thresholds. Therefore, impacts related to a cumulative increase in a criteria pollutant will be less than significant.

d. Expose sensitive receptors to substantial pollutant concentrations?

3d. Response: (Source: South Coast Air Quality Management District’s 2003 and 2012 Air Quality Management Plans and Revised Draft 2016 Air Quality Management Plan; CalEEMod.2016.3.1 Outputs, January 23, 2017)

Less than Significant Impact. Sensitive receptors include the residences that are adjacent to the project site. The SCAQMD has developed Local Significance Thresholds (LSTs) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus will not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NO_x, CO, PM₁₀, and PM_{2.5} pollutants for each of the 38 source receptor areas (SRAs) in the SCAB. The project site is located in SRA 23, Riverside.

Construction

The localized thresholds from the mass rate look-up tables in SCAQMD’s Final Localized Significance Threshold Methodology document, were developed for use on projects that are less than or equal to 5 acres in size or have a disturbance of less than or equal to 5-acres daily. The proposed project is anticipated to have a disturbance of less than 5 acres daily. In addition, the 5-acre site LST threshold provides a conservative evaluation because the project activities within the 9.3-acre project area were evaluated as if they will occur within a 5-acre area; thus, concentrating pollutants over a smaller area and increasing potential to exceed an air quality standard. Therefore, if the emissions from the project do not exceed the applicable LSTs for a five-acre site, then the project impacts will not be significant.

The closest sensitive receptor is a residence approximately 120 feet away from the project site. SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet from the emissions source. Although the closest sensitive receptor is located farther than 82 feet of the project site, using the 82-foot threshold provides a conservative analysis, indicating the maximum potential impact. Thus, construction and operational LSTs for a 5-acre site in SRA 23 (Riverside) at a distance of 82 feet from a sensitive receiver (shown in Table AQ-4), were used to evaluate the project’s localized air quality impacts.

Table AQ-4: SCAQMD Localized Significance Thresholds for Construction on a Five-Acre Site

Pollutant Monitored Within SRA 23 – Riverside	Allowable Emissions (pounds/day) at 82 Feet (25 Meters)
Nitrogen Oxides (NO _x)	270
Carbon Monoxide (CO)	1,577
Respirable Particulate Matter (PM ₁₀)	13
Fine Particulate Matter (PM _{2.5})	8

Source: SCAQMD, 2009.

If the project’s peak daily emissions will not exceed the LSTs thresholds, then it can be concluded that the project’s emissions will not result in adverse localized air quality impacts on surrounding sensitive receptors, impacts will be less than significant. As shown in Table AQ-5, with implementation of SCAQMD Rules, the daily construction emissions from the project will not exceed the applicable SCAQMD LST thresholds for a 5-acre site for NO_x, CO, PM₁₀, or PM_{2.5}. Therefore, localized impacts will be less than significant.

Table AQ-5: Localized Peak Day Construction Emissions (lbs/day)

Construction Season	NOx	CO	PM ₁₀	PM _{2.5}
Summer	33.89	17.10	8.33	5.00
Winter	33.89	17.10	8.33	5.00
SCAQMD Significance Threshold	270	1,577	13	8
Exceed Significance?	No	No	No	No

Source: Entech 2017, Attachment A.

Operations

Operation of the proposed residences would not generate any substantial pollutant concentrations. The majority of the emissions generated by the project would be related to vehicular trips, which are discussed below.

Hot Spots. Regarding potential “hot spots” of CO that could result from the project, the proposed project would not generate enough traffic to generate a potential hotspot. Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. It was determined that a daily traffic volume of 400,000 vehicles per day would not likely exceed the most stringent 1-hour CO standard (20.0 ppm).

With implementation of the project in the cumulative condition, the highest average daily trips on a segment of road would be 2,890 daily trips on Harrison Street, which much less than the volume of traffic required to generate a CO “hot spot”. Thus, impacts related to a CO “hot spot” would not occur from implementation of the proposed project.

e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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3e. Response: (Source: SCAQMD CEQA Air Quality Handbook)

Less than Significant Impact. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor issues include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The proposed project will develop and operate 63 single-family residences, which will not involve the types of activities that will emit objectionable odors affecting a substantial number of people.

In addition, odors generated by new and existing non-residential land uses are required to be in compliance with SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, emissions from diesel equipment, use of volatile organic compounds from architectural coatings, and paving activities may generate some nuisance odors. However, these odors will be temporary and will dissipate as odors disperse, and therefore, will not affect a substantial number of people. Therefore, impacts relating to both operational and construction activity odors will be less than significant.

4. BIOLOGICAL RESOURCES. Will the project:				
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a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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4a. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017 (Attachment B))

Less than Significant with Mitigation Incorporated. The project area contains ruderal vegetation in a field on the western portion of the project area that contains a moderate cover of Russian thistle (*Salsola tragus*) with lesser amounts of alkali heliotrope (*Heliotropium curassavicum* var. *oculatum*). In addition, the project area contains ornamental vegetation including: Mexican fan palm (*Washingtonia robusta*), Canary Island palm (*Phoenix canariensis*), Peruvian

pepper tree (*Schinus molle*), jade plant (*Crassula ovata*), ornamental rose (*Rosa sp.*), freeway iceplant (*Carpobrotus edulis*), and turf grass. None of these plant communities considered sensitive (Psomas 2017).

Due to the urban and developed nature of the project site and surrounding area, only urban-tolerant wildlife species are expected to occur in the project area. Killdeer (*Charadrius vociferus*), yellow-rumped warbler (*Setophaga coronata*), house sparrow (*Passer domesticus*), and ground squirrel (*Spermophilus beecheyi*) burrows were the only wildlife species observed in the survey area.

The ground squirrel burrows are potentially suitable habitat for burrowing owl (*Athene cunicularia*). However, no signs of burrowing owl were observed during the biological resource survey (Psomas 2017). As described below in response 4f, Section 6.3.2 of the MSHCP requires focused surveys for burrowing owl for sites within the designated “Additional Survey Needs Area”. The project site is located outside the “Additional Survey Needs Area” for burrowing owl (Psomas 2017). However, a pre-construction survey for burrowing owl has been included due to the presence of potentially suitable habitat. Implementation of Mitigation Measure BIO-1 will ensure that impacts related to burrowing owls will be less than significant.

Special status wildlife that have been reported in the vicinity of the project area: Santa Ana speckled dace (*Rhinichthys osculus* ssp. 3; Species of Special Concern [SSC]), silvery legless lizard (*Anniella pulchra pulchra*; SSC), western yellow bat (*Lasiurus xanthinus*; SSC), western mastiff bat (*Eumops perotis californicus*; SSC), and pocketed free-tailed bat (*Nyctinomops femorosaccus*; SSC). However, no water sources are present in the project area; therefore, Santa Ana speckled dace is not expected to occur. Suitable chaparral, pine-oak woodland, and riparian areas with moist, loose soil is not present in the project area; therefore, silvery legless lizard is not expected to occur. Also, while western yellow bats roost in leafy vegetation, they are associated with dry, thorny vegetation in the southwestern deserts. Therefore, this species is also not expected to occur. Western mastiff bats forage in a variety of areas and roost in rugged, rocky areas with suitable crevices and buildings with similar crevices. The residential buildings onsite are currently occupied, and the species has not been observed onsite; therefore, the species is not expected to roost in the project area. Additionally, there is limited potential for western mastiff bats to forage in the project area, and impacts related to Western mastiff bats will be less than significant. Furthermore, pocketed free-tailed bats occur in rocky desert areas with high cliffs and crevices for roosting, which does not exist in the project area. Therefore, this species is not expected to occur.

Overall, due to the urban and developed nature of the project site and surrounding area, the proposed project will not result in a substantial adverse effect, either directly or through habitat modifications, on any special status species identified by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS) with implementation of Mitigation Measure BIO-1.

Mitigation Measure

Mitigation Measure BIO-1: A pre-construction survey for burrowing owls shall be conducted by a qualified biologist within 30 days prior to the start of construction/ground-breaking activities. If no active burrows are detected, then no further action will be required. If an occupied burrow is detected during the burrowing owl breeding season (March 1 to August 31), a protective buffer of 500 feet shall be designated around the active burrow by a qualified biologist to avoid impacting a breeding owl. No work shall occur within 500 feet of the burrow unless a reduced buffer area is determined to be acceptable by a qualified biologist’s notification to the City of Riverside. If an occupied burrow is detected during the non-breeding season (September 1 to February 28), the burrowing owl may be passively excluded based on California Department of Fish and Wildlife-approved methods and the burrow can be excavated prior to construction.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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4b. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017)

No Impact. As described above, the project site contains ruderal and ornamental vegetation, and bare ground. A habitat survey was conducted on the project site pursuant to MSHCP Section 6.1.2. Based on the survey, the project site does not contain, nor is it adjacent to, any channels, streambeds, lakes, ponds, or other riverine resources. In addition, the survey area does not support riparian habitat, and there are no potential vernal pools or other ponding areas on the project site. Soils that may support seasonal ponding are not present; therefore, suitable habitat for species associated with vernal pools (i.e., fairy shrimp) is not present. Fairy shrimp require habitat consisting of ponded water lasting for periods of two to

eight months that periodically dries out during the late spring and summer months. Since no ponding areas were observed on the site and soils that may support seasonal ponding area not present, fairy shrimp or other species associated with vernal pools do not have the potential to occur on the site (Psomas 2017). Furthermore, no other sensitive natural communities exist on the project site. Therefore, the project will not result in an impact on these resources or species associated with them.

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?

4c. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017)

No Impact. As described above, the project site contains ruderal and ornamental vegetation, and bare ground. A habitat survey was conducted on the project site pursuant to MSHCP Section 6.1.2. Based on the survey, the project site does not contain, nor is it adjacent to, any channels, drainages, streambeds, lakes, ponds, riverine or riparian habitat. In addition, there are no potential vernal pools or other ponding areas on the project site. Soils that may support seasonal ponding are not present. Furthermore, the project site does not contain any water resources under the regulatory authority of the U.S. Army Corps of Engineers (USACE), CDFW, or the Regional Water Quality Control (RWQCB) were observed in the survey area. Therefore, there will be no impacts on jurisdictional resources from implementation of the proposed project.

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

4d. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017)

Less Than Significant Impact with Mitigation Incorporated. A habitat survey was conducted on the project site pursuant to MSHCP Section 6.1.2. Based on the survey, the project site is located in an urban setting with no contiguous connection to natural open space; thus, wildlife movement opportunities in the area are constrained. The proposed project will provide infill development within the urban area. The project area is surrounded by streets and does not provide a connection of an open space or habitat area. Development of the residential uses on an infill parcel will not interfere with regional wildlife movement and impacts will not occur.

Trees on and adjacent to the project site have the potential to support birds that are subject to the Migratory Bird Treaty Act (MBTA). Bird species that may occur in the project area include: mourning dove (*Zenaida macroura*), Anna’s hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American crow (*Corvus brachyrhynchos*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*), song sparrow (*Melospiza melodia*), and house finch (*Carpodacus mexicanus*). Raptors (i.e., birds of prey) such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*) may also occur in the survey area (Psomas 2017). The MBTA prohibits the taking of migratory birds and their nests and eggs. If construction is initiated during the bird nesting season, a pre-construction survey will be required per Mitigation Measure BIO-2 to ensure that no nests are impacted. If an active nest is present, construction may be temporarily restricted in the immediate vicinity of the nest until nesting is complete.

Mitigation Measure

Mitigation Measure BIO-2: In order to avoid impacts on nesting birds and raptors (common or special status), construction activities should be scheduled during the non-breeding season (generally between July 1 and February 28/29 for nesting birds; between July 1 and January 31 for nesting raptors), to the extent practicable. If project timing requires that construction activities be conducted during the breeding season (generally between March 1 and June 30 for birds; between February 1 and June 30 for raptors), a pre-construction survey or multiple surveys shall be conducted by a qualified biologist no more than 72 hours prior to disturbance to confirm the absence of active nests. If no active nests are found, no further measures will be necessary.

If the biologist finds an active nest in or adjacent to the construction area and determines that the nest may be impacted, the biologist will identify an appropriate buffer zone around the nest, depending on the sensitivity of the species and the nature of the construction activity. The active site will be protected until nesting activity has ended to ensure compliance with the Migratory Bird Treaty Act and the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by a qualified

biologist: (1) clearing limits shall be established within a buffer around any occupied nest (the buffer shall be 300–500 feet for raptors), unless otherwise determined by a qualified biologist and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by a qualified biologist. Construction and/or encroachment into the buffer area around a known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants.

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"/>
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4e. Response: (Source: City of Riverside Urban Forest Tree Policy Manual)

Less Than Significant Impact. Any project within the City of Riverside’s boundaries that proposes planting a street tree within a City right-of-way must follow the Urban Forest Tree Policy Manual. The Manual documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute.

The proposed project includes installation of street trees throughout the project area. The installation of these trees will be in compliance with the Tree Policy Manual. The City’s Public Works Street Tree Division will review landscape plans through a formal landscape and irrigation submittal to the Planning Division Inspection of landscaping will occur during installation and prior to occupancy, ensuring all required City requirements related to street trees are incorporated, therefore, impacts will be less than significant.

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"/>
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4f. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017)

No Impact. The project area is located in the MSHCP’s Cities of Riverside and Norco Area Plan area; however, the site is not within a designated MSHCP “Criteria Area”. The nearest Criteria Area is over two miles away from the site. The project area is not located in MSHCP-designated existing or proposed Core, Extension of Existing Core, Non-Contiguous Habitat Block, Constrained Linkage, or Linkage areas (Psomas 2017). In addition, as described above, a habitat survey was conducted on the project site pursuant to MSHCP Section 6.1.2. Based on the survey, the project site does not contain any riparian/riverine habitat areas, vernal pools, sensitive plant species, or sensitive wildlife species that are included within the MSHCP.

In addition, Section 6.3.2 of the MSHCP requires focused surveys for burrowing owl for sites within the designated “Additional Survey Needs Area”. The project site is located outside the “Additional Survey Needs Area” for burrowing owl (Psomas 2017). However, a pre-construction survey for burrowing owl has been included due to the presence of potentially suitable habitat. Implementation of Mitigation Measure BIO-1 will ensure that impacts related to burrowing owls will be less than significant. Furthermore, the project will be required to conduct pre-construction surveys for nesting birds (included as Mitigation Measure BIO-2), which are covered by the MSHP.

Also, Section 6.1.4 of the MSHCP provides Urban/Wildlands Interface Guidelines to minimize urban/wildlands interface issues that relate to indirect impacts such as water quality (drainage), use of toxics, night lighting, indirect noise, invasive plant and wildlife species, protection of habitat areas (barriers), and grading/land development adjacent to habitat areas. Because the project site is farther than two miles from the nearest MSHCP Conservation area and has no adjacent or nearby natural open space areas, no urban/wildlands interface impacts will result from the proposed project. As a result, the proposed project will not conflict with the provisions of the MSHCP, and impacts will not occur.

5. CULTURAL RESOURCES.

Will 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"/>
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5a. Response: (Source: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))

No Impact. Based on a review of historic aerial photos, it appears that the property was used for agriculture and residences in 1948. By 1966, the agricultural activities had stopped and residences had been constructed on some of the land. Over the years since, portions of the site have been used for agriculture and other areas for storage. Currently, two residences are present onsite; one is located at the northeast corner of Muir and Primrose, the other is located at 3677 Muir Avenue. The record search conducted for the project site (MCC 2017) identified that the project area has already been studied and that five previously recorded historic-era single family residential structures were formally evaluated by an architectural historian, and it was determined that none of the structures met the eligibility criteria required for listing on the California Registry of Historic Resources (CRHR) or National Registry of Historic Properties (NRHP) (MCC 2017). Since that time three of these structures have been demolished and two remain. Because the two remaining structures do not meet the CRHR or NRHP eligibility criteria and are not identified by the City as resources, no historic resources are known to exist within the project area. Therefore, the proposed project will not result in an impact to a historical resource.

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

5b. Response: (Source: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))

Less than Significant Impact. The project area is considered to have a low sensitivity for the presence of prehistoric or historical archaeological deposits or features because numerous studies have been conducted and no archaeological resources have been recorded within the project area or within a 0.5 mile of the project area. In addition, the entire parcel has been disturbed from previous agricultural, grading, and residential uses. Therefore, the potential for encountering buried sites is very low (MCC 2017). If buried resources are encountered, they are likely to be in disturbed or secondary contexts (MCC 2017). Overall, it is unlikely that significant cultural resources will be encountered during development of the project (MCC 2017), and impacts will be less than significant.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

5c. Response: (Source: Paleontological Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))

Less than Significant Impact with Mitigation Incorporated. Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the history of the earth and its past ecological settings. There are two types of resources: vertebrate and invertebrate paleontological resources. These resources are found in geologic strata conducive to their preservation, typically sedimentary formations. Paleontological sites are those areas that show evidence of prehuman activity. Often they are simply small outcroppings visible on the surface or sites encountered during grading. The project area is mapped as both Quaternary older alluvium and Quaternary younger (MCC 2017), which are described below:

- *Quaternary older alluvium* (Qoa) is a Pleistocene-aged (1 million to 10,000 years ago) alluvial fan deposit that typically consists of river and stream derived sediments. The sediments are comprised of unsorted clay to pebble-sized clasts that are oxidized to a reddish hue, poorly indurated, and may contain reworked material from metamorphic and igneous geologic units nearby. This unit has the potential to produce significant paleontological resources, including remains of mammoth, mastodon, camel, horse, and other Pleistocene fossils (MCC 2017).
- *Quaternary younger fan* (Qyf) is a Holocene (10,000 years or younger) unit, characterized by generally loose and unconsolidated, well- to poorly-sorted deposits of varying grain sizes, deposited due to the action of rivers and streams. These units have a low potential to produce scientifically significant fossils (MCC 2017).

The County of Riverside has created a paleontological resource sensitivity map for the entire County, which indicates that the project area has a ‘High A’ potential to produce paleontological resources during ground disturbing activities (MCC 2017). High A is based on geologic formations or mapped rock units that are known to contain (or have the correct age and depositional conditions to contain) significant paleontological resources, which could include an abundant number of vertebrate fossils, or a few significant fossils that may provide new and significant (taxonomic, phylogenetic, ecologic, and/or stratigraphic) data (MCC 2017). Because the project site is underlain by Qoa and is mapped as a high potential for paleontological resources, the project has the potential to impact paleontological resources during construction activities at depth. Therefore, Mitigation Measure CUL-1 has been included to require that a qualified paleontological monitor oversee excavation activities, which will reduce potential impacts to paleontological resources to a less than significant

level.

Mitigation Measure

Mitigation Measure CUL-1: Prior to the issuance of the first grading permit, evidence shall be provided to the City Building and Safety Division and Planning Division that a qualified paleontologist has been retained to perform full-time monitoring of any excavations on the project site that have the potential to impact paleontological resources in undisturbed native sediments. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. In addition, the project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation, with approval from the City Building and Safety Division and Planning Division. Any potentially significant fossils observed shall be collected and recorded in conjunction with best management practices and Society for Vertebrate Paleontology professional standards. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils will be prepared and submitted to the appropriate City personnel.

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"/>
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5d. Response: (Source: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))

Less than Significant Impact. As described above, the project site has been long used for agricultural and residential uses. Human remains on the project site are unlikely, as they typically will have been identified during previous activities. Thus, impacts are less than significant. However, in the unanticipated event that human remains are found during project construction activities compliance with California Health and Safety Code Section 7050.5 will ensure that human remains were treated with dignity and as specified by law, which will reduce the impact to a less than significant level.

As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site, the County Coroner’s office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will make a determination as to the Most Likely Descendent. Compliance with the existing California Health and Safety Code regulations, will ensure impacts related to potential disturbance of human remains are less than significant.

6. GEOLOGY AND SOILS.

Will 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"/>
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6i. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

No Impact. The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. As described by the Preliminary Geotechnical Investigation for the proposed project, there are no known active faults traversing the site. The closest active fault is the Chino-Central Avenue Fault, and is located approximately 9.1 miles west-northwest of the site (Leighton 2016). Thus, the proposed project will not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map, and impacts will not occur.

ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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6ii. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less than Significant Impact. The site is located within a seismically active region of southern California. The principal seismic hazard that could affect the site is ground shaking resulting from an earthquake occurring along several major active or potentially active faults in southern California. The known regional active and potentially active faults that could produce the most significant ground shaking at the site include the Chino-Central Avenue, Elsinore-Glen Ivy, Whittier, San Bernardino and San Jacinto Valley sections of the San Jacinto fault zone, the Cucamonga, and the San Jose faults (Leighton 2016). The closest active fault is the Chino-Central Avenue Fault, and is located approximately 9.1 miles west-northwest of the site (Leighton 2016).

The amount of motion expected at a building site can vary from none to forceful depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located closer to an earthquake epicenter, that consist of poorly consolidated material such as alluvium, and in response to an earthquake of great magnitude.

Structures built in the City are required to be built in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]) that contains provisions for earthquake safety based on factors including occupancy type, the types of soils onsite, and the probable strength of ground motion. Compliance with the CBC will include the incorporation of: 1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; 2) proper building footings and foundations; and 3) construction of the building structure so that it will withstand the effects of strong ground shaking. Because the proposed project will be constructed in compliance with the CBC, the proposed project will result in a less than significant impact related to strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction?

6iii. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less than Significant Impact. Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during severe ground shaking. Liquefaction is associated primarily with loose (low density), saturated, fine-to-medium grained, cohesionless soils. As the shaking action of an earthquake progresses, the soil grains are rearranged and the soils temporarily behave similarly to a fluid. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations. For liquefaction effects to occur, groundwater levels must be within 50 feet of the ground surface and soils in the saturated zone must be non-consolidated loose soils that are susceptible to liquefaction.

The project area is mapped by the County of Riverside as being in an area with high liquefaction potential. Therefore, the Preliminary Geotechnical Investigation that was prepared for the site included subsurface soils testing to determine the potential of liquefaction to occur on the project site. The soil susceptibility for liquefaction is based on several factors, including relative density, fines content, plasticity, and moisture content.

Based on our hollow-stem auger data analysis and using a factor of safety against liquefaction of 1.3, conservatively assuming 1) the historically shallowest groundwater level (approximately 30 feet below the existing ground surface) and 2) that clayey soils with a plasticity index under 18 are potentially susceptible to liquefaction, some of the soil profile between depths of approximately 30 to 50 feet below ground surface (bgs) will be susceptible to liquefaction under the design seismic ground motion. However, due to the depth of the potentially liquefiable layers, their limited thickness, and the depth of groundwater near the project site (approximately 52 feet bgs), the potential for surface manifestations of liquefaction and damage as a result of liquefaction is very low (Leighton 2016).

In addition, the project is required to be built in compliance with the CBC, which includes provisions to reduce the potential effects of liquefaction, such as proper buildings and footings. With implementation of the required CBC seismic safety measures, including those related to liquefaction, the proposed project will result in a less than significant impact related to liquefaction.

iv. Landslides?

6iv. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less than Significant Impact. Landslides are the downhill movement of masses of earth and rock, and are often

associated with earthquakes; but other factors, such as the slope, moisture content of the soil, composition of the subsurface geology, heavy rains, and improper grading can influence the occurrence of landslides.

The project site is relatively flat and no onsite landslides will occur. In addition, the properties surrounding the project site are developed areas that do not contain substantial slopes and will not be subject to a potential landslide. Furthermore, as described in the Preliminary Geotechnical Investigation that was prepared for the site, slope instability and landslides are not an issue at the site, and the site is not considered susceptible to slope instability (Leighton 2016). As a result, impacts related to landslides will not occur from implementation of the proposed project.

b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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6b. Response: (Municipal Code Titles 17 and 18)

Less than Significant Impact. Construction of the project has the potential to contribute to soil erosion and the loss of topsoil. Grading and excavation activities that will be required for the proposed project will expose and loosen topsoil, which could be eroded by wind or water.

The City’s Municipal Code Titles 17 (Grading) and 18 (Subdivisions), Storm Water/Urban Runoff implement the requirements of the California RWQCB Order No. R8-2010-0033, NPDES Permit No. CAS618033 for the portion of the Santa Ana River watershed located within Riverside County, which includes the City. All projects in the City are required to conform to the permit requirements, which includes installation of Best Management Practices (BMPs) in compliance with the RWQCB permit, which establishes minimum stormwater management requirements and controls that are required to be implemented for the proposed project. To reduce the potential for soil erosion and the loss of topsoil, a Stormwater Pollution Prevention Plan (SWPPP) is required by the RWQCB regulations to be developed by a QSD (Qualified SWPPP Developer). The SWPPP is required to address site-specific conditions related to specific grading and construction activities. The SWPPP will identify potential sources of erosion and sedimentation loss of topsoil during construction, identify erosion control BMPs to reduce or eliminate the erosion and loss of topsoil, such as use of silt fencing, fiber rolls, or gravel bags, stabilized construction entrance/exit, hydroseeding. With compliance with the City’s Municipal Code, RWQCB requirements, and the BMPs in the SWPPP that is required to be prepared to implement the project, construction impacts related to erosion and loss of topsoil will be less than significant.

Construction of the proposed project includes installation of landscaping, such that during operation of the project substantial areas of loose topsoil that could erode will not exist. In addition, as described in Section 9, Hydrology and Water Quality the onsite drainage features that will be installed by the project includes two on-site drain systems with catch basins and grate inlets that have been designed to slow, filter, and slowly discharge stormwater into the existing offsite drainage system, which will also reduce the potential for stormwater to erode topsoil during project operations. Furthermore, implementation of the project requires City approval of a Water Quality Management Plan (WQMP), which will ensure that the City’s Municipal Code, RWQCB requirements, and appropriate operational BMPs will be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil to occur. As a result, potential impacts related to substantial soil erosion or loss of topsoil will be less than significant.

c. Be located on a geologic unit or soil that is unstable, or that will 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"/>
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6c. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less than Significant Impact. As described previously in Response 6.iv, the project site is relatively flat and no onsite landslides will occur. In addition, the properties surrounding the project site are developed areas that do not contain substantial slopes and will not be subject to a potential landslide. Additionally, the Preliminary Geotechnical Investigation that was prepared for the site determined that slope instability and landslides are not an issue at the site, and the site is not considered susceptible to slope instability (Leighton 2016). As a result, impacts related to landslides will not occur from implementation of the proposed project.

Also, as described above, the potential for surface manifestations of liquefaction and damage because of liquefaction is very low due to the depth of the potentially liquefiable layers, their limited thickness, and because groundwater near the project site is approximately 52 feet bgs, (Leighton 2016). In addition, the Preliminary Geotechnical Investigation determined that for the same reasons the potential for lateral spreading is also very low. Thus, impacts related to liquefaction and lateral spreading will be less than significant.

Seismically induced settlement or collapse consists of dry dynamic settlement (above groundwater) and liquefaction-induced settlement (below groundwater). During a strong seismic event, seismically induced settlement or collapse can occur within loose to moderately dense sandy soil because of the reduction in volume during, and shortly after, an earthquake event. Settlement caused by ground shaking is often non-uniformly distributed, which can result in differential settlement. Due to the potential of seismic settlement or collapse of the onsite soils the Preliminary Geotechnical Investigation performed an analysis of potential settlement. The results of the analyses identified that from a maximum considered earthquake the onsite soils are susceptible to approximately 1.9 to 2.5 inches of seismic settlement and differential settlement due to seismic loading is assumed to be less than 1.25 inches over a horizontal distance of 40 feet. This level of seismic settlement does not present a significant risk for building collapse (Leighton 2016). Based on a design-level considered earthquake, the onsite soils are susceptible to approximately 1.6 to 1.7 inches of seismic settlement, and differential settlement due to seismic loading is assumed to be less than 1.4 inches over a horizontal distance of 40 feet (Leighton 2016).

To reduce the potential for adverse total and differential settlement of the onsite soils, the proposed project will remove and recompact soils to a 90 percent compaction, which will provide the shear strength to support the proposed structures and meet the requirements of the CBC (Leighton 2016), which will reduce potential impacts related to potential settlement and collapse of soils to a less than significant level.

Subsidence occurs as in-place soil is moisture-conditioned and densified to receive fill, such as in processing an over excavation bottom. Subsidence is in addition to shrinkage due to recompaction of fill soil. The Preliminary Geotechnical Investigation included laboratory-measured maximum dry densities for soil types encountered at the subject site to determine that potential subsidence at the project site is approximately 0.15 foot. However, with implementation of soils removal and recompaction to 90 percent, and development of footings and foundations in compliance with the CBC regulations, potential impacts will be reduced to a less than significant level.

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?

6d. Response: (Source: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

Less than Significant Impact. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and shrink when dried. Structures constructed on these soils are subjected to large uplifting forces caused by the swelling. Without proper measures taken, heaving and cracking of both building foundations and slabs-on-grade could result.

The site is mapped as being underlain by alluvial fan deposits consisting of unconsolidated sand with gravel. In addition, a subsurface investigation was prepared for the project, which identified that the site is underlain by young alluvial fan deposits that primarily consist of clayey sand, silty sand and fine to coarse sand. As described by the Preliminary Geotechnical Investigation for the proposed project, soils encountered in the investigation borings consisted of granular materials, and are expected to have a low to very low expansion potential (Leighton 2016). Therefore, impacts related to expansive soils will be less than significant.

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?

6e. Response: (Source: Project Description)

No Impact. The proposed project will tie into existing sewers, and will not use septic tanks or alternative wastewater disposal systems. As a result, impacts related to septic tanks or alternative waste water disposal systems will not occur from implementation of the proposed project.

7. GREENHOUSE GAS EMISSIONS.

Will the project:

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

7a. Response: (Source: CalEEMod.2016.3.1 Outputs, January 23, 2017)

Regional Air Quality Thresholds

The analysis methodologies from SCAQMD are used in evaluating potential impacts related to GHG from implementation of the proposed project. SCAQMD does not have approved thresholds; however, does have draft thresholds that provides a tiered approach to evaluate GHG impacts, which includes:

- Tier 1: determine whether or not the project qualifies for any applicable exemption under CEQA
- Tier 2: determine whether the project is consistent with a greenhouse gas reduction plan, which will mean that it does not have significant greenhouse gas emissions.
- Tier 3: determine if the project will be below screening values; if a project’s GHG emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land use types: 3,000 MTCO_{2e} per year
 - Residential: 3,500 MTCO_{2e} per year
 - Commercial: 1,400 MTCO_{2e} per year
 - Mixed use: 3,000 MTCO_{2e} per year

In addition, SCAQMD methodology for project’s construction are to average them over 30-years and then add them to the project’s operational emissions to determine if the project will exceed the screening values listed above. To determine whether the project is significant, the City of Riverside uses the conservative SCAQMD Tier 3 threshold of 3,000 MTCO_{2e} per year for all land use types.

Construction

The project construction activities will be temporary, but could contribute to greenhouse gas impacts. Construction activities will result in the emission of GHGs from equipment exhaust, construction-related vehicular activity and construction worker automobile trips. The total estimated construction-related GHG emissions for construction of the proposed residences are shown in Table GHG-1. As shown, the estimated GHG emissions during construction will equal approximately 467.92 MTCO_{2e}, which is equal to approximately 15.60 MTCO_{2e} per year after amortization over 30 years per SCAQMD methodology.

Table GHG-1. Construction-Related GHG Emissions

Emission Year	Estimated CO_{2e} Emissions
2017	249.50
2018	218.42
Total	467.92
Amortized over 30 years	15.60

Source: Entech, 2017.
Notes: CO_{2e}= carbon dioxide equivalent; MT =metric tons; MT/yr = metric tons per year.

Operational

Implementation of the proposed single-family residences will result in area and indirect sources of operational GHG emissions that will primarily result from motor vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the proposed residences will be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. The estimated operational GHG emissions that will be generated from implementation of the proposed single-family residential project are shown in Table GHG-2. Additionally, in accordance with SCAQMD’s recommendation, the project’s amortized construction-related GHG emissions from Table GHG-1 are added to the operational emissions estimate in order to determine the project’s total annual GHG emissions. The project’s emissions modeling is included as Appendix A.

As shown in Table GHG-2, the proposed project’s total net annual GHG emissions will be approximately 1,348.49 MTCO_{2e} per year. This will not exceed the threshold of 3,000 MTCO_{2e} per year. Therefore, the net increase in GHG emissions resulting from implementation of the proposed project will be less than significant.

Table GHG-2. Construction and Operations-Related GHG Emissions

Emission Source	Estimated Emissions CO_{2e} (MT/yr)
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<p>Construction</p> <p>Total Construction 15.60 (Amortized over 30 years)</p> <p>Project Operations</p> <p>Area Sources 22.23 Energy Consumption 319.24 Mobile Sources 921.31 Solid Waste 37.73 Water Consumption 32.38</p> <p>Total (Construction and Operational Emissions) 1,348.49</p> <hr/> <p>Significance Threshold 3,000 Exceed thresholds? No</p> <hr/> <p>Source: Entech, 2017, Appendix A. Notes: CO₂e= carbon dioxide equivalent; MT/yr = metric tons per year.</p>				
b. Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>7b. Response: (Source: City of Riverside Economic Prosperity Action Plan and Climate Action Plan, January 2016)</p> <p>No Impact. The City of Riverside has an Economic Prosperity Action Plan and Climate Action Plan that includes policies and Measures that the City implements to achieve the reduction targets required by the state’s AB 32 requirements and the statewide GHG reduction goals. The City has also adopted the California Building Code (Title 24), which includes the CalGreen requirements that require new development to reduce water and energy consumption, and reduce solid waste. The proposed single-family residential units will comply with these regulations, and do not include any feature that will require significant energy or water use, or otherwise interfere with implementation of these requirements. In addition, as described above, the proposed project will not exceed the regional GHG thresholds. Therefore, the proposed project will not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.</p>				
<p>8. HAZARDS & HAZARDOUS MATERIALS.</p> <p>Will the project:</p>				
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>8a. Response: (Source: General Plan 2025 Public Safety Element, GP 2025 FPEIR, California Health and Safety Code, Title 49 of the Code of Federal Regulations)</p> <p>Less than Significant Impact. A hazardous material is typically defined as any material that due to its quantity, concentration, or physical or chemical characteristics, poses a significant potential hazard to human health and safety or the environment if released. Hazardous materials may include, but are not limited to hazardous substances, hazardous wastes, and any material that will be harmful if released.</p> <p>There are multiple state and local laws that regulate the storage, use, and disposal of hazardous materials. The Riverside County Department of Environmental Health Hazardous Materials Branch is the local administrative agency that coordinates the following programs that regulate hazardous materials and hazardous wastes: Underground Storage Tanks (UST), Above Ground Petroleum Storage Tanks, Hazardous Materials Disclosure Plan Business Plans, and California Accidental Release Program (CalARP).</p> <p>The project will develop and operate 63 single-family residences on a partially developed project site that is within a developed and urban area that is surrounded by similar residential uses. The proposed construction activities will involve transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. In addition, hazardous materials could be used for fueling and serving construction equipment onsite. These types of hazardous materials used during construction are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by state and federal laws that the project is required to strictly adhere to. As a result, the routine transport, use or disposal of hazardous materials during construction activities of the proposed project will be less than significant.</p>				

Operation of the proposed project includes activities related to residential development, which use hazardous materials including solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. Although residents of the project will utilize common types of hazardous materials generally classified as household hazardous waste, normal routine use of these products will not result in a significant hazard to residents or workers in the vicinity of the project. Therefore, operation of the proposed project will not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste during operation of the proposed project. Impacts will be less than significant.

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?

8b. Response: (Source: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016. (Leighton 2016))

Less than Significant with Mitigated Incorporated. As described in the Phase I and limited Phases II prepared for the project site, two partially full 55-gallon drums containing waste oil, two partially full 100-pound containers of grease, a partially full 500-gallon portable aboveground storage tank, four empty 55-gallon drums and several small 5-gallon containers were observed on the southwestern portion of the site; along with large quantities of motor vehicle parts (Leighton 2016). In addition, soils testing was completed on the project site. Sixteen soil samples were taken from proposed residential locations on the project site, which tested to be below the California Department of Toxic Substances Control (DTSC) screening levels, with the exception of two samples that exceeded screening level concentrations for lead. As a result, a laboratory analysis was undertaken to determine if lead will be considered a chemical of concern on the project site. The analysis resulted in a 95 percent upper confidence level on the arithmetic mean for the lead analytical data was calculated, which determined that lead at the project site is 38.53 mg/kg, below the DTSC residential screening level of 80 mg/kg. As a result, lead is not a chemical of concern on the project site (Leighton 2016).

Due to the existence of the waste related hazardous materials on site, such as the 55-gallon drums, storage tanks, and motor vehicle parts, implementation of the proposed project could potentially result in the accidental release of hazardous materials into the environment. Construction workers and the public could be exposed to the substances that are present within the containers and vehicles parts being stored onsite. Additionally, exposure to unanticipated hazardous substances could occur from excavating contaminated soil that may be present from existing or past uses. As a result, Mitigation Measures HAZ-1 will be implemented to reduce the potential risks related to these hazardous materials. Mitigation Measure HAZ-1 requires a certified hazardous waste hauler to remove all 55-gallon drums, storage tanks, motor vehicle parts, and potentially hazardous materials onsite. Should contaminated soils be found onsite during grading and excavation activities, a qualified geotechnical and hazardous materials specialist will collect soil samples and have them analyzed for contaminants of concern for concentrations above worker safety thresholds established by the RWQCB, as required by the RWQCB construction permitting specifications. Any soils with residual agricultural chemicals exceeding the RWQCB Environmental Screening Levels (ESLs) for residential uses or hazardous waste limits will be characterized, removed, and disposed of off-site at a licensed hazardous materials disposal facility in compliance with state regulations. All reports and/or documentation associated with the removal will be submitted to the City of Riverside Fire Prevention Division.

In addition, construction activities will be required to adhere to all applicable regulations regarding hazardous materials storage and handling, as well as to implement construction BMPs to prevent a hazardous materials release and to promptly contain and clean up any spills, which will minimize the potential for harmful exposures. With implementation of Mitigation Measure HAZ-1 and compliance to existing laws and regulations, the project's construction-related impacts to public or the environment from accident conditions involving the release of hazardous materials into the environment will be less than significant.

During operation of the proposed residences, the residents will utilize and store small quantities of hazardous materials such as household cleaners, solvents, paints, and pesticides. These types of hazardous materials are regulated by existing laws that have been implemented to reduce risks related to the use of these substances. In addition, the project must comply with the Southern California Hazardous Waste Management Authority for disposal of any hazardous materials at either appropriate waste facilities or service providers.

Mitigation Measure

Mitigation Measure HAZ-1: Prior to issuance of construction permits, a certified hazardous materials waste hauler shall remove and dispose of all potentially hazardous materials, wastes, and debris; including the: 55-gallon drums, storage

tanks, and motor vehicle parts. Should potentially contaminated soils be identified during clean up or construction activities, the applicant's geotechnical and hazardous materials specialist will collect soils samples and have them analyzed for contaminants of concern for concentrations above worker safety thresholds established by the Regional Water Quality Control Board (RWQCB). Any soils with chemicals exceeding the RWQCB Environmental Screening Levels (ESLs) for residential uses or hazardous waste limits will be characterized, removed, and disposed of off-site at a licensed hazardous materials disposal facility in compliance with state regulations.

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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8c. Response: (Source: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016. (Leighton 2016))

There are no schools within 0.25 mile of the project site. The closest school to the project site is the Liberty Elementary, which is located at 9631 Hayes Street, approximately 0.6 mile from the project site. In addition, as described above, construction and operation of the proposed residential project will involve the use, storage and disposal of small amounts of hazardous materials on the project site. These hazardous materials will be limited and used and disposed of in compliance with federal, state, and local regulations, which will reduce the potential of accidental release into the environment near the school. Furthermore, no element of the proposed project will involve the use of handling of acutely hazardous materials.

The Phase I prepared for the project site conducted a records search to identify if there are any hazardous material uses in the project vicinity that could adversely affect the project site or the proposed residential uses. The information gathered was reviewed for potential environmental concerns; however, none of the offsite listings were identified as a potential impact to the project site or the proposed residential uses (Leighton 2016). Furthermore, the emissions that will be generated from construction and operation of the proposed project were evaluated in the air quality analysis presented in Section 3, and the emissions generated from the proposed project will not cause or contribute to an exceedance of the federal or state air quality standards. Thus, the proposed project will not emit hazardous or handle acutely hazardous materials, substances, or waste near the school, and impacts will be less than significant.

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, will it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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8d. Response: (Source: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016. (Leighton 2016))

No Impact. A search of selected government databases was conducted during preparation of the Phase I and the Environmental Data Resources (EDR) Radius Report environmental database report system did not identify the project site on any list of hazardous material sites (Leighton 2016). In addition, the Phase I conducted a search to identify if there are any hazardous material uses in the project vicinity that could adversely affect the project site. Information from the search was reviewed for potential environmental concerns; however, none of the offsite listings were identified as a potential impact (Leighton 2016). Therefore, the proposed project will not be located on a list of hazardous material sites, and impacts will not occur.

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, will 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"/>
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8e. Response: (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, Riverside County Airport Land Use Compatibility Plan, 2004. <http://www.rcaluc.org/Plans/New-Compatibility-Plan> Accessed October 2016)

No Impact. The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the project site is the Riverside Municipal Airport, which is approximately 2.25 miles north of the project site. As shown on General Plan Airport Safety Zones Figure and Map RI-1, Compatibility Map Riverside Municipal Airport, of the Airport Land Use Compatibility Plan the project site is not located within the Airport

Influence Area Boundary. Therefore, the proposed project, which will develop two-story residential structures, will not result in an airport related safety hazard for people residing or working in the project area.

f. For a project within the vicinity of a private airstrip, will 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"/>
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8f. Response: (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas)

No Impact. There are no private airstrips located within the vicinity of the project site. The closest airstrip is the Flabob Airport, which is located approximately 6 miles north of the project site at 4130 Mennes Avenue. Therefore, the development of the project will not result in a safety hazard related to airstrips for people residing or working in the project area.

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"/>
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8g. Response: (Source Riverside Fire Department, <https://www.riversideca.gov/fire/oem/default.asp>. Accessed October 2016)

Less Than Significant Impact. The City of Riverside’s Office of Emergency Management (OEM), also known as the City of Riverside Fire Department’s Emergency Services Division, administers a comprehensive all-hazards community based emergency management program. The proposed project will provide single-family residential uses that will be permitted and approved in compliance with existing safety regulations, such as the California Building Code and Fire Code to ensure that it will not conflict with implementation of an emergency evacuation.

The proposed construction activities, including equipment and supply staging and storage, will largely occur within the project site and will not restrict access of emergency vehicles to the project site or adjacent areas. During construction of the project Muir Avenue will be closed to through traffic. However, adjacent streets, including Myers Street, Magnolia Avenue, Harrison Street, and Primrose Drive will remain open, providing adequate emergency access to the project area and vicinity. Thus, impacts related to interference with an adopted emergency response of evacuation plan during construction activities will be less than significant.

Operation of the proposed project will also not result in a physical interference with an emergency response evacuation. Direct access to the project site will be provided from Myers Street, Muir Avenue, and Primrose Drive, which are adjacent to the project site. The project is also required to design and construct internal access and provide fire suppression facilities (e.g., hydrants and construction materials) in conformance with the City Municipal Code. In addition, the development plans will be consistent with the requirements in the International Fire Code and Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9). As such, the proposed project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts will be less than significant

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"/>
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8h. Response: (Source: General Plan 2025 Figure 5.7-3 – Fire Hazard Areas)

No Impact. The project site is located within an urban area and not adjacent to wildlands and is not located within an identified wildland fire hazard area, as identified by the General Plan Figure 5.7-3, Fire Hazard Areas. The proposed project will be implemented in compliance with the City Fire Code requirements, as included in Municipal Code Chapter 16.32. Therefore, although the proposed project will result in an increase in the intensity of development when compared to that existing on the site, it will not expose people or structures to a significant risk of loss, injury, or death from wildfires. Therefore, project implementation will not expose people or structures to a significant risk involving wildland fires.

9. HYDROLOGY AND WATER QUALITY.

Will 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"/>
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9a. Response: (Source: General Plan EIR; (Source: Preliminary Hydrology Study, Prepared by MDS)

Consulting, 2017; Water Quality Management Plan, Prepared by MDS Consulting, 2017))

Less than Significant Impact. The proposed project is located within the Santa Ana Region (Region 8) of the California RWQCB, Middle Santa Ana River Watershed Management Area, and in the Santa Ana Hydrologic Unit. The Santa Ana RWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act (CWA) to include both the beneficial uses of specific water bodies and the levels of water quality that must be met and maintained to protect those uses (water quality objectives). Water quality standards for all ground and surface waters overseen by the Santa Ana RWQCB are documented in its Basin Plan, and the regulatory program of the Santa Ana RWQCB is designed to minimize and control discharges to surface and groundwater, largely through permitting, such that water quality standards are effectively attained.

There are eleven principal drainage areas in the City of Riverside. The project site is located in the La Sierra Drainage Area. The project site is largely undeveloped and the soil surface is pervious, with exception of the two residences and a garage that are located in the northwest and southeast portions of the project site. The site currently has 19,190 square feet of impervious surfaces. Existing stormwater that does not infiltrate into the pervious surfaces onsite, sheet flows across the site from the southeast to northwest to an existing off-site 24-inch storm drain on Harrison Street that is approximately 1,000 feet northwest of the project site.

Construction

Construction of the proposed project will require grading and excavation of soils, which will loosen sediment, and then have the potential to mix with surface water runoff and degrade water quality. Additionally, construction will require the use of heavy equipment and construction-related chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents and paints. These potentially harmful materials could be accidentally spilled or improperly disposed of during construction and, if mixed with surface water runoff could wash into and pollute waters.

These types of water quality impacts during construction of the project will be prevented through implementation of a grading and erosion control plan that is required by the Construction Activities General Permit (State Water Resources Board Order No. 2009-009-DWQ, NPDES No. 99-08-DWQ), which requires preparation of a SWPPP by a Qualified SWPPP Developer. The SWPPP is required for plan check and approval by the City's Building and Safety Division, prior to provision of permits for the project, and will include construction BMPs such as:

- Silt Fencing, Fiber Rolls, or Gravel Bags
- Street Sweeping and Vacuuming
- Storm Drain Inlet Protection
- Stabilized Construction Entrance/Exit
- Vehicle and Equipment Maintenance, Cleaning, and Fueling
- Hydroseeding
- Material Delivery and Storage
- Stockpile Management
- Spill Prevention and Control
- Solid Waste Management
- Concrete Waste Management

Adherence to the existing requirements and implementation of the appropriate BMPs per the permitting process will ensure that potential water quality degradation associated with construction activities will be minimized, and impacts will be less than significant.

Operation

The proposed project will introduce single-family residential uses to the project site, which will introduce the potential for pollutants such as, chemicals from household cleaners, pathogens from pet wastes, nutrients from fertilizer, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality.

However, in accordance with State Water Resources Board Order No. 2012-0006-DWQ, NPDES No. CAS000002 the proposed project will be required to incorporate post-construction (or permanent) Low Impact Development (LID) site

design, source control, and treatment control BMPs into the project. The LID site design will to minimize impervious surfaces and provide infiltration of runoff into landscaped areas.

The source control BMPs will minimize the introduction of pollutants that may result in water quality impacts; and treatment control BMPs that will treat stormwater runoff. The project will install catch basins with biotreatment filters to treat stormwater, and remove coarse sediment, trash, and pollutants (i.e., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides). The types of source control BMPs that will be implemented for the proposed project are listed in Table HWQ-1.

Table HWQ-1: Types of Source Control BMPs Incorporated into the Project Design

Type of BMP	Description of BMPs
LID Site Design	<u>Optimize the site layout:</u> The site has been designed so that runoff from impervious surfaces will flow over pervious surfaces. Runoff will be directed to landscape areas and catch basins to slow and retain runoff.
	<u>Use pervious surfaces:</u> Landscaping and catch basins are incorporated into the project design to increase the amount of pervious area and on-site retention of stormflows.
Source Control	<u>Storm Drain Stenciling:</u> All inlets/catch basins will be stenciled with the words “Only Rain Down the Storm Drain,” or equivalent message.
	<u>Need for future indoor & structural pest control:</u> Buildings will be designed to avoid openings that will encourage entry of pests.
	<u>Landscape/outdoor pesticide use:</u> Final landscape plans will accomplish all of the following: <ul style="list-style-type: none"> • Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. • Consider using pest-resistant plants, especially adjacent to hardscape. • Preserve existing native trees and ground cover to the maximum extent possible.
	<u>Refuse Area:</u> Signs will be posted on or near dumpsters not to dump hazardous materials.
	<u>Roofing, gutters and trim:</u> The architectural design will avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.
	<u>Vehicle Maintenance:</u> No vehicle maintenance will be done outdoors.
Treatment Control	<u>Bio-Retention Basins:</u> The catch basins and grate inlets proposed for the project will retain runoff and filter it, prior to discharge.

With implementation of the operational BMPs that will be required by the City pursuant to the NPDES permit, which will be verified during the permitting process for the proposed project, potential pollutants will be reduced to the maximum extent feasible, and development of the proposed project will not violate any water quality standards or waste discharge requirements, including but not limited to increasing pollutant discharges to receiving waters, and impacts will be less than significant.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will 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 will drop to a level which will 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"/>
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9b. Response: (Source: 2015 Urban Water Management Plan for Riverside Public Utilities, June 2016 (UWMP 2016). Accessible: <http://www.riversideca.gov/utilities/pdf/2016/RPU-2015-UWMP.pdf>; Preliminary Hydrology Study, Prepared by MDS Consulting, 2017 (Attachment G); Water Quality Management Plan, Prepared by MDS Consulting, 2017)

Less than Significant Impact. The domestic and irrigation water for the proposed project will be supplied to the project

by the City of Riverside Public Utilities Division. As outlined in the City’s 2015 Urban Water Management Plan (UWMP), regional growth projections from the Southern California Association of Governments (SCAG) 2012 Adopted Growth Forecast, which are based on the City’s General Plan Land Use designations, are used in the UWMP to identify future water demands.

The project site has a General Plan Land Use designation of MDR – Medium Density Residential, which allows up to 8.0 dwelling units per acre, and MU-V - Mixed Use Village, which allows up to 40 dwelling units per acre. The proposed project will result in a density of 6.77 units per acre, which is less than the allowable General Plan Land Use designation criteria, and will be consistent with existing growth projections. Therefore, the development of this site was considered in developing the UWMP.

According to the UWMP, water supply is primarily groundwater from the Bunker Hill Basin, Rialto-Colton Basin, Riverside North, and Riverside South sub-basins. The City has specific extraction rights for these basins. The City’s current extraction rights include: 51,261 AFY from the Bunker Hill Basin; 2,728 AFY from the Rialto-Colton Basin; 10,902 AFY from the Riverside North Basin; and 16,880 AFY from the Riverside South Basin. These extraction rights equal 81,772 AFY and are managed by the Western San Bernardino Watermaster (UWMP 2016). Additional sources of water include recycled water from the Riverside Water Quality Control Plant (RWQCP) and imported water from Western Municipal Water District through a connection at the Metropolitan Water District of Southern California’s (MWD) Henry J. Mills Treatment Plant. The Riverside Public Utilities Division plans to augment these water supplies through conjunctive use projects in the Bunker Hills and Riverside North Basins and recycled water infrastructure projects (UWMP 2016).

In 2015, the total water supply and demand was 75,126 acre-feet, all of which was groundwater. By 2020, the UWMP projects a total demand of 95,221 acre-feet, which includes demand from the proposed project, as is within the build out of the General Plan land use designations and within the regional growth projections. In 2020, the UWMP projects a total water supply of 116,903 acre-feet (18.6 percent of which will be imported supplies from Western Municipal Water District) (UWMP 2016). Local groundwater supplies will continue to be managed by the Western San Bernardino Watermaster, who will ensure that the City’s extraction rights are provided and that groundwater supplies are not substantially depleted. Overall, the project will utilize the planned sources of water within the anticipated water demand and supply projections, and will not substantially deplete groundwater supplies. Impacts related to water demand upon groundwater supplies will be less than significant.

The project site overlies the Arlington Sub-basin, which consists of alluvial deposits and is not currently used by Riverside Public Utilities (who supplies water to the project area) due to the high levels of total dissolved solids and nitrates (UWMP 2016). Because water from this basin is not utilized, water demand from the proposed project (as evaluated in Section 17, Utilities and Service Systems) will not result in depletion of this groundwater resource.

Regarding infiltration of runoff water into the Arlington Sub-basin, the soils report attached the project’s WQMP, describes that the onsite soils are silty to clayey sand that have an infiltration rate of 0.2-inch per hour, which is a very low rate that does not permit infiltration of stormwater onsite (MDS 2016). Thus, the existing onsite soils do not provide a substantial source of infiltration, and no infiltrating of runoff is proposed with the project. The project site currently has 19,190 square feet of impervious surfaces, and the project will develop 250,648 square feet of impervious surfaces; thus, an increase of 231,458 square feet. However, because the onsite soils have a minimal infiltration rate, and most existing runoff sheet flows into the existing off-site storm drain system, implementation of the proposed project (including increased impervious surfaces) will not substantially interfere with groundwater recharge, such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level, and impacts will be less than significant.

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 will result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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9c. Response: (Sources: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016. (Leighton 2016); Preliminary Hydrology Study, Prepared by MDS Consulting, 2017 (Attachment G); Water Quality Management Plan, Prepared by MDS Consulting, 2017))

Less than Significant Impact. The project site does not include a stream, creek, or river. The closest waterbody is the Riverside Canal located approximately 0.6 of a mile east of the project site. In addition, A small unnamed flood control channel is located approximately 0.25 mile southeast of the subject site. The Santa Ana River is located approximately 3.6-

miles north of the subject site (Leighton 2016). Thus, direct impacts related to alteration of the course of a stream or river will not occur.

Construction

Construction of the proposed project will require grading and excavation of soils, which will loosen sediment and could result in erosion or siltation. However, construction of the proposed project requires City approval of a grading and erosion control plan per the Construction Activities General Permit (State Water Resources Board Order No. 2009-009-DWQ, NPDES No. 99-08-DWQ), which requires preparation of a SWPPP by a Qualified SWPPP Developer. The grading and erosion control plan and SWPPP are required for plan check and approval by the City’s Building and Safety Division, prior to provision of permits for the project, and will include construction BMPs to reduce erosion or siltation. Typical BMPs for erosion or siltation, include: use of silt fencing, fiber rolls, gravel bags, stabilized construction driveway, and stockpile management (as described in the response above). Adherence to the existing requirements and implementation of the required BMPs per the permitting process will ensure that erosion and siltation associated with construction activities will be minimized, and impacts will be less than significant.

Operation

The project site has large areas of pervious undeveloped surfaces, and 19,190 square feet of impervious surfaces (MDS 2017). After development of the project, approximately 250,648 square feet of impervious surfaces will exist onsite, which is an increase of 231,458 square feet of impervious area. Although a substantial change of impervious surfaces will occur by implementation of the project, the existing onsite soils have a low infiltration rate (MDS 2017) and the site drainage will be designed to closely mimic the existing drainage conditions, as detailed in the Water Quality Management Plan prepared for the project (MDS 2017). Runoff from the impervious surfaces that will be created by the project will be conveyed into 4 catch basins that will include biofilters that will retain, treat, and slowly discharge stormwater drainage into an offside stormwater drain (MDS 2017). The use of catch basins will reduce the velocity and the potential for erosion. According to the Water Quality Management Plan, the bioretention basins will have a design storm depth of 0.60 inches and will have the following volumes:

- Bioretention Basin 1: a required design capture volume of 8,966.6 cubic feet and 11,115 cubic feet is provided in this basin.
- Bioretention Basin 2: a required design capture volume of 2,108.7 cubic feet and 2,404 cubic feet is provided in this basin.
- Bioretention Basin 3: a required design capture volume of 701 cubic feet and 896 cubic feet is provided in this basin.
- Bioretention Basin 4: a required design capture volume of 231.8 cubic feet and 234 cubic feet is provided in this basin.

As listed, each of the bioretention basins proposed for the project would exceed the required design capture volume, which would accommodate the stormwater from the project site, and impacts would be less than significant. Overall the proposed project will not alter an existing drainage pattern that could result in substantial erosion or siltation, and impacts will be less than significant.

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 will result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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9d. Response: Source: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016. (Leighton 2016); Preliminary Hydrology Study, Prepared by MDS Consulting, 2017 (Attachment G); Water Quality Management Plan, Prepared by MDS Consulting, 2017)

Less than Significant Impact. As described in the previous response, the project site does not include, and is not adjacent to, a stream or river. Thus, direct impacts related to alteration of the course of a stream or river will not occur.

Construction

Construction of the proposed project will require grading and excavation of soils, which could temporarily alter the existing drainage pattern of the site or area and result in flooding on- or off-site. However, as described above, implementation of the project construction requires preparation of a SWPPP by a Qualified SWPPP Developer, which will include construction BMPs to limit an increase in stormwater flows during construction and reduce the potential for

construction related flooding to occur.

In addition, the project site does not receive run-off, and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the project area (06065C0715G), the project site is located within “Zone X,” which is an area determined to be outside of the 0.2 percent annual chance flood. Therefore, there is a low potential for onsite flooding to occur during construction activities, and impacts relating to flooding both on- and off-site during construction will be less than significant.

Operation

As described above, the project site is currently undeveloped and largely pervious. The project will include development of pervious surfaces from building pads, driveways, roadways, sidewalks, and other such project features, which will result in an increase of 231,458 square feet of impervious surfaces. Although a substantial change of impervious surfaces will occur by implementation of the project, the operational drainage will closely mimic the existing drainage conditions because the project will install grate inlets and catch basins that will capture and retain and slowly discharge runoff. The hydrologic design of the proposed project and use of the grate inlets and catch basins will control the velocity and amount of runoff to ensure that runoff does not exceed pre-development conditions (MDS 2017). As detailed in the previous response, each of the catch basins would exceed the required design capture volume, which would accommodate the stormwater from the project site. As a result, implementation of the proposed project will not substantially increase the rate or amount of surface runoff in a manner which will result in flooding on- or off-site, and impacts will be less than significant.

e. Create or contribute runoff water which will exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

9e. Response: (Source: Preliminary Hydrology Study, Prepared by MDS Consulting, 2017; Water Quality Management Plan, Prepared by MDS Consulting, 2017))

Less than Significant Impact.

Construction

As described above, the project will require grading and excavation of soils, which will loosen sediment and could temporarily alter the existing drainage pattern of the site and result in additional sources of polluted runoff. However, implementation of project construction requires approval of a grading and erosion control plan per the City’s existing requirements and approval of a SWPPP by a Qualified SWPPP Developer, which will include construction BMPs to minimize the potential for construction related sources of pollution or increases in stormwater flows that could result in flooding. Adherence to the existing requirements and implementation of the required BMPs per the permitting process will ensure that increases in runoff and pollution associated with construction activities will be minimized, and impacts related to the capacity of storm water drainage systems and generation of polluted runoff will be less than significant.

Operation

As described above, the project the project includes installation of grate inlets and bioretention basins that will capture runoff from the developed project areas (MDS 2017). The hydrologic design of the proposed project and use of the proposed grate inlets and catch basins will control the velocity and amount of runoff to ensure that runoff does not exceed pre-development conditions (MDS 2017). As detailed previously in Response 9c., each of the bioretention basins proposed for the project would exceed the required design capture volume, which would accommodate stormwater from the project site. Thus, implementation of the proposed project will not increase the rate or amount of runoff that could result in exceedance of the stormwater drainage system, and impacts will be less than significant.

Also, as described above and listed in Table HWQ-1, the project has included source control BMPs to minimize the introduction of pollutants; and treatment control BMPs have been included to treat runoff. The project will install bioretention basins with biotreatment filters to treat stormwater, and remove coarse sediment, trash, and pollutants (i.e., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides) pursuant to the NPDES permit. With implementation of the operational source and treatment control BMPs, potential pollutants will be reduced, and implementation of the proposed project will not provide substantial additional sources of polluted runoff; thus, impacts will be less than significant.

f. Otherwise substantially degrade water quality?

9f. Response: (Source: Preliminary Hydrology Study, Prepared by MDS Consulting, 2017; Water Quality

Management Plan, Prepared by MDS Consulting, 2017))

Less than Significant Impact.

Construction

Construction of the proposed project is not expected to pose any additional threats to water quality not already identified above. The project will be required to have an approved grading and erosion control plan and approval of a SWPPP, which will include construction BMPs to minimize the potential for construction related sources of pollution, which will be implemented during construction to protect water quality. As a result, impacts related to the degradation of water quality during construction of the proposed project will be less than significant

Operation

Operation of the project is not expected to pose any threats to water quality in addition to those described above. As described, the proposed project will be required to implement source control BMPs to minimize the introduction of pollutants; and treatment control BMPs to treat runoff. With implementation of the operational source and treatment control BMPs that will be required by the City during the project permitting and approval process, potential pollutants will be reduced to the maximum extent feasible, and implementation of the proposed project will not substantially degrade water quality, and impacts will be less than significant.

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"/>
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9g. Response: (Source: General Plan EIR Figure 5.8-2, Flood Hazard Areas; FEMA FIRM Map Number 06065C0715G)

No Impact. The City’s General Plan EIR Figure 5.8-2, Flood Hazard Areas and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the project area (06065C0715G) identifies the project site is located within “Zone X,” which is an area determined to be outside of the 0.2 percent annual chance flood. Thus, the proposed project will not 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, and impacts will not occur.

h. Place within a 100-year flood hazard area structures which will impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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9h. Response: (Source: General Plan EIR Figure 5.8-2, Flood Hazard Areas; FEMA FIRM Map Number 06065C0715G)

No Impact. As described in the response above, the project site is not located within a 100-year flood hazard area. Thus, the proposed project will not place structures within a flood hazard area that will impede or redirect flood flows, and impacts will not occur.

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 type="checkbox"/>
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9i. Response: (Source: General Plan EIR Figure 5.8-2, Flood Hazard Areas)

No Impact. As described in the response above, the project site is not located within a 100-year flood hazard area. In addition, the City’s General Plan EIR Figure 5.8-2, Flood Hazard Areas, shows that the proposed project site is not located within a levee or dam inundation pathway. Thus, the proposed project will not 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.

j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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9j. Response: (Source: General Plan EIR, Section 5.8, Hydrology and Water Quality; Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016 (Leighton 2016))

No Impact. As described in the City’s General Plan EIR, a seiche is a to-and-fro vibration of a waterbody that is similar to the slopping of water in a basin. Once initiated, oscillation within the waterbody can continue independently. Seiches are often triggered by earthquakes. The most likely area that could be subject to seiche in the Project Area is Lake Mathews and Lake Evans in Fairmont Park (GP EIR 2007). The project site is approximately 4.25 miles from Lake Mathews, which

is the closest water body, and 6.7 miles from Lake Evans. Due to the distance of the project site from these two waterbodies, impacts related to seiche to the project site will not occur.

Also, as described in the City’s General Plan EIR, tsunamis are tidal waves that occur in coastal areas; because the project area is not located in a coastal area, no impacts due to tsunamis will occur.

The project site is relatively flat and no onsite mudslides or mudflow will occur. In addition, the properties surrounding the project site are developed areas that do not contain substantial slopes and will not be subject to a potential mudslide. Furthermore, as described in the Preliminary Geotechnical Investigation that was prepared for the site, slope instability and landslides are not an issue at the site, and the site is not considered susceptible to slope instability (Leighton 2016). As a result, impacts related to mudslides or mudflow will not occur from implementation of the proposed project.

10. LAND USE AND PLANNING:				
Will the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10a. Response: (Source: Project Description and Existing Setting)

No Impact. The physical division of an established community could occur if a major road (expressway or freeway, for example) were built through an existing community or neighborhood, or if a major development was built which was inconsistent with the land uses in the community such that it divided the community. The environmental effects caused by such a facility or land use could include lack of, or disruption of, access to services, schools, or shopping areas. It might also include the creation of blighted buildings or areas due to the division of the community.

The proposed project site is partially developed. Two residences and a garage are located on the northwest and southeast portions of the site. In addition, two parcels in the southern portion of the project area are used for vehicle and material storage, and the rest of the project area is vacant. The project area is surrounded by developed land uses that include single-family residential and roadways. The proposed single-family residential project is consistent with the existing single-family residential land uses surrounding the project site. The proposed project will also complete development of the roadway infrastructure of the neighborhood, which will provide more connectivity to the other residential areas (as described in Section 16, Transportation/Traffic). Therefore, implementation of the proposed project will not physically divide an established community, and impacts will not occur.

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"/>
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10b. Response: Source: General Plan 2025, General Plan 2025 Figure LU-10 – Land Use Policy Map, Table LU-5 – Zoning/General Plan Consistency Matrix, Title 19 – Zoning Code, Title 18 – Subdivision Code, Title 7 – Noise Code, Title 17 – Grading Code, Title 20 – Cultural Resources Code, Title 16 – Buildings and Construction and Citywide Design and Sign Guidelines)

Less than Significant Impact. The project site has a General Plan Land Use designation of MDR – Medium Density Residential, which allows up to 8.0 dwelling units per acre, and MU-V - Mixed Use Village, which allows up to 40 dwelling units per acre. A portion of the Project site is located within the Magnolia Avenue Specific Plan, Arlington District which requires compliance with the Development standards of the base zone, R-1-7000 - Single-Family Residential Zone. The site has two zoning designations: R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones, which allow for a density up to 6.2 dwelling units per acre, or up to 8.0 dwelling units per acre with a Planned Residential Development permit. The proposed project is requesting a Planned Residential Development permit and will develop 63 single-family residences on the 9.3-acre project site, which will result in 6.77 single-family dwelling units per gross acre, which will be consistent with the existing land use and zoning designations.

As part of the Planned Residential Development (PRD) request, the project will provide modified front yard and side yard setbacks that are inconsistent with the standards included in Section 19.780.060 B.2 of the City’s Municipal Code, but are permissible with approval of a PRD. The proposed reduced front yard setback of a minimum of 7 feet on some lots provide opportunities for front patios adjacent to the sidewalks with the intention of providing a visual enhancement to the homes, facilitating community interaction, and will function as gathering places for the residents. The proposed reduced side yard

setback of a minimum of 4 feet on some lots allows for pedestrian connections from lots 10 and 19 along Myers Street to access the amenities within the PRD and still maintains adequate setbacks between buildings. The proposed variance will allow for reduced project perimeter setbacks on lot 10 to be consistent with the existing development along Myers Street. Otherwise, the project is consistent with the required setbacks and other development regulations as established in the Planned Residential Development permit. The proposed modification to the front yard setbacks will improve the aesthetics and function of the community, and will not result in a conflict with a regulation that could result in an environmental effect. The reduced setback would not result in increased home square footage that is out of character with the rest of the proposed community or existing homes. Therefore, project impacts related to conflict with an applicable land use plan or zoning regulation will be less than significant.

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"/>
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10c. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, November 2016)

No Impact. As described previously in Section 4, a habitat survey was conducted on the project site pursuant to MSHCP Section 6.1.2. The project area is located in the MSHCP’s Cities of Riverside and Norco Area Plan area; however, the site is not within a designated MSHCP “Criteria Area”. The nearest Criteria Area is over two miles away from the site. The project area is not located in MSHCP-designated existing or proposed Core, Extension of Existing Core, Non-Contiguous Habitat Block, Constrained Linkage, or Linkage areas (Psomas 2017). In addition, as described above, the project site does not contain any riparian/riverine habitat areas, vernal pools, sensitive plant species, or sensitive wildlife species that are included within the MSHCP.

As previously described, Section 6.3.2 of the MSHCP requires focused surveys for burrowing owl for sites within the designated “Additional Survey Needs Area”. The project site is located outside the “Additional Survey Needs Area” for burrowing owl (Psomas 2017); therefore, focused surveys for burrowing owl are not required. Also, as described previously, Section 6.1.4 of the MSHCP provides Urban/Wildlands Interface Guidelines to minimize urban/wildlands interface issues; however, because the project site is farther than two miles from the nearest MSHCP Conservation area and has no adjacent or nearby natural open space areas, no urban/wildlands interface impacts will result from the proposed project. Furthermore, as described in response 4d, the project will be required to conduct pre-construction surveys for nesting birds, which are covered by the MSHP. As a result, the proposed project will not conflict with the provisions of the MSHCP, and impacts will not occur.

11. MINERAL RESOURCES. Will the project:				
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a. Result in the loss of availability of a known mineral resource that will 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"/>
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11a. Response: (Source: General Plan EIR Figure 5.10-1, Mineral Resources)

No Impact. The General Plan EIR, Figure 5.10-1, Mineral Resources identifies that the project site is within MRZ-4, which is defined as areas where there is insufficient data to assign any mineral resource designation. The project area is within a developed suburban area that does not contain identified mineral resources, and the proposed project will develop the 9.3-acre infill parcel with residential uses. No existing or abandoned quarries or mines exist in the area surrounding the project site. Therefore, the proposed project will not result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state, and impacts will not occur.

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"/>
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11b. Response: (Source: General Plan EIR Figure 5.10-1, Mineral Resources)

No Impact. The project site is designated for single-family residential uses by the City’s General Plan and zoning code. The project site is located within a developed suburban area and surrounding areas do not include mineral resource recovery sites. Thus, the proposed project will not 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, and impacts will not occur.

12. NOISE. Will the project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>12a. Response: (Source: General Plan and Municipal Code, Noise Measurement Data and Modeling (Attachment G))</p> <p>Less than Significant Impact. The proposed project will develop and operate 63 single-family residences on the project site. Potentially significant noise impacts related to exposure of persons to or generation of noise levels in excess of standards from construction activities will occur from grading and construction equipment noise. Operational noise impacts generated by the project could occur from placement of the new residential uses in a noise environment that is not consistent with the City’s planning regulations, from vehicular noise that will be generated project trips, and from onsite mechanical equipment.</p> <p>Noise sensitive receptors (land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise) typically include residential dwellings, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. As previously noted, the project site is located within a developed residential neighborhood, sensitive receptors include residences that are adjacent to the project site. The applicable City noise thresholds and standards, as well as the potential impacts from implementation of the proposed project, are described below.</p> <p><i>Noise Thresholds and Standards</i></p> <p>A decibel (dB) is a unit used to express the intensity of a sound wave. Since the human ear is not equally sensitive to all sound frequencies within the entire auditory spectrum, the dBA descriptor (or A-weighted sound level) is used because it factors sounds more heavily within the range of maximum human sensitivity to sound frequencies. Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of sounds from distant sources that create a relatively steady background noise in which no particular source is identifiable. For this type of noise, a single descriptor called the Leq (or equivalent sound level) is used. For most acoustical studies, the monitoring interval is generally taken as one-hour, and is abbreviated Leq-h.</p> <p>The minimum change in sound level that the healthy human ear can detect is approximately 3-dBA and a 5-dBA change in noise levels is considered readily perceptible. This increment is commonly accepted under CEQA as representing an impact threshold. The 5-dBA limit is also accepted by the City as the significance threshold to determine a proposed project’s impact on the affected (existing) environment.</p> <p><i>City Noise Regulations</i></p> <p>The City of Riverside’s Land Use Noise Compatibility Criteria considers noise levels of up to 60 dB “normally acceptable” for residential use and levels of up to 65 dB to be “conditionally acceptable”. Conditionally acceptable requires that new development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features in the design are determined.</p> <p>In addition, the City of Riverside’s Noise Code (Title 7- Ord.6273. 1) sets internal and external noise standards for specific land uses/zoning (Municipal Code Sections 7.25.010 and 7.30.015). The exterior noise standard for residential land uses is 45 dBA between 10:00 p.m. and 7:00 a.m., and 55 dBA between 7:00 a.m. and 10:00 p.m. The Municipal Code also states that it shall be unlawful for any person to cause or allow the creation of any exterior noise that exceeds the following:</p> <ol style="list-style-type: none"> 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.

The City's interior noise standard for residential land uses is 35 dBA between 10:00 p.m. and 7:00 a.m., and 45 dBA between 7:00 a.m. and 10:00 p.m. The Municipal Code also states that 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;
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.

Fixed Operational Noise

Fixed operational noise (such as HVAC or other fixed equipment) are subject to the property line noise limits established in Sections 7.25.010 and 7.30.015 of the City's Municipal Code, which limits noise levels to 55 dBA from 7:00 am to 10:00 pm and 45 dB Leq from 10:00 pm to 7:00 am for a cumulative period of more than thirty minutes in any hour at a sensitive receiver.

Construction Noise Regulations

Pursuant to the City's construction noise regulations (Municipal Code Section 9.09.030), operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, grading or demolition work is not permitted between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 5:00 p.m. and 8:00 a.m. on Saturdays or at any time on Sunday or federal holidays. In addition, Municipal Code Section 7.35.020, exempts construction noise sources from the City's exterior and interior noise standards; provided that a construction permit has been obtained from the City as required; and provided said activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday.

Traffic Noise Thresholds

Based on local noise criteria as utilized in the City's General Plan EIR, if project-related traffic will increase the CNEL at a sensitive receptor by 5 dBA is considered a potentially significant impact because a 5 dBA change in noise levels is considered readily perceptible to a healthy human ear.

Existing Ambient Noise

The project site is adjacent to Primrose Drive and Myers Street. Traffic along these roads provides the dominant source of existing ambient noise. One long-term and three short-term noise measurements were taken in the vicinity of the project area on November 16, 2016. The purpose of the measurements was to characterize existing noise levels adjacent to the project area and at sensitive receptors. Figure N-1 shows the ambient noise measurements and sensitive receiver locations and Table N-1 provides the existing ambient noise at these sites, which ranges between a low of 47 dBA and a high of 56 dBA along Muir Avenue.



R = Receptor
 ST = Short-term noise measurement
 LT = Long-term noise measurement



PRIMROSE RESIDENTIAL
 City of Riverside

FIGURE N-1
Noise Measurement & Sensitive Receptor Locations

Table N-1: Summary of Existing Ambient Noise

Receiver	Existing dBA
ST-1	55
ST-2	55
ST-3	55
R1	52
R2	52
R3	51
R4	52
R5	50
R6	49
R7	52

Source: Entech, 2017, Attachment G.

Operational Noise and Vehicular Noise

The proposed project is estimated to generate a total of 609 daily trips to and from the project site. Of these trips 48 will occur in the a.m. peak hour and 64 will occur in the p.m. peak hour (TranspoGroup, 2016). The volume of vehicles entering the project area (i.e., inbound) vehicles is forecast at no more than 12 trips during the a.m. peak hour and 41 vehicle trips during the p.m. peak hour, which equates to approximately one vehicle every 5 minutes in the a.m. peak hour and one vehicle every 1.5 minutes during the p.m. peak hour (TranspoGroup, 2016). This increase in traffic resulting from implementation of the project will result in a limited increase the ambient noise levels in proximity to the project area.

The significance of the project’s traffic noise impacts is determined by comparing existing ambient noise levels with project-related noise levels. As utilized in the City’s General Plan EIR, if project-related traffic will increase the CNEL at a sensitive receptor by 5 dBA a significant impact could occur.

The noise levels were calculated using the FHWA’s Highway Traffic Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the Traffic Impact Study (TranspoGroup, 2017). As shown in Table N-2, the proposed project will increase noise levels at sensitive receptor sites by a maximum of 1 dBA Leq with implementation of the proposed project. This increase will not exceed the 5 dBA threshold; thus, impacts related to traffic noise increases to the sensitive receptor locations will be less than significant.

Table N-2: Traffic Noise Levels

Receiver	Existing dBA	Predicted dBA	Increase
R1	52	52	0
R2	52	52	0
R3	51	51	0
R4	52	53	1
R5	50	50	0
R6	49	49	0
R7	52	52	0

Source: Entech, 2017, Attachment G.

Stationary Equipment Noise

Once the proposed project is operational, noise levels generated at the project site will mainly occur from new stationary equipment such as heating, ventilation, and air conditioning (HVAC) units that will be installed for the new residences. Although the operation of this equipment will generate noise, the design of these onsite HVAC units and exhaust fans will be required to comply with the noise limit regulations of the City’s Municipal Code Sections 7.25.010 and 7.30.015 that do not allow exterior noise to substantially exceed 45 dBA between 10:00 p.m. and 7:00 a.m., and 55 dBA between 7:00 a.m. and 10:00 p.m. Meeting these exterior standards will also meet the City’s interior noise standards with implementation of standard construction, which will be required by the City. Therefore, impacts related to generation of noise in excess of standards will not occur from operation of the proposed project.

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

12b. Response: (Source: California Department of Transportation’s (Caltrans) *Transportation and Construction Vibration Guidance Manual (2013)*)

Less than Significant Impact. The proposed project will develop and operate 63 single-family residences on the project site. Potentially significant groundborne vibration impacts could occur from demolition of the existing residential

structures, grading, and construction activity.

Vibration Thresholds and Standards

There are no state vibration standards applicable to the proposed project. In addition, Caltrans does not provide official Caltrans standards for vibration. However, the Caltrans *Transportation and Construction Vibration Guidance Manual* (2013) provides guidelines for assessing the potential for adverse vibration effects related to structural damage and human perception. The vibration guidelines established by Caltrans for assessing structural damage and human perception are shown in Tables N-3 and N-4, respectively.

Table N-3: Caltrans Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
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

Source: Caltrans, 2013.

Table N-4: Caltrans Vibration Annoyance Potential Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.35	0.01
Distinctly perceptible	0.24	0.035
Strongly perceptible	0.90	0.10
Severe	2.0	0.40

Source: Caltrans, 2013.

Existing Vibration Levels

Aside from periodic construction work that may occur in the vicinity of the project area, other sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on the roadways that are adjacent to the project area. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 in/sec PPV), and these levels could reach 72 VdB (approximately 0.016 in/sec PPV) when trucks pass over bumps in the road (FTA, 2006).

Construction Vibration

The project includes temporary and intermittent use of construction equipment for various construction activities that can result in the generation of groundborne vibration levels. Groundborne vibration is a concern when sensitive receptors, such as residences, are in proximity to the vibration sources. The nearest sensitive receptor that could be exposed to vibration levels from project construction are the single-family residences that are adjacent to the project site. No pile driving or blasting, which are considered to be major sources of vibration levels, will be required for the proposed project; however, construction would utilize jackhammers, bulldozers, and loaded trucks.

The various PPV vibration velocities for this construction equipment, along with their corresponding RMS velocities (in VdB), that can generate perceptible vibration levels are identified in Table N-4. As shown, vibration velocities could range from approximately 0.003 to 0.089 inch-per-second PPV at 25 feet from the source activity, depending on the type of construction equipment in use, which corresponds to RMS velocity levels of 58 to 87 VdB at 25 feet, respectively, from the source activity. For the purpose of this analysis, the vibration level for a large bulldozer provided in Table N-5 was used to evaluate vibration source levels at the nearest sensitive receptor from project construction.

Table N-5: Vibration Source Levels for Construction Equipment at 25 Feet

Equipment	PPV (in/sec)	RMS (VdB)
Large Bulldozer	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Caltrans, 2013.

For the purpose of this analysis, the single-family residential structures adjacent to the project site are considered to be at 25 feet from vibrating related construction activities, and are considered older residential structures per the Caltrans vibration criteria (refer to Table N-4), and are not considered fragile buildings. As the existing single-family residences will not be exposed to PPV groundborne vibration levels that exceed the 0.3 in/sec PPV threshold for continuous/frequent intermittent vibration sources shown in Table N-6, vibration impacts associated with building damage will be less than significant. Additionally, based on Caltrans criteria for human annoyance (refer to Table N-5), the vibration levels experienced at the single-family residences will be between distinctly and strongly perceptible. However, construction activities will only be temporary in nature and any construction activities occurring along the project site boundary directly adjacent to the single-family residences will only occur for a short duration in relation to the overall project construction schedule. In addition, project construction will occur in accordance with the permissible construction hours established by the City. Thus, vibration impacts associated with human annoyance will be less than significant.

Operation Vibration

The proposed single-family residential land uses will not involve activities or operation of stationary or mobile equipment that will result in high vibration levels, which are more typical for large industrial projects that employ heavy machinery. During project operations, the primary source of vibration will likely be vehicle circulation within and adjacent to the project area. However, the FTA’s *Transit Noise and Vibration Impact Assessment* states that it is unusual for vibration from vehicular sources (including buses and trucks) to be perceptible, even in locations close to major roads. As such, no sources of “excessive” groundborne vibration or noise levels are anticipated during operations of either residential area.

c. A substantial permanent 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"/>
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12c. Response: (Source: Noise Measurement Data and Modeling)

Less than Significant Impact. As described above, operation of the proposed project will generate noise from vehicle trips to and from the proposed residences and mechanical equipment that will be used to operate the proposed uses.

Vehicle Noise

As described above, the proposed project will generate 609 daily vehicular trips to and from the project site, and a significant impact related to traffic noise will occur if the project results in an increase of 5 dBA CNEL. However, as shown on Table N-3, the proposed project will increase noise levels by a maximum of 1 dBA. This increase will not exceed the 5 dBA CNEL threshold. Therefore, traffic from the proposed project will not result in a substantial permanent increase in ambient noise levels in the project vicinity, and impacts will be less than significant

Stationary Equipment Noise

As described previously, equipment on the project site, including HVAC units and exhaust fans will be installed in compliance with the City’s Municipal Code Sections 7.25.010 and 7.30.015 that requires that all equipment be installed in compliance with the City’s noise limits. Therefore, onsite stationary noise equipment associated with the proposed project will not result in a substantial permanent increase in ambient noise levels, and impacts will be less than significant.

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"/>
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12d. Response: (Source: Noise Measurement Data and Modeling)

Less than Significant Impact. As discussed in checklist response 12a, construction activities are exempted pursuant to Section 7.35.020[G] of the Noise Code. Further, operation of the proposed residential uses would not generate temporary or periodic increases in noise. Operational noise that would be generated by the proposed project is evaluated previously in Responses 12.a and 12.c.

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, will 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>12e. Response: (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, Riverside County Airport Land Use Compatibility Plan, 2004. http://www.rcaluc.org/Plans/New-Compatibility-Plan. Accessed October 2016)</p> <p>No Impact. The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. The closest airport to the project site is the Riverside Municipal Airport, which is approximately 2.25 miles north of the project site. As shown on the General Plan Airport Safety Zones Figure and Map RI-1 Compatibility Map Riverside Municipal Airport, of the Airport Land Use Compatibility Plan, the project site is not located within the Airport Influence Area Boundary. Therefore, the proposed project will not expose people residing or working in the project area to excessive airport related noise levels.</p>				
f. For a project within the vicinity of a private airstrip, will 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>12f. Response: (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas)</p> <p>No Impact. There are no private airstrips located within the vicinity of the project site. Therefore, the development of the project will not expose people residing or working in the project area to excessive noise levels related to airstrips.</p>				
<p>13. POPULATION AND HOUSING.</p> <p>Will 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>13a. Response: (Source: General Plan 2025)</p> <p>Less than Significant Impact. The project site has a General Plan Land Use designation of MDR – Medium Density Residential that allows up to 8.0 dwelling units per acre and MU-V - Mixed Use Village, which allows up to 40 dwelling units per acre. The site has a zoning designation of R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones which allow up to 8.0 dwelling units per acre with a Planned Residential Development permit. The proposed project is requesting a Planned Residential Development permit and will develop 63 single-family residences on the 9.3-acre project site, which will result in 6.77 single-family dwelling units per gross acre, which is consistent with the General Plan land use and zoning designations.</p> <p>The California Department of Finance 2016 estimates for the City indicate that the City of Riverside has 3.29 persons per household. Based on this, the proposed project will generate an additional population of 207 residents. As this growth was anticipated by the General Plan, the project will not directly induce substantial population growth in the area, and impacts will be less than significant.</p> <p>In addition, the project is an in-fill residential project. The site is located in-between existing single-family residential uses. The project will be served by the existing public roadways that surround the project area; and will connect into the existing utility and infrastructure system. The project does not include, and will not result in, an extension of roads or other infrastructure outside of the project area that could induce substantial population growth in the area. Therefore, the proposed project will result in less than significant impacts related to both direct and indirect inducement of growth.</p>				
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>13b. Response: (Source: General Plan 2025)</p> <p>Less than Significant Impact. The proposed project site is developed with two single-family residences that will be demolished, as part of the construction process. However, the proposed project will develop 63 single-family residences onsite, which will result in a net increase of 61 additional single-family residences. Therefore, the proposed project will</p>				

result in additional housing in the project area and will not displace a substantial number of existing residences, and will not necessitate the construction of housing elsewhere. Thus, impacts will be less than significant.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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13c. Response: (Source: General Plan 2025)

Less than Significant Impact. As described above, there are two existing single-family residences on the project site that will be demolished by the project. However, the project will result in a net increase of 61 single-family residences on the project site. Therefore, the proposed project will not displace substantial numbers of people and will not necessitate the construction of replacement housing elsewhere.

14. PUBLIC SERVICES.

Will 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"/>
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14a. Response: (Source: General Plan 2025 EIR, Section 5.13, Public Services; City of Riverside Fire Department Website: <https://www.riversideca.gov/fire/>)

Less than Significant Impact. The City of Riverside Fire Department operates 14 fire stations throughout the City. There are currently 5 fire stations within 4 miles of the project site, as listed below:

- Station Number 2, located at 9449 Andrew Street, 0.5 mile from the project site
- Station Number 12, located at 10692 Indiana Avenue, 2.2 miles from the project site
- Station Number 8, located at 11076 Hole Avenue, 2.5 miles from the project site
- Station Number 5, located at 5883 Arlington Avenue, 3.4 from the project site
- Station Number 10, located at 2590 Jefferson Street, 3.6 miles from the project site

Implementation of the proposed project will be required to adhere to the Uniform Fire Code, as included in the City’s Municipal Code Section 16.32.10 and will be reviewed by the City’s Fire Prevention Bureau to ensure that the project plans meet the fire protection requirements.

Due to the increase in onsite residents (approximately 207) that will occur from 63 single-family residences on the project site, the project will result in an incremental increase in demand for fire protection and emergency medical services; however, the increase in population is limited, and will not increase demands such that provision of a new or physically altered fire station will be required that could cause environmental impacts. Therefore, impacts related to fire protection services will be less than significant.

b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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14b. Response: (Source: General Plan 2025 EIR, Section 5.13, Public Services; City of Riverside Police Department Website: <https://www.riversideca.gov/rpd/>)

Less than Significant Impact. The City of Riverside Police Department provides law enforcement services to the City. The Police Department has two stations located at:

- 10540 Magnolia Avenue, which is 1.3 miles from the project site
- 4102 Orange Street, which is 7 miles from the project site

As described by the City’s General Plan EIR, the Police Department does not use a formula for calculating the number of officers per capita. Instead, staffing is based on growth and evaluated on a project-by-project basis. The proposed project will result in an onsite population that will create the need for police services. Calls for police service during project construction may include: theft of building materials and construction equipment, malicious mischief, graffiti, and

vandalism. Operation of the single-family residences could generate a typical range of police service calls, such as vehicle burglaries, residential thefts, and disturbances. To reduce the potential for these types of crimes, security concerns are addressed in the project design by providing low-intensity street lighting and exterior building lighting to provide security.

Although an incremental increase in calls for law enforcement services could result from implementation of the project, the need for law enforcement services from the proposed project will not be significant when compared to the current service levels of the Riverside Police Department and the small residential nature of the proposed project. The additional 207 residents that are anticipated to be generated from full occupancy of the proposed project will not require the construction or expansion of police stations. Overall, the proposed project will not result in the need for, new or physically altered police protection facilities, and substantial adverse physical impacts associated with the provision of new or expanded facilities will not occur, and impacts are less than significant.

c. Schools?

14c. Response: (Source: Riverside Unified School District 2016 School Facilities Needs Analysis (RUSD 2016), Riverside Unified School District Website: <http://www.rusdlink.org/>; California Department of Education DataQuest <http://dq.cde.ca.gov/dataquest/>)

Less than Significant Impact. The project site is located within the Riverside Unified School District. The schools serving the project site are listed and described below.

- Liberty Elementary School (grades K-6), located at 9631 Hayes Street. The school has a capacity of 875 (based on a capacity of 25 students per classroom (RUSD 2016). In the 2015-16 school year had a total enrollment of 805 students; thus, having capacity for 70 additional students.
- Chemawa Middle School (grades 7-8), located at 8830 Magnolia Avenue. The school has a capacity of 1,188 (based on a capacity of 27 students per classroom (RUSD 2016). In the 2015-16 school year had a total enrollment of 883 students; thus, having capacity for 305 additional students.
- Arlington High School (grades 9-12), located at 2951 Jackson Street. The school has a capacity of 2,619 (based on a capacity of 27 students per classroom (RUSD 2016). In the 2015-16 school year had a total enrollment of 1,928 students; thus, having capacity for additional students.

As described in the Riverside Unified School District 2016 School Facilities Needs Analysis, the school district uses the student generation factors that are listed in Table PS-1. As shown in the table below, it is anticipated that approximately 32 total students will be generated from build out of the proposed project. The Riverside Unified School District levies school fees of \$3.77 per square foot of new residential construction. Pursuant to Government Code Section 65995 et seq. payment of these fees will offset any potentially significant impacts to school facilities, and impacts will be less than significant.

Table PS-1: Students Generated by the Project

School	Grades Served	Student Generation Rates for Single-Family Units	Number of Students Generated by Project
Elementary	K-6	0.2945	18
Middle	7-8	0.0906	6
High School	9-12	0.1230	8
Total	K-12	0.5081	32

Source: Riverside Unified School District 2016 School Facilities Needs Analysis

d. Parks?

14d. Response: (Source: General Plan EIR, Section 5.14, Recreation)

Less than Significant Impact. There are nine existing park facilities that provide more than 123 acres of park and recreational area within two miles of the project site, which include:

- Arlington Park, which is 4.77-acres, located at 3860 Van Buren Boulevard, 0.7 mile from the project site
- Challen Park, which is 33.01-acres, located at 4602 Challen Avenue, 1.5 mile from the project site
- Don Lorenzi Park, which is 9.08-acres, located at 4230 Jackson Street, 1.6 miles from the project site

- El Dorado Park, which is located at 7750 Remington Drive, 1.7 miles from the project site
- Arlington Heights Sports Park, which is 34.39 acres, located at 9401 Cleveland Avenue, 1.8 miles from the project
- Harrison Park, which is 6.49-acres, located at 2851 Harrison Lane, 1.8 miles from the project site
- Don Derr Park, which is 21.44-acres, located at 3995 Monroe Street, 1.9 miles from the project site
- Myra Linn Park, which is 7.89-acres, located at 4540 Meredith Street, 1.9 miles from the project site
- Collette Park, which is 5.60-acres, located at 10950 Collette Avenue, 2.0 miles from the project site

As described by the General Plan EIR, the City’s standards for parkland distribution is 3 developed acres per 1,000 population. The proposed project involves the construction and occupancy of 63 single-family residences, which when fully occupied, will house approximately 207 residents. Based on the number of residents, the project will create a demand for 0.62-acre (or 27,007 square feet) of parkland.

As provided in the Project Description, the project includes development of five onsite park facilities, including: a fitness/tot lot park, a Bocce ball court park, a garden park, a paseo/tot lot park, and a pool recreation area. Overall, the project provides 35,005 square feet of common open space in the form of a park and recreational space, which is 7,998 square feet more than the required development standards. In addition, a slight increase in demand on existing parks could occur from the 207 residents that will be generated from the project. However, impacts from the proposed project are anticipated to be minimal due to the limited number of residents that will be generated by the project, the provision of onsite facilities, and due to the existing amount of parkland that is within two miles of the project site. The slight increase in demand for park facilities that could occur from the 207 residents residing onsite will be spread amongst the existing facilities. Therefore, the project will not increase demands such that provision of a new or physically altered parks will be required that could cause environmental impacts, and impacts will be less than significant.

In addition, to ensure the future provision of parkland in the City, the project will be required to pay parkland development impact fees for regional parks, local parks, and aquatics facilities. Payment of these fees is required as a condition of approval. Overall, impacts related to parks will be less than significant.

e. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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14e. Response: (Source: Riverside Public Library Website: <https://www.riversideca.gov/library/about.asp>)

Less than Significant Impact. The City of Riverside Pubic Library consists of one Main Library and seven branch libraries. The library system has a collection of approximately 425,000 books and other library materials, 400 public access computers, and an annual circulation of 1.23 million. The Arlington Branch Library is over 13,000 square feet and is located at 9556 Magnolia Avenue, which is 0.5 mile from the project site. The proposed project may result in an incremental increase in the use of libraries and other public facilities. However, with a projected total of approximately 207 people occupying the residences, project development is not expected to substantially increase the demand of these services such that construction of new or expanded facilities will be required. Thus, impacts will be less than significant.

15. RECREATION.

a. Will the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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15a. Response: (Source: General Plan EIR, Section 5.14, Recreation)

Less than Significant Impact. As described in response to Impact 14.d), there are nine existing park facilities that provide more than 123 acres of park and recreational area within two miles of the project site. The proposed project includes development of 35,005 square feet of park and recreational space onsite. The proposed project will provide housing for approximately 207 residents, which will create a slight increase in demand on the existing recreation facilities; however, impacts from the proposed project are anticipated to be minimal due to the provision of park and recreational space onsite, the limited number of residents that will be generated by the project, and the amount of existing recreation facilities that are in the vicinity of the project site. The slight increase in demand for recreation facilities that could occur from the 207 residents will be spread amongst the existing facilities. Therefore, the project will not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated, and impacts will be less than significant. In addition, as described above the project will be required to pay parkland development impact fees for regional parks, local parks, and aquatics facilities. Payment of these

fees is required as a condition of approval.

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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15b. Response: (Source: General Plan EIR, Section 5.14, Recreation)

Less than Significant Impact. As described previously, the proposed project includes 35,005 square feet of park and recreational amenities. The impacts of development of the proposed recreational amenities are considered part of the impacts of the proposed project as a whole and are analyzed throughout the various sections of this IS/MND. For example, activities such as excavation, grading, and construction as required for the recreational components of this project will result in impacts that are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation and Traffic. In addition, operation of the project will only result in the demand for parks and recreational facilities as articulated in the previous response, which will not require the construction or expansion of recreational facilities. Therefore, the proposed project will not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. As a result, impacts related to recreation will be less than significant.

16. TRANSPORTATION/TRAFFIC. Will the project result in:				
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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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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16a. Response: (Source: Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017)

Less Than Significant Impact.

Traffic Thresholds and Standards

The City of Riverside Traffic Impact Analysis Preparation Guide (January 2016) provides the level of service (LOS) standards and acceptable delay increases for use in preparing traffic analysis, which states that LOS D is the maximum acceptable threshold for the study intersections and roadways of Collector or higher classification. For projects in conformance with the General Plan, a significant impact occurs at a study intersection when the peak hour LOS falls below D per Policy CCM-2.3; however, LOS E is allowed at peak hours on arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges. Policy CCM-2.3 is provided below.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials that are used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

In addition, the City of Riverside identifies the following as impacts under CEQA:

- 1) When Existing Traffic conditions already exceed the General Plan 2025 target LOS.
- 2) Project Traffic, when added to Existing Traffic, will deteriorate the LOS to below the target LOS, and impacts cannot be mitigated through project conditions of approval.
- 3) When Existing plus Project plus Cumulative Traffic exceeds the target LOS, and impacts cannot be mitigated through the TUMF network (or other funding mechanism) or project conditions of approval. Or when the target LOS is exceeded and the needed improvements are not funded.

Thus, for the proposed project’s study area, the adopted LOS threshold is LOS D; except when an LOS E occurs during peak hours at a key intersection arterial that is used by regional freeway bypass traffic and at heavily traveled freeway interchanges.

Traffic Study Area and Existing Conditions

As shown in Table T-1, the traffic study area includes four intersections, all of which are currently operating at satisfactory

LOS C or better during the weekday a.m. and p.m. peak hours, except for Myers Street/Magnolia Avenue, which operates at LOS F in the p.m. peak hour in the existing condition.

Table T-1: Existing Intersection Peak Hour Level of Service

Intersection	AM Peak		PM Peak	
	Delay ¹	LOS ²	Delay ¹	LOS ²
1. Harrison Street South at Magnolia Avenue	16.1 sec	B	29.2 sec	C
2. Harrison Street North at Magnolia Avenue	13.3 sec	B	21.0 sec	C
3. Muir Avenue at Magnolia Avenue	10.8 sec	B	17.2 sec	C
4. Myers Street at Magnolia Avenue	24.2 sec	C	67.9 sec	F

¹ Delay in seconds expressed as average control delay per vehicle.

² LOS = Level of Service; based on *Highway Capacity Manual* (HCM).

Source: TranspoGroup, 2017.

As shown in Table T-2, the traffic study area includes three roadway segments, all of which are currently operating at satisfactory LOS C or better during the weekday a.m. and p.m. peak hours.

Table T-2: Existing Intersection Peak Hour Level of Service

Roadway	Location	Capacity ¹	ADT	V/C Ratio	LOS
Harrison Street South	Between Magnolia Avenue and Primrose Drive	3,100	2,610	0.841	C
Muir Avenue		3,100	320	0.102	A
Myers Street		3,100	870	0.279	A

¹ Capacity values based on the City of Riverside Traffic Study Guidelines, January 2016. Capacities shown are for LOS E.
Source: TranspoGroup, 2017.

Project Impacts

Less than Significant. The proposed project will develop and operate 63 single-family residences. However, the Traffic Impact Analysis that was prepared for the proposed project evaluates 64 (one additional) residences. Therefore, the Traffic Study provides a conservative analysis of a greater potential impact than could result from the proposed project. As shown in Table T-3, operation of 64 single-family residences will generate approximately 609 daily trips, 48 a.m. peak hour trips and 64 p.m. peak hour trips (TranspoGroup 2017).

Table T-3: Project Trip Generation

Land Use	Unit	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Rate for Single Family Residential ¹	Per DU	9.52	0.19	0.56	0.75	0.63	0.37	1.00
Project Trip Generation	64 DUs	609	12	36	48	41	23	64

Source: TranspoGroup, 2017.

DU = Dwelling Unit

¹ Trip rates from the Institute of Transportation Engineers, *Trip Generation, 9th Edition*, 2012. Land Use Code 210 - Single-Family Detached Housing.

Existing Plus Project Intersection Operations: Existing with-project traffic volumes were determined by adding the project trips to the existing without-project traffic volumes. As shown in Table T-4, with the addition of project traffic, all study intersections will continue to operate at satisfactory LOS D or better during the weekday a.m. and p.m. peak hours, with the exception of the Myers Street/Magnolia Avenue intersection that operates at LOS F during the p.m. peak hour both with and without the project. However, with the addition of project traffic, an additional 2.0 seconds will be added during the p.m. peak hour at the northbound approach of Myers Street.

As shown in Table T-4, all intersections are expected to operate at LOS C or better both with and without the project with exception of Myers Street/Magnolia Avenue that will operate at LOS F during the p.m. peak hour both with and without the project. With the addition of project traffic, 2.0 seconds will be added to the p.m. peak hour delay, which is considered an impact per the City’s criteria. Therefore, Mitigation Measure T-1 has been included to install signage on the minor street approaches (northbound and southbound approaches) of the Myers Street/Magnolia Avenue intersection which

would restrict left-turn and through movements (i.e., right-turn only) in both directions during the a.m. and p.m. peak hours (7-9 a.m. and 4-6 p.m.). Vehicles that would make these movements (12 vehicles in the a.m. peak hour and 7 vehicles in the p.m. peak hour in the northbound direction; and, 3 vehicles in both peak hours in the southbound direction) would be re-routed to the intersections of Roosevelt Street/Magnolia Avenue and Muir Avenue/Magnolia Avenue where U-turns are permitted during the peak hours to access either westbound Magnolia Avenue and northbound Myers Street, or eastbound Magnolia Avenue and southbound Myers Street, respectively. With implementation of Mitigation Measure T-1, the intersection of Myers Street/Magnolia Avenue is forecast to operate at LOS B and C in the a.m. and p.m. peak hours, respectively, during the existing with-project conditions. During the opening year with-project conditions, the intersection is also forecast to continue to operate at LOS B and LOS C in the a.m. and p.m. peak hours, respectively. The adjacent intersections at Roosevelt Street and Muir Avenue would also not be significantly impacted by the additional U-turns created by the mitigation measure. Therefore, with implementation of Mitigation Measure T-1, impacts at the intersection of Myers Street/Magnolia Avenue will be reduced to a less than significant level.

Table T-4: Existing Plus Project Intersection Operations

Intersection	AM Peak Hour				PM Peak Hour			
	Existing		Plus Project		Existing		Plus Project	
	Delay/LOS		Delay/LOS	Change	Delay/LOS		Delay/LOS	Change
1. Harrison South at Magnolia	16.1	B	16.0	B -0.1	29.2	C	29.2	C 0.0
2. Harrison North at Magnolia	13.3	B	13.4	B 0.1	21.0	C	21.1	B 0.1
3. Muir Avenue at Magnolia	10.8	B	10.9	B 0.1	17.2	C	16.7	C -0.5
4. Myers Street at Magnolia	24.2	C	24.7	C 0.5	67.9	F	69.9	F 2.0

Source: TranspoGroup, 2017.

Delay in seconds expressed as average control delay per vehicle.

LOS = Level of Service; based on *Highway Capacity Manual* (HCM).

Existing Plus Project Roadway Segment Operations: As described above, the existing with-project traffic volumes were determined by adding the project trips to the existing without-project traffic volumes. As shown in Table T-5, with the addition of project traffic all of the area roadway segments that were evaluated are located between Magnolia Avenue and Primrose Drive, and will operate at LOS D or better. Thus, no impacts to roadway segments will occur under the existing plus project conditions.

Table T-5: Existing Plus Project Roadway Segment Operations

Roadway	Capacity ¹	Without Project			With Project		
		ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
Harrison Street South	3,100	2,610	0.841	C	2,810	0.906	D
Muir Avenue	3,100	320	0.103	A	470	0.152	A
Myers Street	3,100	870	0.281	A	930	0.300	A

¹ Capacity values based on the City of Riverside Traffic Study Guidelines, January 2016. Capacities shown are for LOS E.

Source: TranspoGroup, 2017.

Opening Year 2018 Cumulative Plus Project: Per City direction, Opening Year (2018) cumulative without-project traffic volumes were determined by adding an estimated growth rate of 1.5 percent per year to the existing traffic volumes. In addition to the 1.5 percent growth rate, traffic from cumulative (approved and/or pending) projects have also been added to the opening year 2018 baseline condition, which are listed in Table T-6. As shown, the cumulative projects are expected to generate approximately 16,344 daily trips, 1,099 a.m. peak hour trips (492 inbound and 608 outbound), and 1,377 p.m. peak hour trips (750 inbound and 627 outbound).

Table T-6: Cumulative Project Trip Generation

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Project Trip Generation									
10938 Magnolia Ave - Walgreens	14.064	TSF	1363	25	23	49	70	70	139
10121 Hole Ave - Fitness Facility	15.362	TSF	506	11	11	22	31	23	54
3875 Dawes St - Condos	62	DU	360	5	23	27	22	11	32
4247 Van Buren Blvd - Church Expansion	12.166	TSF	111	4	3	7	3	3	7
3865 Jackson St - Parkview Hospital Med Ctr Expansion	20.655	TSF	273	12	7	20	7	12	19
Van Buren Blvd/Magnolia Ave - Walgreens	10.776	TSF	1044	19	18	37	53	53	107
3990 Reynolds Rd - Apartments	102	DU	678	10	42	52	41	22	63
5200 Van Buren Blvd - Walmart Expansion	22.272	TSF	1130	23	18	41	47	49	97
9241 - 9265 Audrey Avenue - Azar Plaza	6.15	TSF	273	20	22	42	7	9	17
3705 Tyler St - Two Tenant Restaurants	6	TSF	763	36	29	65	35	24	59
10403-10485 Magnolia Ave Mixed Use									
Apartments	315	DU	2095	32	129	161	127	68	195
Retail	71.211	TSF	3041	42	26	68	127	137	264
<i>Retail Passby (17% AM/Daily, 34% PM)²</i>			-517	-7	-4	-12	-43	-47	-90
Net			4619	67	150	217	211	159	370
9565 Rudicill St - Apartments	102	DU	678	10	42	52	41	22	63
3502 - 3520 Tyler St - Restaurant	10	TSF	1272	59	49	108	59	39	99
9644 Magnolia Ave - Retail	12	TSF	532	39	43	82	14	18	33
10938 Magnolia Ave - McDonalds	5.16	TSF	2560	120	115	234	88	81	168
4375 Van Buren Blvd - Veterinary Clinic	6.058	TSF	-	18	7	25	11	17	29
3590 Tyler St - IEHP Community Outreach Ctr	7.05	TSF	78	10	1	11	2	9	11
Tract Map 36579 Homes	5	DU	48	1	3	4	3	2	5
Tract Map 35455 Homes	6	DU	57	1	3	5	4	2	6
Total Trip Generation			16,344	492	608	1,099	750	627	1,377

TSF = Thousand Square Feet, DU = Dwelling Unit

¹ Trip rates based on Trip Generation, 9th Edition, Institute of Transportation Engineers (ITE), 2012.

² ITE Trip Generation does not provide daily and a.m. peak hour pass-by percentages. Daily and a.m. pass-by percentages were assumed to be one-half of the p.m. pass-by percentage.

Source: TranspoGroup, 2017.

Opening Year 2018 Cumulative Plus Project Intersection Impacts: As shown in Table T-7 all of the study intersections are forecast to operate at satisfactory LOS D or better during the weekday a.m. and p.m. peak hours under the 2018 with project scenario, except for the intersection of Myers Street/Magnolia Avenue. This intersection is expected to operate at LOS F during both the a.m. and p.m. peak hours.

With implementation of the project, the Myers Street/Magnolia Avenue intersection northbound approach is expected to experience a nominal decrease in delay during both the a.m. and p.m. peak hours. The decrease in delay is caused by small changes in traffic volumes. When an intersection is operating at LOS F, use of the HCM methodology can cause, the change of one or two vehicles can result in large differences in delay, either increasing or decreasing the delay excessively.

The overall intersection delay increases by 0.1 seconds during the a.m. peak hour and 0.2 seconds during the p.m. peak hour. Additionally, the HCM 95th percentile (in vehicles) queuing calculation indicates an increase of 0.1 seconds during the a.m. peak hour and 0.2 seconds during the p.m. peak hour. At the Myers Street/Magnolia Avenue intersection, which currently operates at LOS F) will not experience an increase in delay with the addition of project traffic; therefore, the project will not result in cumulatively considerable impacts.

Table T-7: 2018 Cumulative Without and With Project Peak Hour Intersection LOS

Intersection	Without Project				With Project				Delay Change	
	AM Peak		PM Peak		AM Peak		PM Peak		AM	PM
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay		
Harrison Street South at Magnolia	B	15.9	D	50.8	B	16.0	D	51.1	0.1	0.3
Harrison Street North at Magnolia	B	13.9	C	29.8	B	14.0	C	29.9	0.1	0.1
Muir Avenue at Magnolia	B	12.1	C	22.6	B	12.3	C	21.9	0.2	-0.7
Myers Street at Magnolia	F	52.4	F	356.0	F	51.3	F	344.3	-1.1	-11.7

Source: TranspoGroup, 2017.

Opening Year 2018 Plus Project Roadway Segment Impacts: As shown in Table T-8, all of the area roadway segments are forecast to operate at LOS D or better. Therefore, no impacts to the roadway segments will occur in the 2018 with project conditions.

Table T-8: 2018 Without and With Project Roadway Segment Operations

Roadway	Without Project				With Project		
	Capacity ¹	ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
Harrison Street South	3,100	2,690	0.868	C	2,890	0.932	D
Muir Avenue	3,100	330	0.106	A	480	0.155	A
Myers Street	3,100	900	0.290	A	960	0.310	A

¹ Capacity values based on the City of Riverside Traffic Study Guidelines, January 2016. Capacities shown are for LOS E.

Source: TranspoGroup, 2016.

Mitigation Measure

Mitigation Measure T-1: Prior to issuance of occupancy permit, the proposed project shall install signage on the minor street approaches (northbound and southbound approaches) of the Myers Street/Magnolia Avenue intersection which would restrict left-turn and through movements (i.e., right-turn only) in both directions during the a.m. and p.m. peak hours (7-9 a.m. and 4-6 p.m.). Vehicles that would make these movements (12 vehicles in the a.m. peak hour and 7 vehicles in the p.m. peak hour in the northbound direction; and, 3 vehicles in both peak hours in the southbound direction) would be re-routed to the intersections of Roosevelt Street/Magnolia Avenue and Muir Avenue/Magnolia Avenue where U-turns are permitted during the peak hours to access either westbound Magnolia Avenue and northbound Myers Street, or eastbound Magnolia Avenue and southbound Myers Street, respectively.

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 type="checkbox"/>	<input checked="" type="checkbox"/>
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16b. Response: (Source: Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017)

No Impact. Every county in California is required to develop a CMP that looks at the links between land use, transportation, and air quality. The Riverside County Transportation Commission (RCTC) prepares and periodically updates the Riverside County CMP to meet federal Congestion Management System guidelines as well as state CMP legislation. The Riverside County CMP does not require traffic impact assessments for development projects, such as the proposed project. However, the CMP does require that local agencies prepare a deficiency plan if proposed development impacts cause the LOS on a non-exempt CMP facility to fall to below the LOS E standard. As described above, the proposed project will only effect local roadways, none of which are part of the Riverside County CMP system. Therefore, the proposed project will not result in a conflict with an applicable congestion management program, and impacts will not occur.

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"/>
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16c. Response: (Source: General Plan 2025 Figure PS-6 – Airport Safety Zones and Influence Areas, Riverside County Airport Land Use Compatibility Plan, 2004. <http://www.rcaluc.org/Plans/New-Compatibility-Plan>. Accessed October 2016)

No Impact. The proposed project is located 2.25 miles south of the Riverside Municipal Airport. As shown on General

Plan Airport Safety Zones Figure and Map RI-1, Compatibility Map Riverside Municipal Airport, of the Airport Land Use Compatibility Plan the project site is not located within the Airport Influence Area Boundary. Therefore, the proposed project, which will develop two-story residential structures, will not a change in air traffic patterns, and impacts related to safety risks related to a change in air traffic patterns will not occur from implementation of the proposed project.

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"/>
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16d. Response: (Source: Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017)

Less than Significant Impact. The proposed project includes solely single-family residential uses, and does not include any incompatible uses, such as farm equipment. The project will also not increase any hazards related to a design feature. Operation of the proposed residential uses will enter and exit the site from Magnolia Avenue, Primrose Drive, Muir Avenue, and Myers Street. The circulation layout prepared for the project meets emergency access requirements and provides fire truck accessibility throughout the project site. Based on the City compliant roadway design that will be required to construct the project, motorists entering and exiting the project site will be able to do so comfortably, safely, and without undue congestion. As such, project access and circulation will be adequate, and project impacts related to hazardous design features will be less than significant.

e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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16e. Response: (Source Riverside Fire Department, <https://www.riversideca.gov/fire/oem/default.asp>. Accessed October 2016)

Less Than Significant Impact. The proposed construction activities, including equipment and supply staging and storage, will largely occur within the project site and will not restrict access of emergency vehicles to the project site or adjacent areas. During construction of the project Muir Avenue will be closed to through traffic. However, the adjacent streets will remain open, which will provide adequate emergency access to the project area and vicinity. Thus, impacts related to inadequate emergency access during construction activities will be less than significant.

Operation of the proposed project will also not result in an inadequate emergency access. Direct access to the project site will be provided from Myers Street, Muir Avenue, and Primrose Drive, which are adjacent to the project site. The project is also required to design and construct internal access in conformance with the City Municipal Code. In addition, the Fire Department will review the development plans prior to approval to ensure adequate emergency access pursuant to the requirements in the Uniform Fire Code. As such, impacts related to emergency access will be less than significant.

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"/>
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16f. Response: (Source: Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017)

No Impact. Transit services in the project area are provided by Riverside Transit Authority. Bus transit lines, 1, 10, 12, and 21 have stops on Magnolia Avenue within the project’s vicinity. Route 1 starts at the University of California Riverside campus and terminates at the West Corona Metrolink Station. Route 10 provides service between Big Springs and Watkins to the Galleria at Tyler. Route 12 provides service between La Cadena and Stevens to Merced and Magnolia. Route 21 provides service between the Galleria at Tyler to Country Village. Sidewalks are provided on the roadway segments, which provides adequate access to the bus stops on Magnolia Avenue. The only roadway with bicycle lanes is Magnolia Avenue.

The proposed project will include sidewalks for all of the onsite roadways, which will provide additional pedestrian facilities in the project area. In addition, the proposed project will not alter any bicycle or pedestrian facilities with, and development of 63 single-family residences is not expected to significantly increase bicycle and/or pedestrian trips. Therefore, the proposed project will not result in conflicts related to public transit, bicycle, or pedestrian facilities, and impacts will not occur.

17. TRIBAL CULTURAL RESOURCES. Will 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,				
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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>17a. Response: (Source: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))</p> <p>No Impact. As described above the project site was historically used for agriculture and residences; however, none of the existing or previous structures met the eligibility criteria required for listing on the CRHR or NRHP (MCC 2017). Thus, the proposed project will not result in an impact to a historical resource.</p> <p>In addition, the project area has a low sensitivity for the presence of prehistoric or historical archaeological deposits or features because numerous studies have been conducted and no archaeological resources have been recorded within the project area or within a 0.5 mile of the project area. In addition, the entire parcel has been disturbed from previous agricultural, grading, and residential uses, and the project site is not eligible for listing in the California Register of Historical Resources, or in a local register of historical resources (MCC 2017). As a result, impacts will not occur.</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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>17b. Response: (Source: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))</p> <p>Less than Significant Impact.</p> <p>Assembly Bill 52 Chapter 532, Statutes of 2014 (i.e., Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project’s potential to impact “tribal cultural resources.” Such resources include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical resources or included in a local register of historical resources.” AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a “tribal cultural resource.” Also per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects.</p> <p>A search of the Sacred Lands File (SLF) was requested for the project by the Native American Heritage Commission (NAHC) on September 20, 2016. The NAHC responded on the same day, stating that there are no known/known sacred lands within 0.5 mile of the project site, and requesting that 48 Native American tribes or individuals be contacted for further information regarding the general project vicinity. Letters were subsequently sent to the 48 Native American contacts on September 20, 2016, requesting any information related to cultural resources or heritage sites within or adjacent to the project area. Additional attempts at contact by letter, email or phone call were made on October 14 and October 28, 2016 (MCC 2017). In addition, the City sent consultation notices to the tribes pursuant to the provisions of AB 52. Furthermore, no requests for consultation were received by the City in response to the AB 52.</p> <p>In response to requests for information as part of preparing the Cultural Resources Report, responses were received from three tribes (Agua Caliente, San Manuel, and Pala) deferring consultation to other groups (MCC 2017). The Soboba Band of Luiseño Indians replied stating that although the project area is outside the existing reservation, it does fall within the bounds of their Tribal Traditional Use Areas. In addition, the tribe noted that the project location is in proximity to known sites, is a shared use area that was used in ongoing trade between the tribes, and is considered to be culturally sensitive by the people of Soboba. However, documentation to substantiate this comment was not provided by the tribe, and this was not identified in the records search results (MCC 2017).</p>				

As described above, the project does not contain any historic structures and project area has a low sensitivity for the presence of prehistoric or historical archaeological resources. In addition, the entire parcel has been disturbed from previous agricultural, grading, and residential uses. Furthermore, the NAHC has not identified any known sacred lands within 0.5 mile of the project area (MCC 2017). Thus, impacts related to California Native American tribes will be less than significant.

18. UTILITIES AND SYSTEM SERVICES.

Will the project:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

18a. Response: (Source: City of Riverside Capital Improvement Program and Rate Development Study, February 2014 (CIP 2014))

Less than Significant Impact. The proposed project will install 8-inch sewer laterals onsite that will connect with existing sewer main located within Primrose Drive. The proposed project will introduce new residential land uses that will generate an increase in the amount of wastewater. Wastewater will be conveyed by existing trunk sewer lines to the Riverside Water Quality Control Plant, which has a tertiary treatment capacity of 46 mgd and handled 29 mgd in 2013. Additionally, the facility is forecasted to operate at 40 mgd in 2035 with the estimated regional population growth (CIP 2014).

The Water Quality Control Plant has been issued an NPDES permit by the RWQCB that includes waste discharge requirements that are based on all applicable state and federal regulations, policies and guidance, and include limitations on effluent discharge and receiving water. In general, effluent discharge requirements include specifications for adequate disinfection treatment and limitations on radioactivity, pollutant concentrations, sediments, pH, temperature, and toxicity.

The single-family residential land uses proposed by the project are not anticipated to discharge wastewater that contains harmful levels of toxins that are regulated by the RWQCB (such as large quantities of pesticides, herbicides, oil, grease, and other chemicals that are more typical in industrial uses) and all effluent will comply with the wastewater treatment standards of the RWQCB. Therefore, the proposed project will result in less than significant impacts related to the wastewater treatment requirements of the RWQCB.

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?

18b. Response: (Source: City of Riverside Capital Improvement Program and Rate Development Study, February 2014. (CIP 2014))

Less than Significant Impact.

Water

The proposed project is an infill project and water lines currently exist in the adjacent roadway. An 8-inch sewer main is located in Primrose Drive. The proposed project will install a new onsite 8-inch water main line that will loop through the project site conveying water supplies to each residence.

The proposed project will continue to receive water supplies through the existing water lines located within Primrose Drive, which will not require expansion to serve the proposed project. Therefore, although construction of the onsite water distribution lines will be required to support the new development, no extensions or expansions to the water pipelines supplying the project site will be required. The necessary installation of the onsite water supply lines is included as part of the proposed project and will not result in any physical environmental effects beyond those identified in other sections of this IS/MND. Therefore, the proposed project will not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts will be less than significant.

Wastewater

As described above, the proposed project is an infill project and wastewater lines currently exist in the adjacent roadway. An 8-inch line is located in Primrose Drive. The proposed project will install new 8-inch lateral lines to serve each residence; that will connect to the existing sewer main on Primrose Drive that will convey wastewater flows from the project to the Riverside Water Quality Control Plant.

Based on the average daily wastewater flow identified in the City’s Capital Improvement Program and Rate Development Study, the proposed single-family residential units will generate an average of 206 gallons per day (gpd) (CIP 2014). Therefore, the proposed 63 residence project will result in an average daily flow of 12,978 gpd.

As described above, wastewater from the project area will be conveyed to the Riverside Water Quality Control Plant, which has a tertiary treatment capacity of 46 mgd and handled 29 mgd in 2013; and is forecasted to operate at 40 mgd in 2035 including the anticipated population growth (CIP 2014). Thus, the existing wastewater facilities have the capacity to accommodate the additional 12,978 gpd that will be generated from operation of the proposed project.

Although construction of the onsite sewer lines will be required to support the new development, no extensions or expansions to the wastewater facilities serving the project area will be required. The necessary installation of the onsite sewer lines is included as part of the proposed project and will not result in any physical environmental effects beyond those identified in other sections of this IS/MND. Therefore, the proposed project will not result in the construction of new wastewater facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts will be less than significant.

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"/>
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18c. Response: (Source: Preliminary Hydrology Study, Prepared by MDS Consulting, December 2016; Water Quality Management Plan, Prepared by MDS Consulting, December 2016)

No Impact. The project site is largely pervious. The site currently has 19,190 square feet of impervious surfaces, that consist of the existing residences, pavement, and other existing site features. The existing drainage pattern through the site is a southeast to northwest sheet flow to an existing 24-inch storm drain on Harrison Street, approximately 1,000 feet northwest of the project site.

The proposed project will include development of 250,648 square feet of impervious surfaces from building pads, driveways, roadways, sidewalks, and other such project features (MDS 2017). The project will install onsite storm drain systems that will consist of grate inlets and catch basins that will detain, filter, and slowly release the stormwater drainage to a connection to the existing storm drain on Harrison Street. As detailed previously in Response 9c., each of the catch basins proposed for the project would exceed the required design capture volume, which would accommodate stormwater from the project site.

Although a substantial change of impervious surfaces will occur by implementation of the project, the post-construction drainage will closely mimic the existing drainage pattern, and the project will install catch basins that will capture, filter, and slowly discharge runoff. The hydrologic design of the proposed project and use of the proposed catch basins will control the velocity and amount of runoff to ensure that runoff does not exceed pre-development conditions (MDS 2016). As a result, implementation of the proposed project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, and impacts will not occur.

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"/>
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18d. Response: (Source: 2015 Urban Water Management Plan for Riverside Public Utilities, June 2016 (UWMP 2016). Accessible: <http://www.riversideca.gov/utilities/pdf/2016/RPU-2015-UWMP.pdf>)

Less than Significant Impact. The domestic and irrigation water for the proposed project will be supplied to the project by the City of Riverside Public Utilities Division. As outlined in the City’s 2015 UWMP, regional growth projections from SCAG’s Growth Forecast are based on the City’s General Plan Land Use designations, and are used in the UWMP to identify future water demands.

The project site is located within the R-1-7000 – Single-Family Residential Zone and R-1-7000-SP– Single-Family Residential and Specific Plan (Magnolia Avenue) Overlay Zones, which allows up to 8.0 dwelling units per acre with a Planned Residential Development permit. The proposed project will result in a density of 6.77 units per acre, which is less than the allowable General Plan Land Use designation criteria, and is therefore consistent with existing growth projections

that are based on general plan land use designations. Therefore, the development of this site was considered in developing the UWMP.

In 2015, the City’s total water supply and demand was 75,126 acre-feet. By 2020, the UWMP projects a total demand of 95,221 acre-feet, which includes demand from the proposed project because it’s within the build out of the General Plan land use designations and within the regional growth projections. At the same time, the water supply is estimated to be 116,903 acre-feet (UWMP 2016), which provides an estimated surplus of 21,682 acre-feet of water. Thus, sufficient water supplies will be available to serve the project from existing entitlements and resources, and new or expanded entitlements will not be needed. Impacts related to water demand upon groundwater supplies will be less than significant.

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 checked="" type="checkbox"/>	<input type="checkbox"/>
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18e. Response: (Source: City of Riverside Capital Improvement Program and Rate Development Study, February 2014. (CIP 2014))

Less than Significant Impact. As described above, wastewater from the project area will be conveyed to the Riverside Water Quality Control Plant, which has a tertiary treatment capacity of 46 mgd and handled 29 mgd in 2013; and is forecasted to operate at 40 mgd in 2035 including the anticipated population growth (CIP 2014). Therefore, the existing wastewater facilities have the capacity to accommodate the additional 12,987 gpd that will be generated from operation of the proposed project, and impacts related to wastewater treatment capacity will be less than significant.

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"/>
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18f. Response: (Source: CalRecycle Jurisdiction Disposal By Facility, City of Riverside. Calrecycle Solid Waste Information System. www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx (Calrecycle 2016). Website: <http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx>, General Plan EIR, Section 5.16, Utilities and Service Systems)

Less than Significant Impact. In 2015, 81 percent of the solid waste from the City of Riverside that was disposed of in landfills, went to the Badlands Sanitary Landfill (Calrecycle 2016). The Badlands Sanitary Landfill is permitted to accept 4,800 tons per day of solid waste and is permitted to operate through 2021. In July 2016, the landfill averaged 2,758 tons per day; thus, having an average daily additional capacity of 2,024 tons per day, as shown in Table UT-1 (Calrecycle 2016). In addition, 14 percent of solid waste from the City was disposed of at the El Sobrante Sanitary Landfill, which is permitted to accept 16,054 tons per day of solid waste, and is permitted to operate through 2044 (Calrecycle 2016). In August 2016, the landfill averaged 8,534 tons per day; thus, having an average daily additional capacity of 7,520 tons per day.

Table UT-1: Landfill Capacity and Average Daily Disposal

Landfill	Permitted Through	Maximum Permitted Daily (Tons)	Average Daily Disposal (Tons)	Additional Average Daily Capacity (Tons)
Badlands Sanitary Landfill	2021	4,800	2,758	2,024
El Sobrante Sanitary Landfill	2044	16,054	8,534	7,520
Total				9,544

Source: Calrecycle, 2016.

Implementation of the proposed project will result in additional solid waste generation from the proposed 63 single-family residences. The City’s General Plan EIR states that single-family residential uses generate 10 pounds per day of solid waste. Hence, the 63 residences will generate approximately 630 pounds per day of solid waste that will be collected weekly from the City’s solid waste collection service. The pick up from the project area will total 4,410 pounds weekly.

Based on the current recycling requirements, which require diversion of 50 percent of solid waste away from landfills, the proposed project will result in 2,205 pounds of solid waste per week. In 2020, state regulations per AB 341 will become effective, which will require diversion of 75 percent of solid waste from landfills. Thus, it is anticipated that solid waste landfill disposal from operation of the project in 2020 will be reduced to approximately 1,103 pounds per week. As described above, both landfills that could serve the project site have sufficient permitted capacity to accommodate the

project's solid waste disposal needs, and impacts related to landfill capacity will be less than significant.

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"/>
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18g. Response: (Source: CalRecycle Jurisdiction Disposal By Facility, City of Riverside. Calrecycle Solid Waste Information System. www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx (Calrecycle 2016). Website: <http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx>, General Plan EIR, Section 5.16, Utilities and Service Systems)

No Impact. The proposed project will comply with all regulations related to solid waste. All solid waste-generating activities within the City are subject to the requirements set forth in AB 939 that requires diversion of a minimum of 50 percent of solid waste. In addition, after 2020 per AB 341, all development will be required to divert 75 percent of solid waste pursuant to state regulations. Implementation of the proposed project will be consistent with all state regulations. All projects in the City undergo development review prior to permit approval, which includes an analysis of project compliance with these programs. Therefore, the proposed project will comply with all regulations related to solid waste, and impacts will not occur.

19. MANDATORY FINDINGS OF SIGNIFICANCE.

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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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19a. Response: (Source: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017) (Attachment B) and Paleontological Resources Assessment, Prepared by Material Culture Consulting, 2017 (MCC 2017))

Less than Significant Impact with Mitigation Incorporated. As described above in Section 4, Biological Resources, due to the urban and developed nature of the project site and surrounding area, the project site does not contain sensitive communities or plants. In addition, the site does not contain any riparian habitat or water bodies that could be suitable habitat. Only urban tolerant wildlife species are expected to occur in the area, which include burrowing owl and nesting birds. As described in response 4a., no signs of burrowing owl were observed during the biological resource survey; however, a pre-construction survey for burrowing owl has been included as Mitigation Measure BIO-1, to ensure that impacts related to burrowing owls will not occur. In addition, trees on and adjacent to the project site have the potential to support nesting birds that are subject to the MBTA. Therefore, Mitigation Measure BIO-2 requires that if construction is initiated during the bird nesting season, a pre-construction survey is completed (per Mitigation Measure BIO-2) to ensure that no nests are impacted. With implementation of these two mitigation measures, it will be assured that the proposed project will not degrade the quality of the environment or result in impacts to plant and animal communities.

Also, as described above, the project site was historically used for agriculture and residences; however, none of the existing or previous structures met the eligibility criteria required for listing on the CRHR or NRHP (MCC 2017). Thus, the proposed project will not result in an impact to a historical resource. The project area has a low sensitivity for the presence of prehistoric or historical archaeological deposits or features because numerous studies have been conducted and no archaeological resources have been recorded within the project area or within a 0.5 mile of the project area. In addition, the entire parcel has been disturbed from previous agricultural, grading, and residential uses, and the project site is not eligible for listing in the California Register of Historical Resources, or in a local register of historical resources (MCC 2017). However, the project site has the potential to contain paleontological resources that could be impacted during construction activities. Therefore, Mitigation Measure CUL-1 has been included to require that a qualified paleontological monitor oversee excavation activities, which will reduce potential impacts to paleontological resources to a less than significant level. As a result, impacts related to elimination of important examples of major periods of California history or prehistory will be less than significant with mitigation incorporated.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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>19b. Response: (Source: previous responses)</p> <p>Less than Significant Impact. The project consists of redevelopment and infill of an existing underdeveloped parcels within an urban and developed area. The proposed project will provide 63 additional residential units within the residential area. As described above, all of the potential impacts related to implementation of the project will be less than significant or reduced to a less than significant level with implementation of mitigation measures related to biological resources, cultural resources, hazards, traffic, and construction noise.</p> <p>The City of Riverside has identified several related projects, which are listed previously in Table T-6: Cumulative Project Trip Generation. The cumulative effect of the proposed project taken into consideration with these other residential and commercial projects in the area will be limited, due to the small scale of the proposed project, and that implementation of the residential uses on the project site are consistent with the General Plan. Furthermore, the project will develop an infill parcel that is surrounded by residentially developed areas, and has been previously graded and disturbed. Thus, impacts to environmental resources or issue areas will not be cumulatively considerable; and cumulative impacts will be less than significant.</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"/>
<p>19c. Response: (Source: previous responses)</p> <p>Less than Significant Impact with Mitigation Incorporated. The project proposes the construction and occupancy of 63 new single-family residences on a 9.3-acre site. The project will not consist of a use or activities that will negatively affect persons in the vicinity. All resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation incorporated. Consequently, the project will not result in any environmental effects that will cause substantial adverse effects on human beings directly or indirectly, with implementation of the mitigation measures previously that have been previously detailed.</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).

Recommended Mitigation, Monitoring and Reporting Program

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party ¹	Monitoring/Reporting Method
Biological Resources	Mitigation Measure BIO-1: A pre-construction survey for burrowing owls shall be conducted by a qualified biologist within 30 days prior to the start of construction/ground-breaking activities. If no active burrows are detected, then no further action will be required. If an occupied burrow is detected during the burrowing owl breeding season (March 1 to August 31), a protective buffer of 500 feet shall be designated around the active burrow by a qualified biologist to avoid impacting a breeding owl. No work shall occur within 500 feet of the burrow unless a reduced buffer area is determined to be acceptable by the City of Riverside, through a qualified biologist. If an occupied burrow is detected during the non-breeding season (September 1 to February 28), the burrowing owl may be passively excluded based on California Department of Fish and Wildlife-approved methods and the burrow can be excavated prior to construction.	Prior to issuance of a grading permit, if project timing requires that construction activities be conducted during the burrowing owl breeding season (between March 1 and August 31).	City of Riverside Public Works Department and Planning Division	Biological Monitoring Report
	Mitigation Measure BIO-2: In order to avoid impacts on nesting birds and raptors (common or special status), construction activities should be scheduled during the non-breeding season (generally between July 1 and February 28/29 for nesting birds; between July 1 and January 31 for nesting raptors), to the extent practicable. If project timing requires that construction activities be conducted during the breeding season (generally between March 1 and June 30 for birds; between February 1 and June 30 for raptors); prior to issuance of a grading permit, a pre-construction survey or multiple surveys shall be conducted by a qualified biologist no more than 72 hours prior to disturbance to confirm the absence of active nests. If no active nests are found, no further	Prior to issuance of a grading permit, if project timing requires that construction activities be conducted during the breeding season (between March 1 and June 30 for birds; between February 1 and June 30 for raptors).	City of Riverside Public Works Department and Planning Division	Biological Monitoring Report

¹ All agencies are City of Riverside Departments/Divisions unless otherwise noted.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party ¹	Monitoring/Reporting Method
	<p>measures will be necessary.</p> <p>If the biologist finds an active nest in or adjacent to the construction area and determines that the nest may be impacted, the biologist will identify an appropriate buffer zone around the nest, depending on the sensitivity of the species and the nature of the construction activity. The active site will be protected until nesting activity has ended to ensure compliance with the Migratory Bird Treaty Act and the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by a qualified biologist: (1) clearing limits shall be established within a buffer around any occupied nest (the buffer shall be 300–500 feet for raptors), unless otherwise determined by a qualified biologist and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by a qualified biologist. Construction and/or encroachment into the buffer area around a known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants.</p>			
Cultural Resources	<p>Mitigation Measure CUL-1: Prior to the issuance of the first grading permit, evidence shall be provided to the City Building and Safety Division and Planning Division that a qualified paleontologist has been retained to perform full-time monitoring of any excavations on the project site that have the potential to impact paleontological resources in undisturbed native sediments. The monitor will have the ability to redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. In addition, the project paleontologist may re-evaluate the necessity for paleontological monitoring after examination of the affected sediments during excavation, with approval from the City Building and Safety Division and Planning Division. Any potentially significant fossils observed shall be collected and recorded in conjunction with best</p>	<p>Prior to the issuance of the first grading permit</p>	<p>City of Riverside Public Works Department and Planning Division</p>	<p>Evidence of paleontologist retention and paleontological monitoring report</p>

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party ¹	Monitoring/Reporting Method
	management practices and Society for Vertebrate Paleontology professional standards. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations. A report documenting the results of the monitoring, including any salvage activities and the significance of any fossils will be prepared and submitted to the appropriate City personnel.			
Hazards and Hazardous Materials	Mitigation Measure HAZ-1: Prior to issuance of construction permits, a certified hazardous materials waste hauler shall remove and dispose of all potentially hazardous materials, wastes, and debris; including the: 55-gallon drums, storage tanks, and motor vehicle parts. Should potentially contaminated soils be identified during clean up or construction activities, soils samples shall be taken and analyzed for contaminants of concern for concentrations above worker safety thresholds established by the Regional Water Quality Control Board (RWQCB). Any soils with chemicals exceeding the RWQCB Environmental Screening Levels (ESLs) for residential uses or hazardous waste limits will be characterized, removed, and disposed of off-site at a licensed hazardous materials disposal facility in compliance with state regulations. All reports and/or documentation associated with the removal will be submitted to the City of Riverside Fire Prevention Division.	Prior to issuance of construction permits	City of Riverside Public Works Department and Fire Prevention Division	Receipt from waste hauler of materials removed from the site shall be submitted to the City of Riverside Fire Prevention Division. Site inspection by City of Riverside Public Works Department.
Noise	Mitigation Measure N-1: The project's construction plans and grading and building permits issued by the City of Riverside shall include the following requirements: <ul style="list-style-type: none"> • During all excavation and grading on-site, the construction contractors will equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards to reduce construction equipment noise to the 	To be included in permits issued by the City.	City of Riverside Public Works Department and Building and Safety Division	City of Riverside permits and inspections during construction.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party ¹	Monitoring/Reporting Method
	<p>maximum extent practicable. The construction contractor will place all stationary construction equipment so that emitted noise is directed away from noise sensitive receptors.</p> <ul style="list-style-type: none"> • The construction contractor will stage equipment and material stockpiles in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors during project construction. • The construction contractor will limit haul truck deliveries to the same hours specified for construction equipment. • Electrically powered equipment to be used instead of pneumatic or internal combustion powered equipment, where feasible. • Unnecessary idling of internal combustion engines (e.g., in excess of 5 minutes) will be prohibited. • The use of noise-producing signals, including horns, whistles, alarms, and bells, will be for safety warning purposes only. 			
Traffic	<p>Mitigation Measure T-1: Prior to issuance of occupancy permit, the proposed project shall install signage on the minor street approaches (northbound and southbound approaches) of the Myers Street/Magnolia Avenue intersection which would restrict left-turn and through movements (i.e., right-turn only) in both directions during the a.m. and p.m. peak hours (7-9 a.m. and 4-6 p.m.). Vehicles that would make these movements (12 vehicles in the a.m. peak hour and 7 vehicles in the p.m. peak hour in the northbound direction; and, 3 vehicles in both peak hours in the southbound direction) would be re-routed to the intersections of Roosevelt Street/Magnolia Avenue and Muir Avenue/Magnolia Avenue where U-turns are permitted during the peak hours to access either westbound Magnolia Avenue and northbound Myers Street, or eastbound Magnolia Avenue and southbound Myers Street, respectively.</p>	Prior to issuance of occupancy permit.	City of Riverside Public Works Department	City of Riverside permits and inspections during construction.

Attachments:

Attachment A: Air Quality and Greenhouse Gas Emission CalEEMod Outputs, Prepared by Entech 2017

Attachment B: Habitat Assessment for the Primrose Project Site, Prepared by Psomas, 2017

Attachment C: Cultural Resources Assessment, Prepared by Material Culture Consulting, 2017 and Paleontological Resources Assessment, Prepared by Material Culture Consulting, 2016

Attachment D: Preliminary Geotechnical Investigation. Prepared by Leighton and Associates, 2016

Attachment E: Phase I and Limited Phase II ESA, prepared by Leighton and Associates 2016

Attachment F: Preliminary Hydrology Study, Prepared by MDS Consulting, 2017; Water Quality Management Plan, Prepared by MDS Consulting, 2017

Attachment G: Primrose Traffic Impact Analysis, prepared by TranspoGroup, 2017