HIGHGROVE RESIDENTIAL DEVELOPMENT
AT MOUNT VERNON AVENUE AND CENTER STREET
CEQ190048

Prepared for:

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*****NOTE: Some technical appendices mention "commercial" development in the title or project description. This refers to a previous iteration of the project scope. The Proposed Project as discussed and analyzed in this document consists of residential uses only.*****

ACRONYMS & ABBREVIATIONS

Acronyms/Abbreviation	Definition
ADT	average daily traffic
afy	acre feet per year
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ASTs	above ground storage tanks
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CGS	California Geologic Survey
CHSC	California Health and Safety Code
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Value
CO	carbon monoxide
County	Riverside County
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	Decibel
dBA	A-weighted decibels
DIF	Development Impact Fee
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GPA	General Plan Amendment
gpd	gallons per day
HCM	Highway Capacity Manual
ICU	Intersection Capacity Utilization
IS	Initial Study
LDMF	Local Development Mitigation Fee
Ldn	Day-night average noise level
Leq	Equivalent sound level
LBP	lead-based paint
LOS	level of service
LSTs	Localized Significant Thresholds
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day

Acronyms/Abbreviation	Definition
MLD	most likely descendent
MND	Mitigated Negative Declaration
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
MSL	mean sea level
MTCO2e	million metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NO2	nitrogen dioxide
NPDES	National Pollution Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PM2.5	fine particulate matter
PM10	Respirable particulate matter
ppm	parts per million
PPV	peak particle velocity
RCFD	Riverside County Fire Department
RCSD	Riverside County Sheriff's Department
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RUSD	Riverside Unified School District
RWQCB	Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SF	square feet
SLF	Sacred Lands File
SO2	sulfur dioxide
SOI	Sphere of Influence
SR-91	State Route 91
SWCRB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TMDLs	total maximum daily loads
TWC	Time Warner Cable
USTs	underground storage tanks
UWMP	Urban Water Management Plan
V/C	volume-to-capacity
VOC	volatile organic compound
WoUS	Waters of the United States

COUNTY OF RIVERSIDE
ENVIRONMENTAL ASSESSMENT FORM: INITIAL STUDY

Environmental Assessment (CEQ / EA) Number: CEQ190048
Project Case Type (s) and Number(s): GPA190009, CZ1900026, TTM37743, CUP200030, PPT200016, and PPT200017
Lead Agency Name: County of Riverside Planning Department
Address: 4080 Lemon Street 12th Floor, Riverside, CA 92501
Contact Person: Jose Merlan, Principal Planner
Telephone Number**:** 951-955-6646
Applicant's Name: Highgrove INV, LLC
Applicant's Address: 7111 Indiana Avenue, Suite 300, Riverside, CA 92504

I. PROJECT INFORMATION

PROJECT DESCRIPTION

The Proposed Project is located at the northeast corner of Mt Vernon Avenue and Center Street (APN 255-150-001) in the unincorporated community of Highgrove in the County of Riverside (County), California (Project Site). The Project Site is within the U.S. Geological Survey (USGS) "San Bernardino, California" 7.5-minute quadrangle and located in the northern portion of Highgrove, on the south of East Main Street, west of Oriole Avenue, north of Center Street, and east of Mt Vernon Avenue. Freeway access to the Project Site is provided via Interstate 215 (I-215) (**Figure 1** - *Regional Vicinity Map*). The Project Site is a 9.17 gross acre (8.45 net acre) undeveloped vacant lot and is located south of East Main Street, west of Oriole Avenue, north of Center Street, and east of Mt Vernon Avenue in the unincorporated community of Highgrove (**Figure 2** – *Project Vicinity Map*). The Proposed Project would involve a General Plan Amendment and Tentative Tract Map. The General Plan Amendment would amend the land use designation from Community Development: Medium Density Residential (CD: MDR) to Community Development: Medium High Density Residential (CD: MHDR). The Tentative Tract Map would subdivide the subject parcel into 72 numbered lots for the development of single family residential units , and 20 lettered lots for the purposes of private street dedication (Lots A, B, C, D, E, F, G and I), open space and landscape area dedication (Lots H, J, K, L, M, N, R, S and T), and right-of-way dedication to the County (Lots O, P and Q).Refer to **Figure 3** – *Tentative Map 37743* and **Figure 4** - *Overall Site Plan*.

General Plan Amendment No. 190009

The Proposed Project would include legislative amendments to the County's General Plan Land Use Map and Zoning Map. General Plan Amendment (GPA190009) would amend the land use designation for the entirety of the Project Site from Community Development: Medium Density Residential (CD: MDR) to Community Development: Medium High Density Residential (CD: MHDR)

Tentative Map - TTM37743

The Project Site is a 9.17 gross acre (8.45 net acre) undeveloped vacant lot and is located south of East Main Street, west of Oriole Avenue, north of Center Street, and east of Mt Vernon Avenue in the unincorporated community of Highgrove. The Proposed Project would involve the subdivision of the subject parcel into 72 numbered lots for the development of single family residential units , and 20 lettered lots for the purposes of private street dedication (Lots A, B, C, D, E, F, G and I), open space

and landscape area dedication (Lots H, J, K, L, M, N, R, S and T), and right-of-way dedication to the County (Lots O, P and Q). (Figures 3 and 4).u

Plot Plan No. 200017 (PPT200017)

The Proposed Project has a gross area of 9.17 acres and a net area of 8.45 acres after right-of-way dedications. The project would include 72 single family residential units ranging from approximately 3,047 sf to 4,587 sf, with a total of 3 different floor plans (**Figures 5 – 7** – *Conceptual Residential Floor Plan*), and nine (9) lettered lots (Lots H, J, K, L, M, N, R, S and T) totaling 56,190-sf of community maintained open space and landscaped areas (**Figure 8** – *Conceptual Residential Development Landscape Plan*). The 33,483-sf open space common area in the center of the residential development would house one of the two bioretention areas, a tot lot, and a 994-sf community shade structure (**Figure 9** – *Shade Structure Floor Plan & Roof Plan* and **Figure 10** – *Shade Structure Elevations*). Six parking spaces proposed in front of the community shade structure would serve as guest parking. A 6-foot-tall block wall would be constructed around the perimeter of the development. Eight (8) private streets within the residential development would provide circulation and access. Primary access would be provided to the residential development from Center Street, with secondary emergency access provided at Elena Street to the north. Gates would be installed at both access points to the residential development. On-site drainage would be collected and conveyed to two bioretention basins, the largest located within the residential open space area (Lot H) and the second located at the northwest corner of the residential development (Lot J). The residential development street design would allow for fire access throughout the entire site, with emergency access provided at the north end (**Figure 11** – *Conceptual Fire Access Plan*).

Each of the three floor plan options would include three elevation styles: Spanish, prairie, and farmhouse. Proposed materials for the exterior of the residences include, but are not limited to, stucco finishing, wood and metal railing, stone veneer, wood posts, and decorative clay pipes (**Figures 12a – 14c** – *Conceptual Residential Elevations*).

Utilities

The Proposed Project would connect to existing water mains that are serviced by the Riverside Public Utilities (RPU), the water service provider for the Highgrove area. Existing water mains are located within Mt Vernon Avenue and Center Street. The Proposed Project would connect to an existing 20-inch water line on Mt Vernon Avenue. The Project Site is served by an existing public sewer system. The Proposed Project would involve one connection to an existing sewer line located within Center Street. Will serve letters are provided by the Riverside Highland Water Company and City of Riverside's Public Works Department.

Grading and Construction

Construction activities for the Proposed Project would begin January 2025 and buildout is expected to take approximately 14 months, ending in February 2026. Site preparation includes removal of existing vegetation, trash, debris, irrigation lines, and foundation elements and removal of compressible topsoil and would begin January 2025 and occur over 10 days. Site preparation activities would require 18 worker trips per day, with six vendor truck emissions added to account for water trucks. The onsite equipment would consist of three rubber-tired dozers, and four of either tractors, loaders, or backhoes.

Grading throughout the site would occur (**Figure 15a and 15b** – *Conceptual Grading Plan*). The grading phase would occur after completion of the site preparation phase and occur over four weeks. The grading activities would require no dirt to be imported or exported from the Project Site. The onsite equipment utilized during the grading phase would include one excavator, one grader, one rubber-tired dozer, and three of either tractors, loaders, or backhoes. Grading activities would generate 15 worker trips per day, with six daily vendor truck trips added to the grading phase to account for water trucks.

The paving phase would consist of paving the onsite parking, roads, and driveways as well as the proposed improvements to Pennsylvania Avenue adjacent to the Project Site. The paving phase would occur after the completion of the building construction phase, occurring over four weeks. The paving phase would generate 15 worker trips per day. The onsite equipment would consist of the simultaneous operation of two pavers, two paving equipment, and two rollers.

The application of architectural coatings would occur after the completion of the paving phase, occurring over four weeks. The architectural coating phase is based on covering 238,049 square feet of residential interior area and 10,977 square feet of paved area. The architectural coating phase would generate 19 worker trips per day, and equipment would consist of one air compressor.

Offsite Improvements

The unpaved right-of-way (ROW) areas along Mt Vernon Avenue and Center Street would be paved as part of the Proposed Project. Approximately 20-feet of ROW would be dedicated to the County from the southern and western portions of the Project Site, along Mt Vernon Avenue and Center Street. The dedicated ROW would include sidewalk, curb and gutter, and landscaping improvements. A second 18-feet of ROW would be dedicated at the northeastern corner of the Project Site where new curb and gutter would be constructed to County standard no. 200. Existing above ground power poles would be relocated as a part of the dedication process and remain above ground, outside of the roadway behind the curb and gutter.

DISCRETIONARY ACTIONS

The Proposed Project involves the following entitlements:

- General Plan Amendment (GPA 190009): Amend the existing land designation from Medium Density Residential (MDR) to Medium High Density Residential (MHDR);
- Plot Plan (PPT200017): Construct 72 single-family units and five common area lettered lots;
- Subdivision: Subdivide the Project Site into 72 numbered lots for single family residential development, and 20 lettered lots for the purposes of private street dedication (Lots A, B, C, D, E, F, G and I), open space and landscape area dedication (Lots H, J, K, L, M, N, R, S and T), and right-of-way dedication to the County (Lots O, P and Q).

A. Type of Project: Site Specific ☒; Countywide ☐; Community ☐; Policy ☐.

B. Total Project Area: 9.17 acres

Residential Acres: 8.45	**Lots:** 92	**Units:** 72	**Projected No. of Residents:** 231[1]
Commercial Acres: 0	**Lots:** 0	**Sq. Ft. of Bldg. Area:** 0	**Est. No. of Employees:** 0
Industrial Acres: N/A	**Lots:** N/A	**Sq. Ft. of Bldg. Area:** N/A	**Est. No. of Employees:** N/A
Other: N/A			

C. Assessor's Parcel No(s): 255-150-001

Street References: Northeast corner of Center Street and Mt Vernon Avenue

D. Section, Township & Range Description or reference/attach a Legal Description: San Bernardino South, U.S.G.S.-7.5.' Quadrangle, Township 2 South., Range 4 West, Section 9 Northwest.

E. Brief description of the existing environmental setting of the project site and its surroundings: The Project Site is 9.17 gross acres, and it is located south of East Main Street, west of Oriole Avenue, north of Center Street, and east of Mt Vernon Avenue in Highgrove, an

[1] https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-general-Plan-2017-appendices-Appendix-E-2-April-2017.pdf, Table E-2, p. 2, Accessed December 21, 2023

unincorporated area in the County of Riverside. Freeway access to the Project Site is provided via Interstate 215 (**Figure 2** – Project Vicinity Map). Areas to the north, east, and west of the Project Site have a General Plan designation of Medium Density Residential (MDR) and a Zoning Classification of One-Family Dwellings (R-1). The area to the south of the Project Site has a General Plan designation of Highest Density Residential (HDR) and a Zoning Classification of Highest Density Residential (R-7).

The Project Site is a vacant undeveloped open field which has been previously disced. Vegetation is minimal, with grass and no trees present. The Project Site has a General Plan designation of Medium Density Residential (MDR) and a Zoning Classification of One-Family Dwellings (R-1). Topography on the Project Site is generally flat and is approximately 1,100 to 1,120 feet above mean sea level. The southwest corner of the Project Site, along Mt Vernon Avenue, contains an existing curb and gutter. The southwest portion of the Projects Site, along Center Street, contains an existing partial sidewalk. There are no sidewalks on the eastern portion of the Project Site along Mt Vernon. Portions of ROW are unpaved along Mt Vernon and Center Street. There are four (4) existing utility poles within the existing ROW along Mt Vernon Avenue.

F. Other Public Agency Involvement and Required Permits: N/A

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

G. General Plan Elements/Policies:

1. **Land Use:** The Project Site's existing General Plan land use designation is Medium Density Residential (MDR), which allows a 2.0 to 5.0 dwelling units per acre(du/ac). As described in the Highgrove Area Plan, the MDR land use designation provides for the development of conventional single-family detached houses and suburban subdivisions. Limited agriculture and animal-keeping uses, such as horses, are also allowed within this category. The density range is 2.0 to 5.0 dwelling units per acre, which allows for a lot size that typically ranges from 5,500 to 20,000 square feet.

2. **Circulation:** The Highgrove Area Plan, Figure 6 – "Circulation," identifies both Center Street and Mount Vernon Avenue Secondary (100' ROW) roadways.

3. **Multipurpose Open Space:** No multi-purpose open space areas are located within the Project Site.

4. **Safety:** According to the Highgrove Area Plan, the Project Site is not within a flood hazard area, wildlife susceptibility area; steep slope area; and slope instability area. The Project Site is mapped as having a low deep groundwater susceptible sediment.

5. **Noise:** The Noise Element requires projects to limit the volume of noise effecting residential or other noise-sensitive uses.

6. **Housing:** The Housing Element requires projects to use energy conservation features in residential construction.

7. **Air Quality:** The Project Site is within the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District.

8. **Healthy Communities:** The Health Communities Element states that, where feasible, air pollutant sources and sensitive receptors should be sited apart from each other.

   a) Environmental Justice Summary: The Project Site is located within the Highgrove EJ Community boundary.

G. General Plan Area Plan(s): Highgrove Area Plan

H. Foundation Component(s): Community Development

I. Land Use Designation(s): Areas to the north, east and west of the Project Site are designated Medium Density Residential. The area to the south of the Project Site is designated Highest Density Residential.

J. Overlay(s), if any: N/A

K. Policy Area(s), if any: Highgrove Community Policy Area

L. Adjacent and Surrounding:

1. **General Plan Area Plan(s):** Highgrove Area Plan
2. **Foundation Component(s):** Community Development
3. **Land Use Designation(s):** Medium Density Residential and Highest Density Residential
4. **Overlay(s), if any:** N/A
5. **Policy Area(s), if any:** Highgrove Community Policy Area

M. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** N/A
2. **Specific Plan Planning Area, and Policies, if any:** N/A

N. Existing Zoning: One Family Dwelling (R-1)

O. Proposed Zoning, if any: N/A

P. Adjacent and Surrounding Zoning: Areas to the north, east and west are zoned R-1. Areas to the south are zoned Highest Density Residential (R-7).

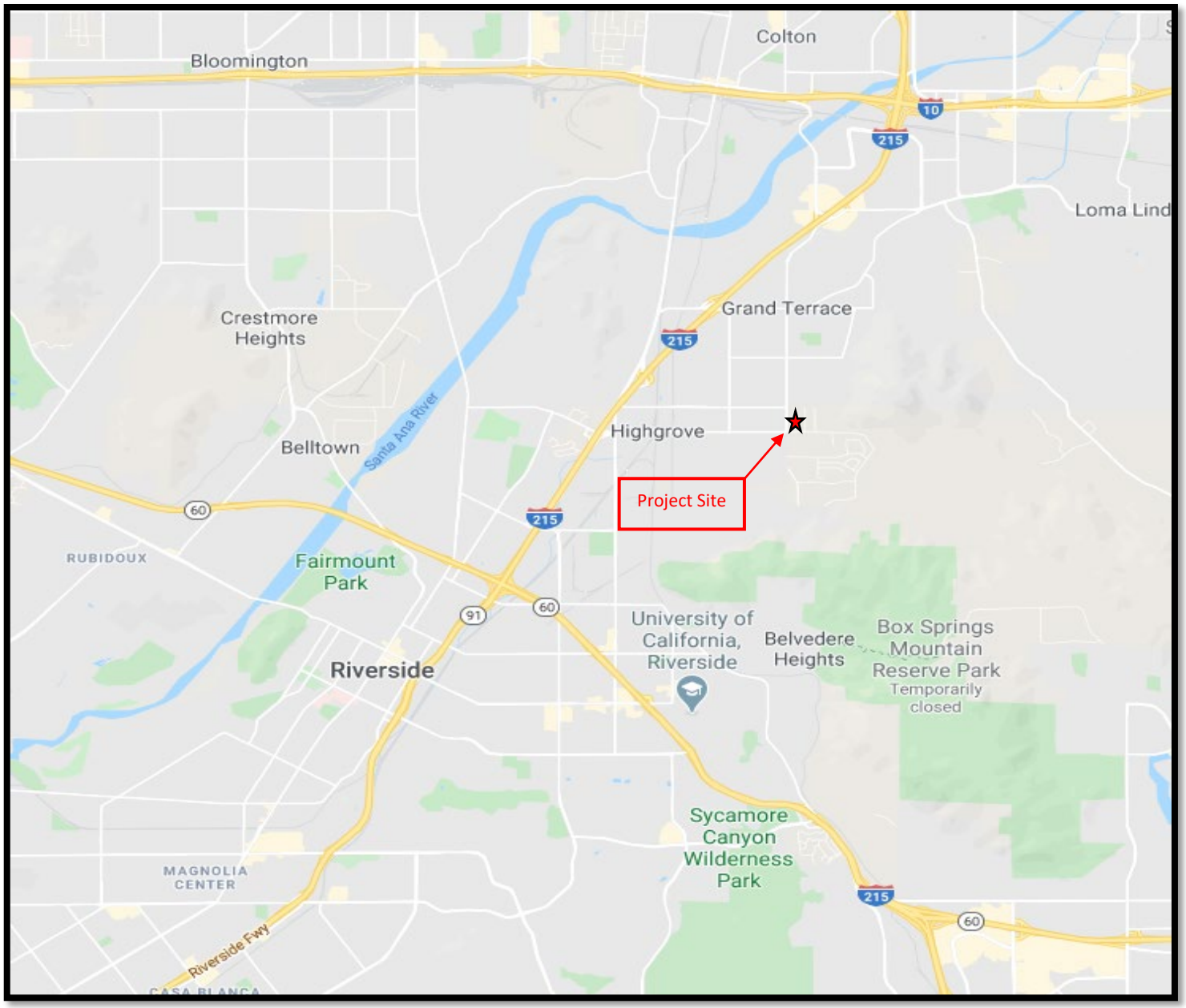


Figure 1: Regional Vicinity Map

Source: Google Maps

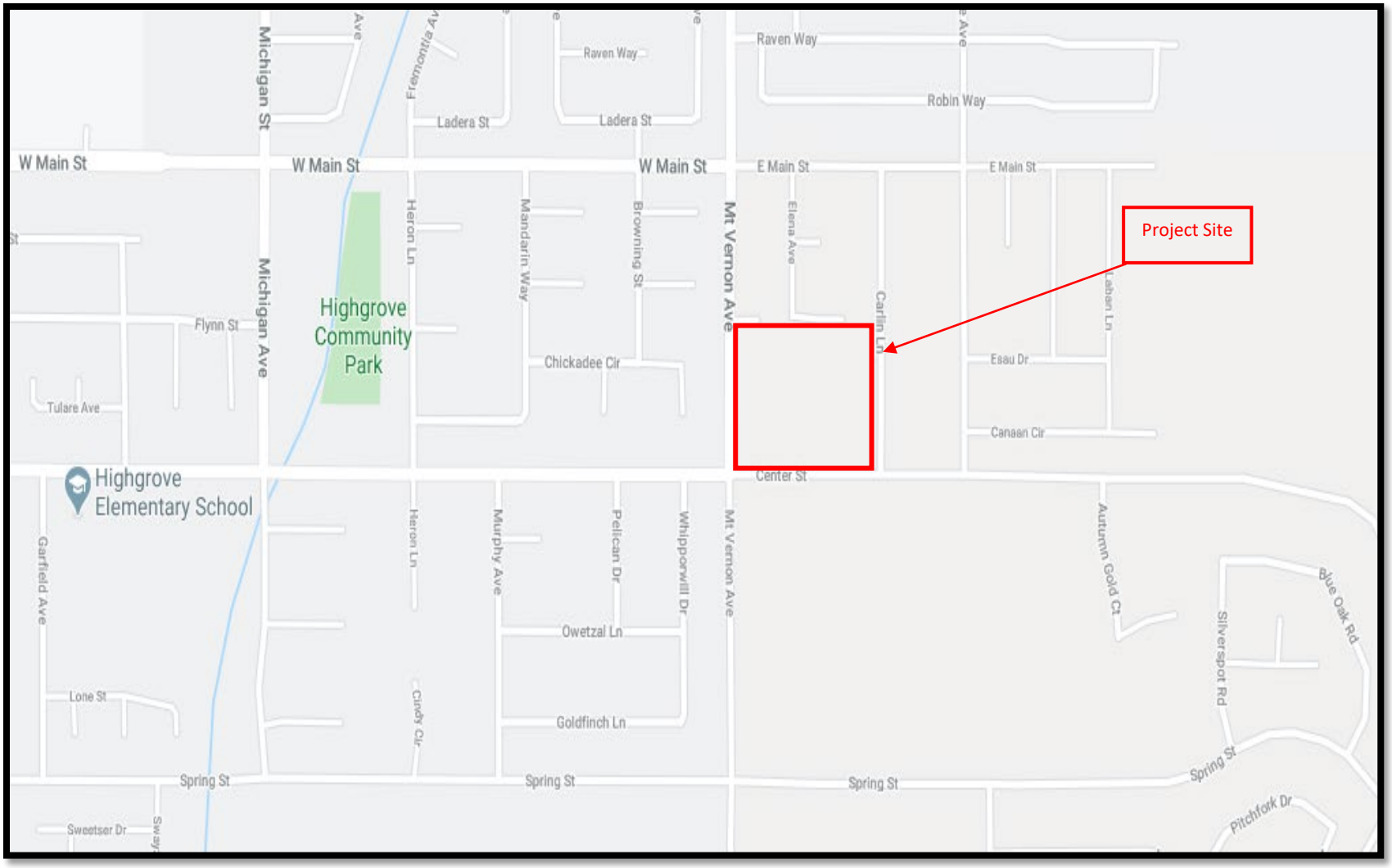


Figure 2: Project Vicinity Map
Source: Google Maps

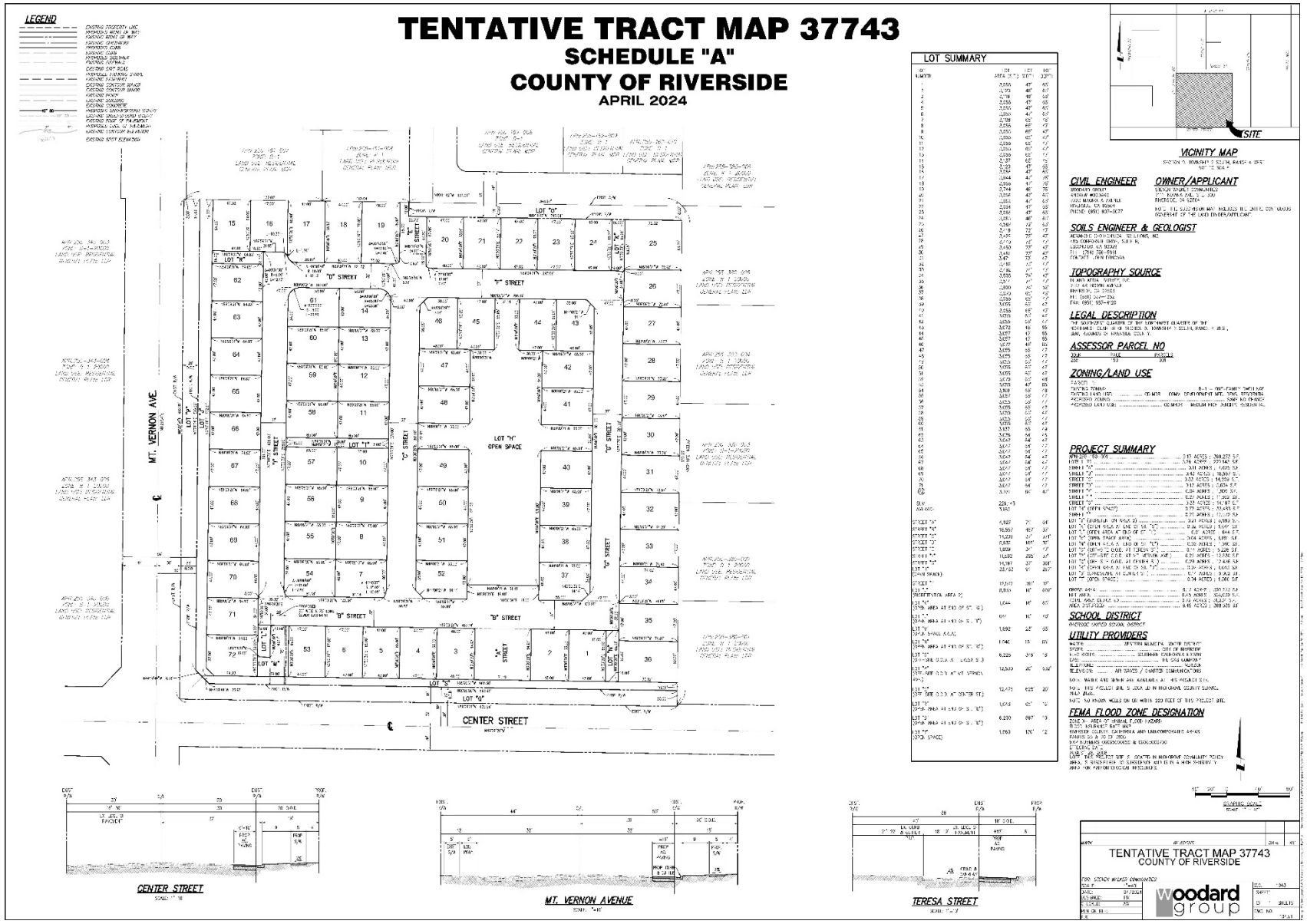


Figure 3: Tentative Map 37743

Source: Woodard Group

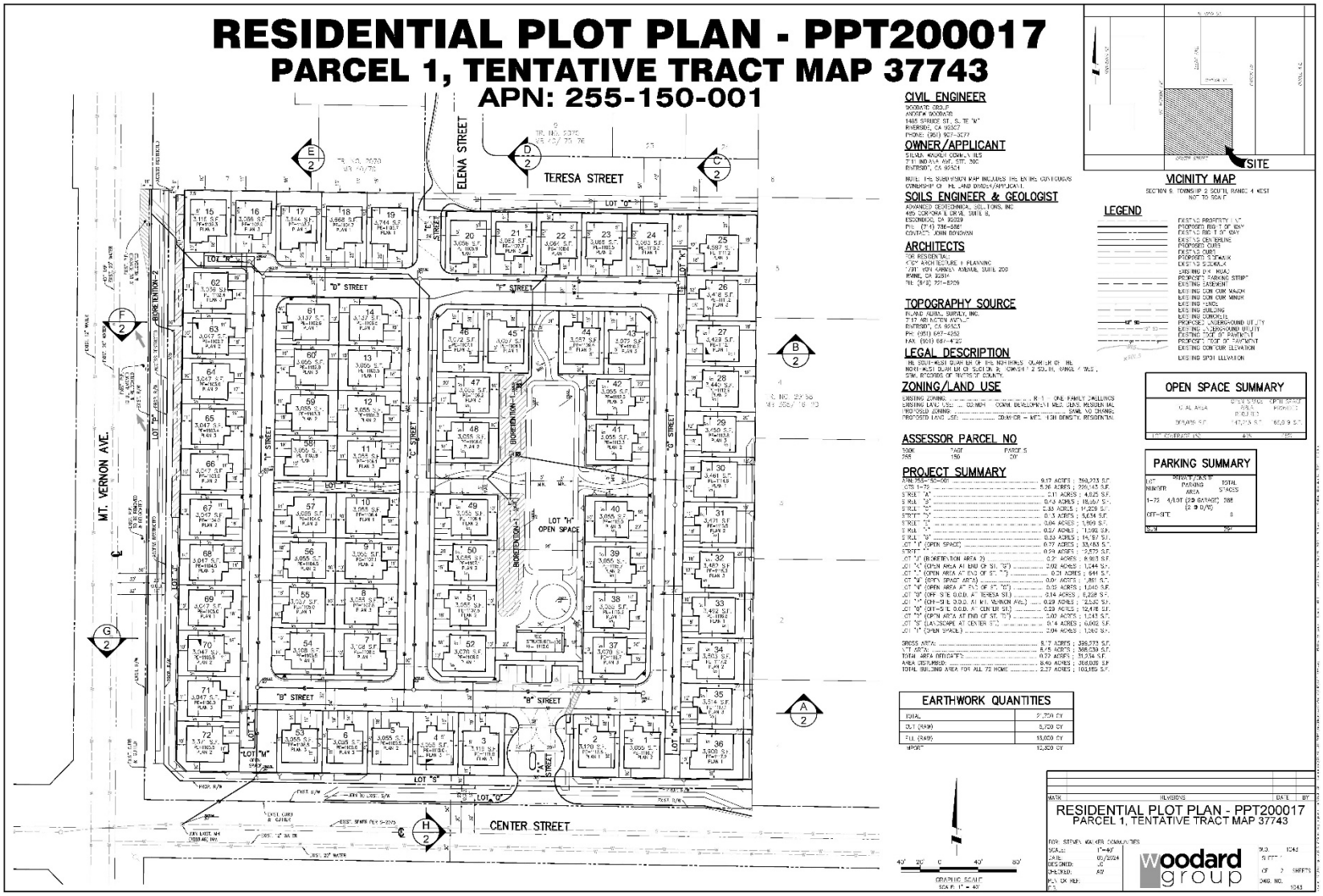


Figure 4: Overall Site Plan

Source: Woodard Group

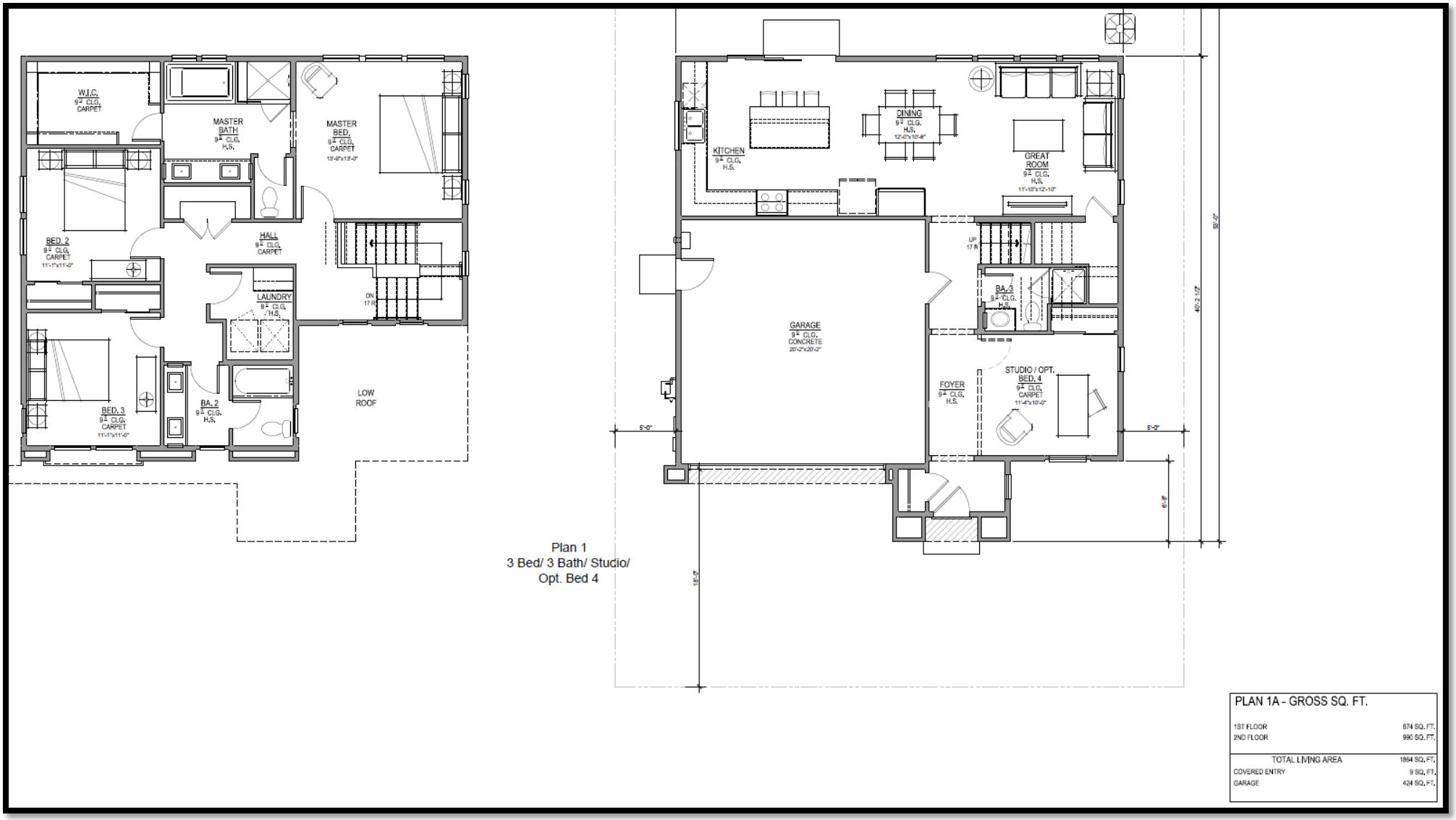


Figure 5: Conceptual Residential Floor Plans (1)

Source: ktgy Architecture + Planning

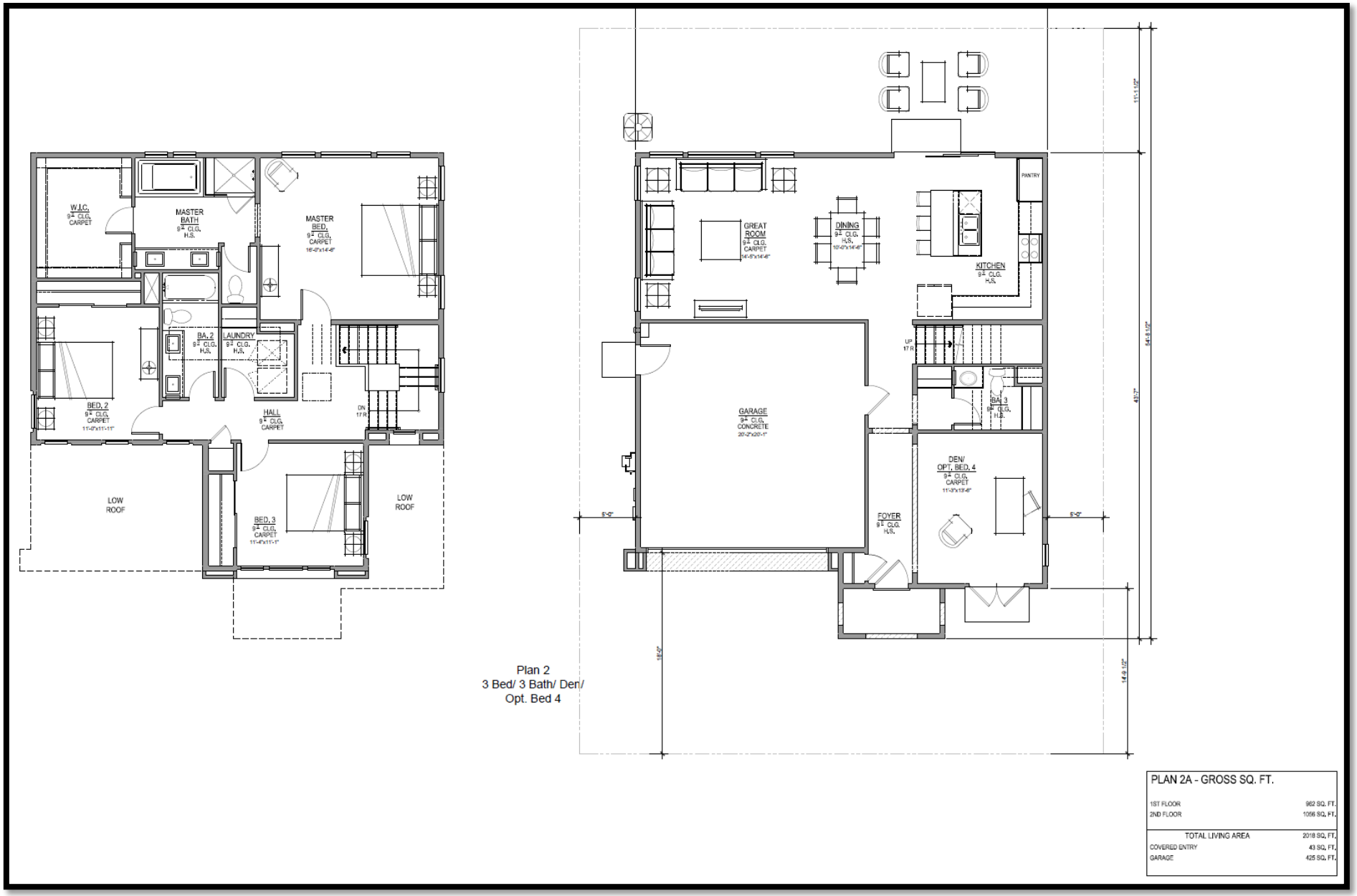


Figure 6: Conceptual Residential Floor Plans (2)

Source: ktgy Architecture + Planning

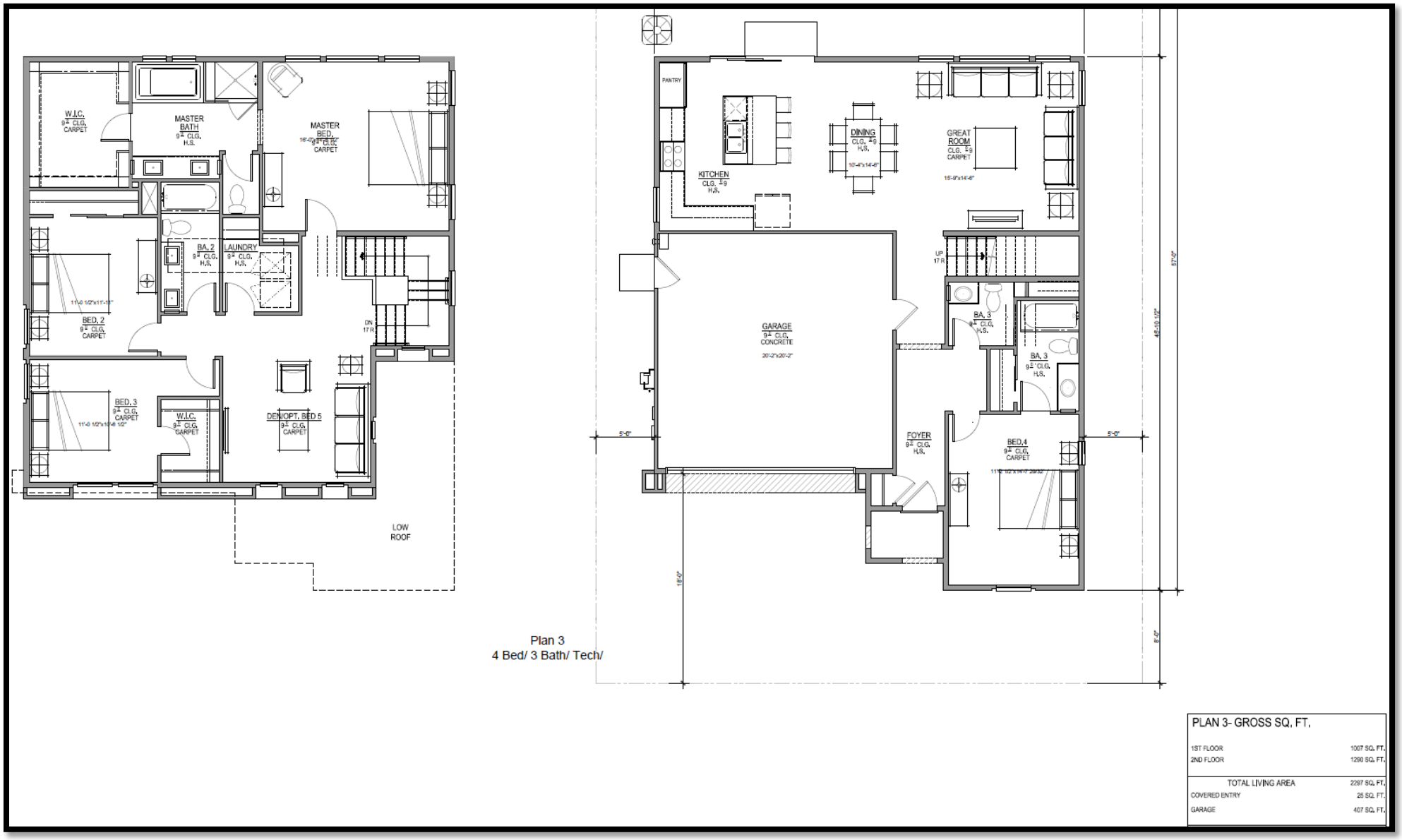


Figure 7: Conceptual Residential Floor Plans (3)

Source: ktgy Architecture + Planning

Figure 8: Conceptual Residential Development Landscape Plan

Source: ktgy Architecture + Planning

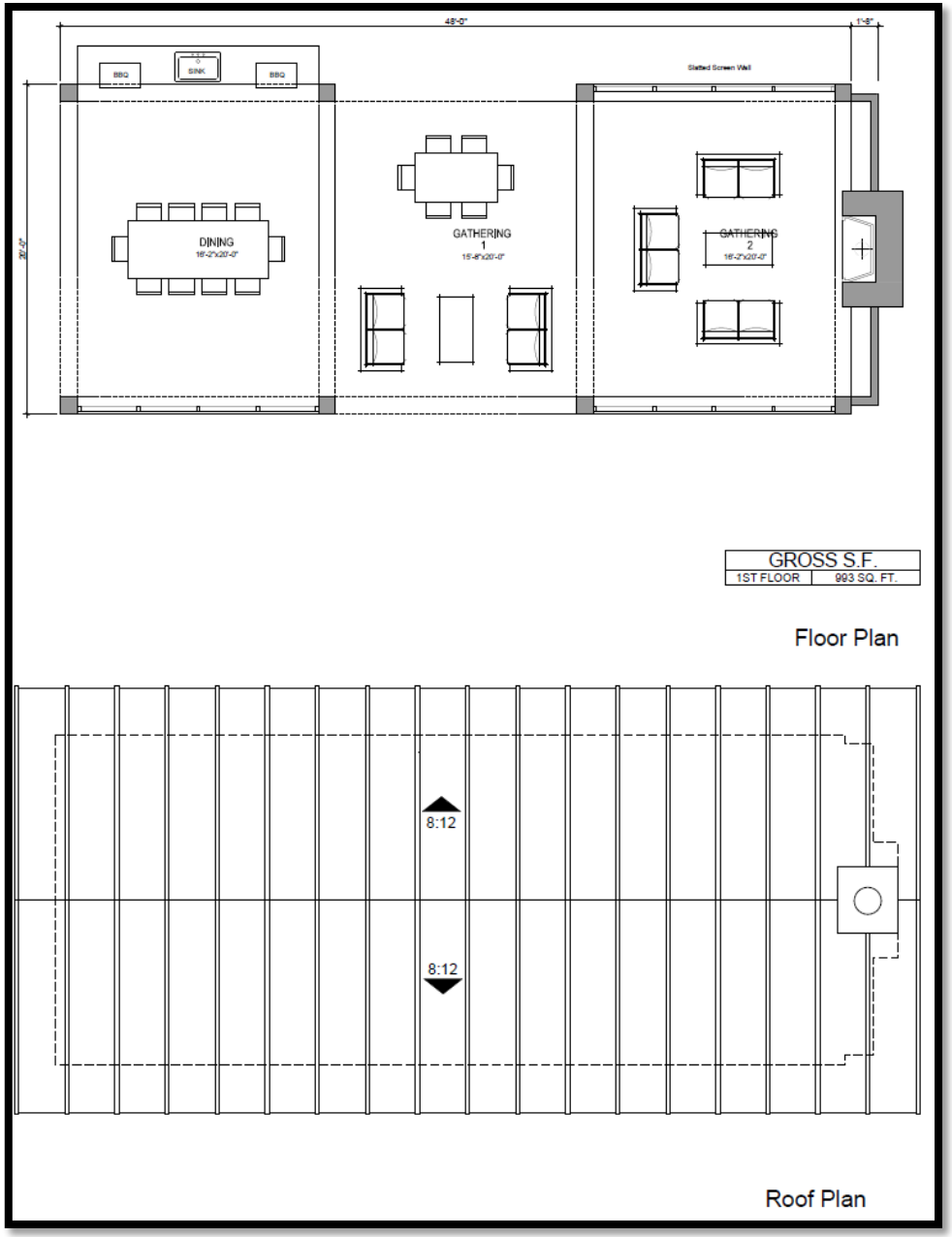


Figure 9: Shade Structure Floor Plan & Roof Plan

Source: ktgy Architecture + Planning

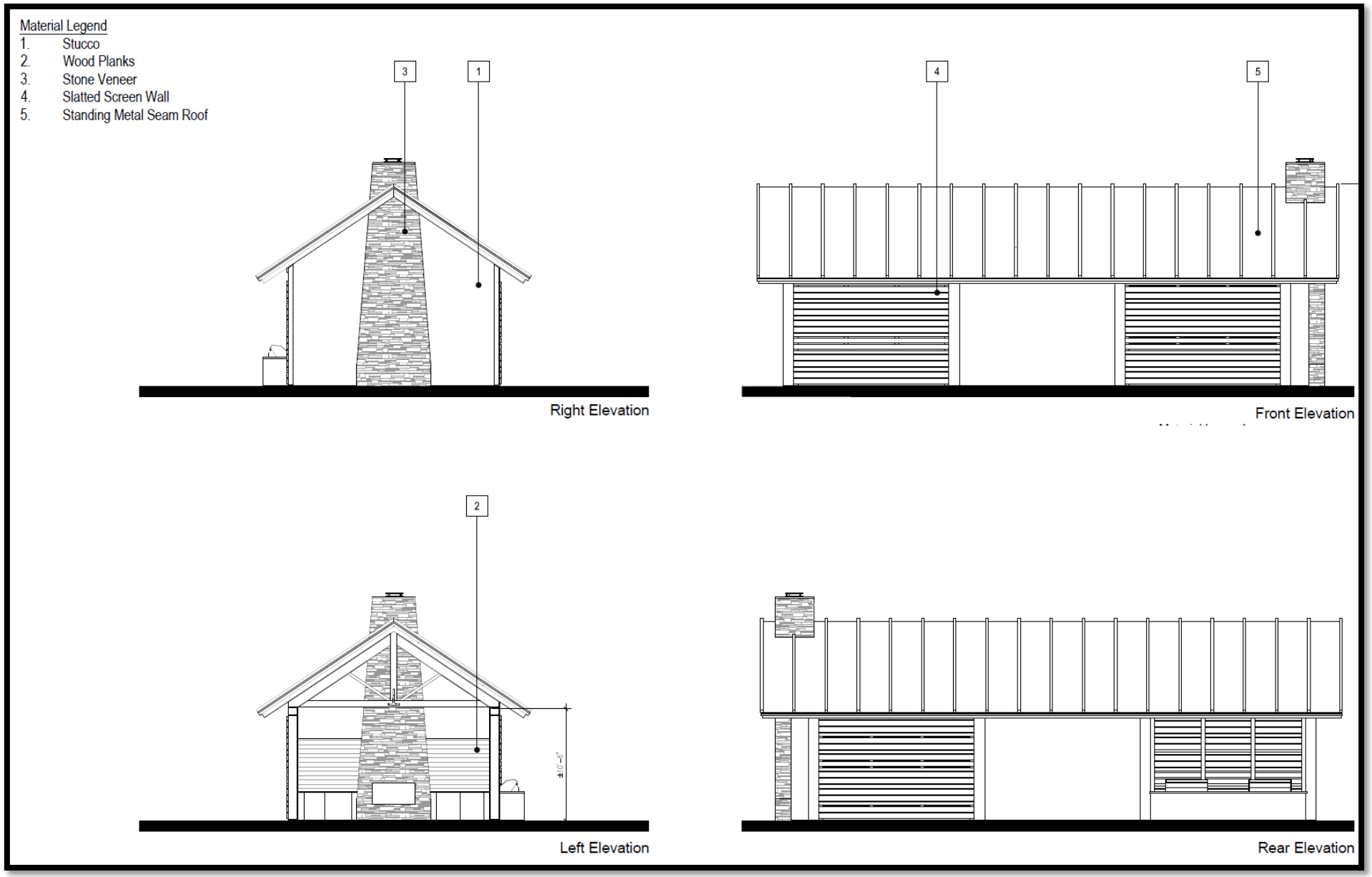


Figure 10: Shade Structure Elevations

Source: ktgy Architecture + Planning

Figure 11: Conceptual Residential Fire Access Plan

Source: Woodard Group

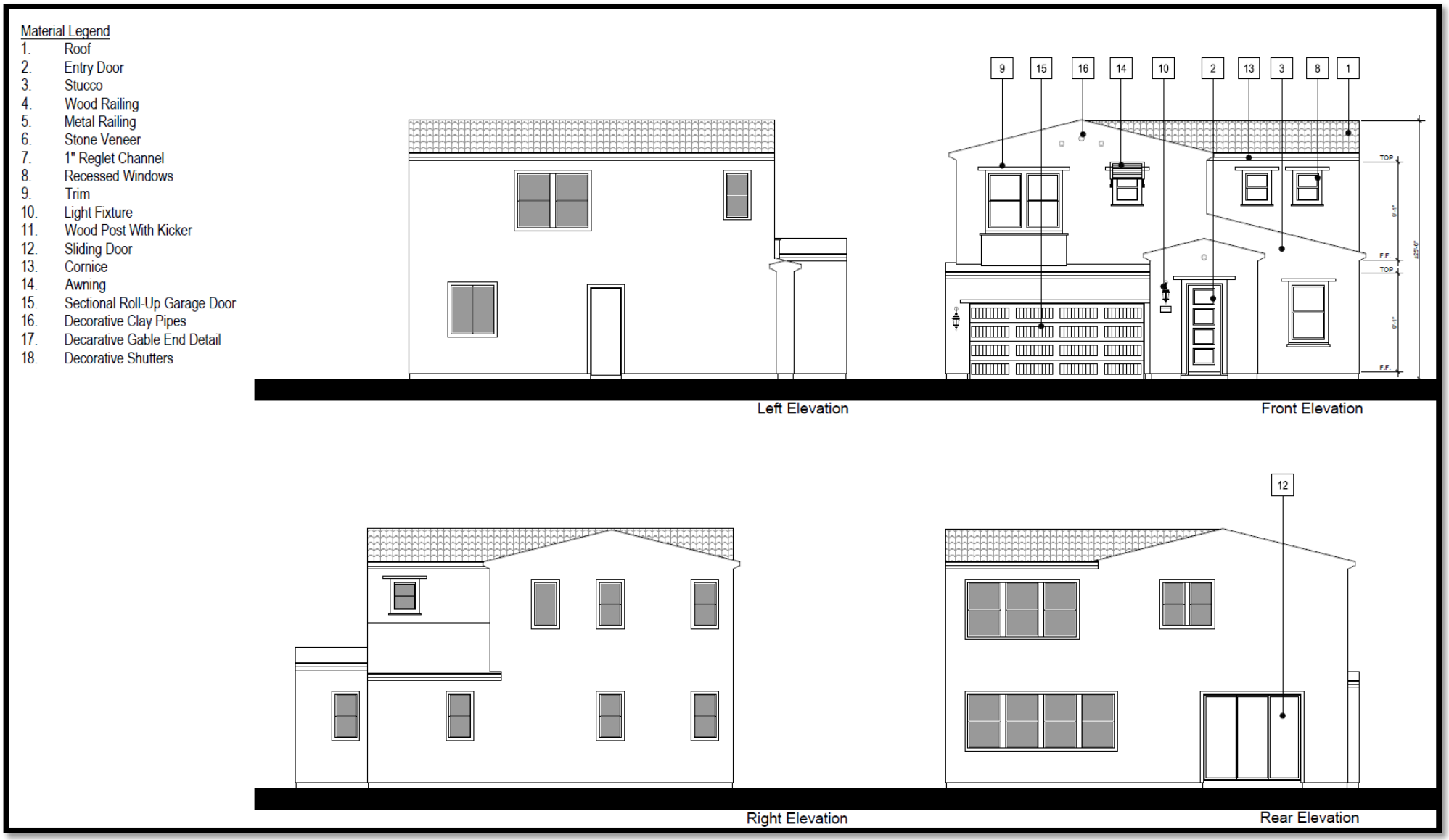


Figure 12a: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

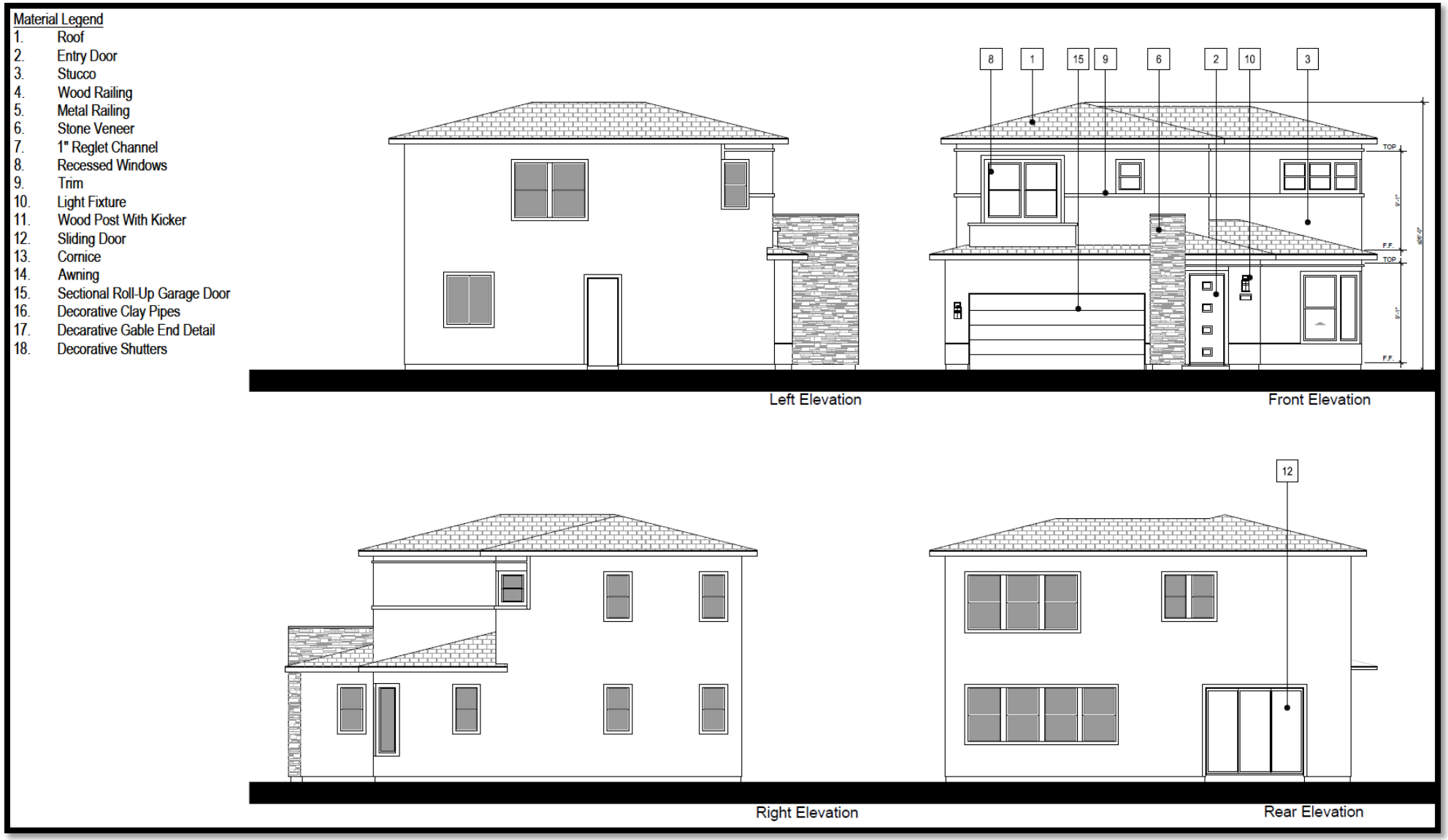


Figure 12b: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

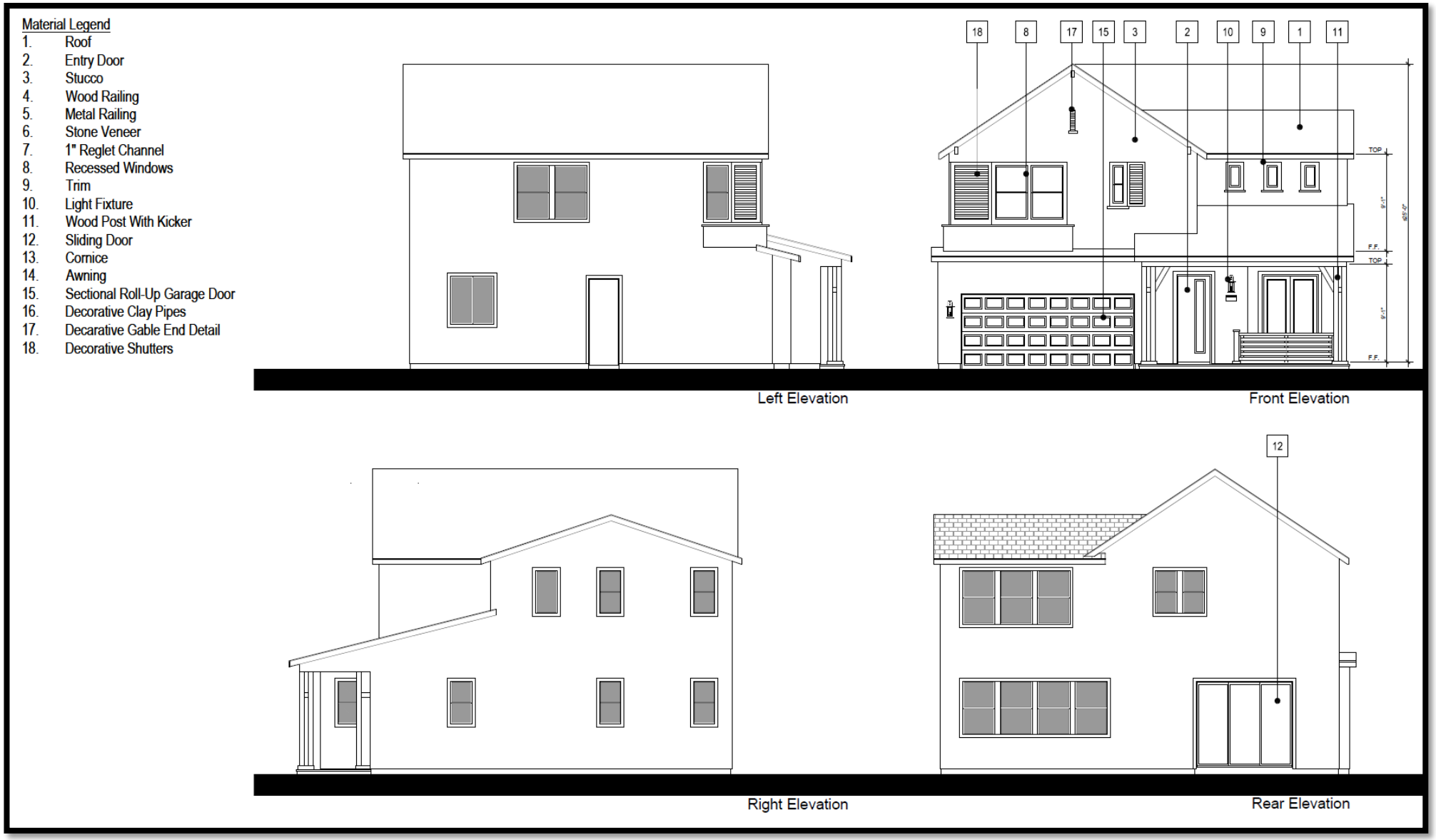


Figure 12c: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

Material Legend

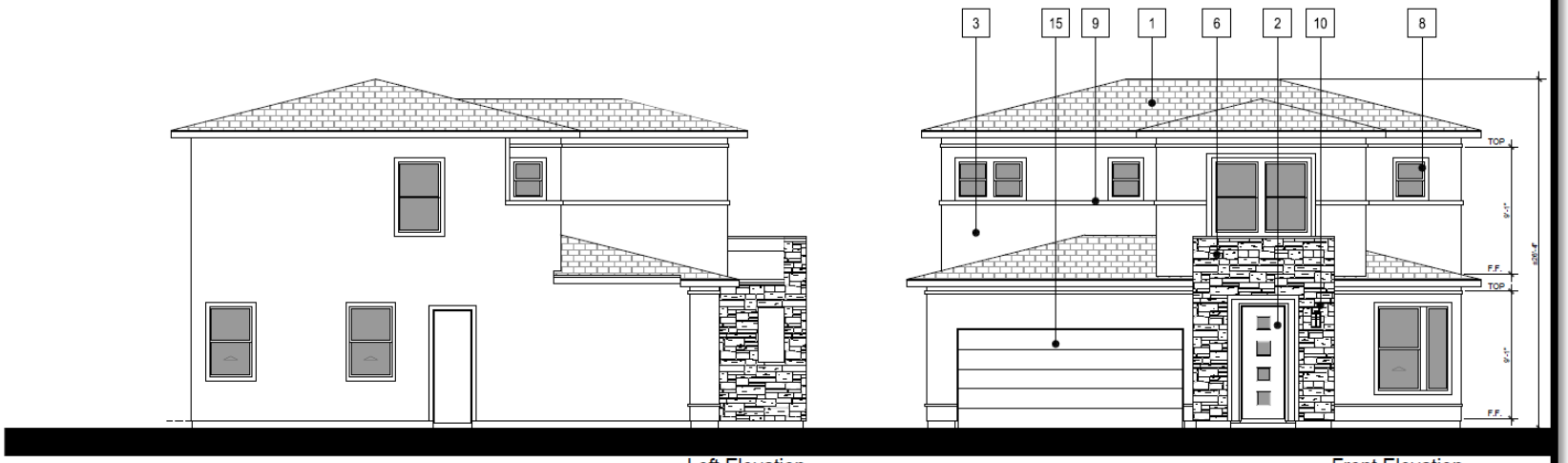
1. Roof
2. Entry Door
3. Stucco
4. Wood Railing
5. Metal Railing
6. Stone Veneer
7. 1" Reglet Channel
8. Recessed Windows
9. Trim
10. Light Fixture
11. Wood Post With Kicker
12. Sliding Door
13. Cornice
14. Awning
15. Sectional Roll-Up Garage Door
16. Decorative Clay Pipes
17. Decorative Gable End Detail
18. Decorative Shutters

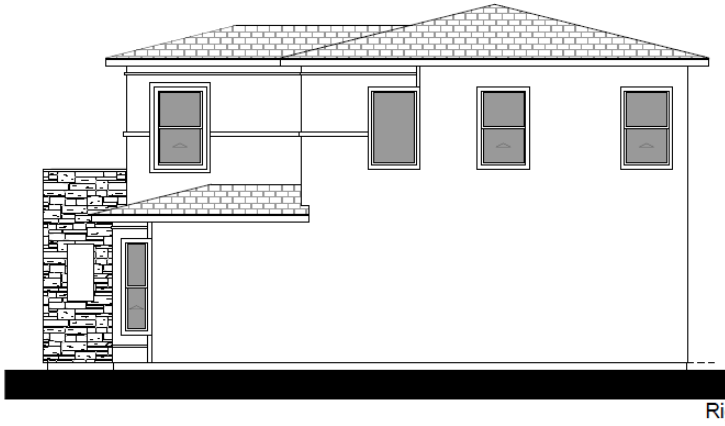
Figure 13a: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

Material Legend

1. Roof
2. Entry Door
3. Stucco
4. Wood Railing
5. Metal Railing
6. Stone Veneer
7. 1" Reglet Channel
8. Recessed Windows
9. Trim
10. Light Fixture
11. Wood Post With Kicker
12. Sliding Door
13. Cornice
14. Awning
15. Sectional Roll-Up Garage Door
16. Decorative Clay Pipes
17. Decorative Gable End Detail
18. Decorative Shutters





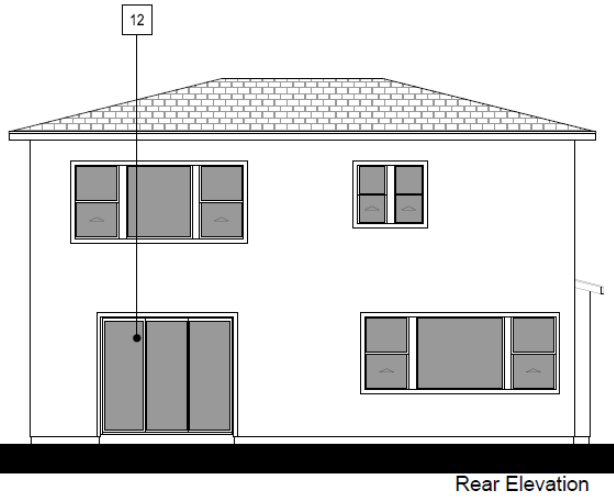


Figure 13b: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

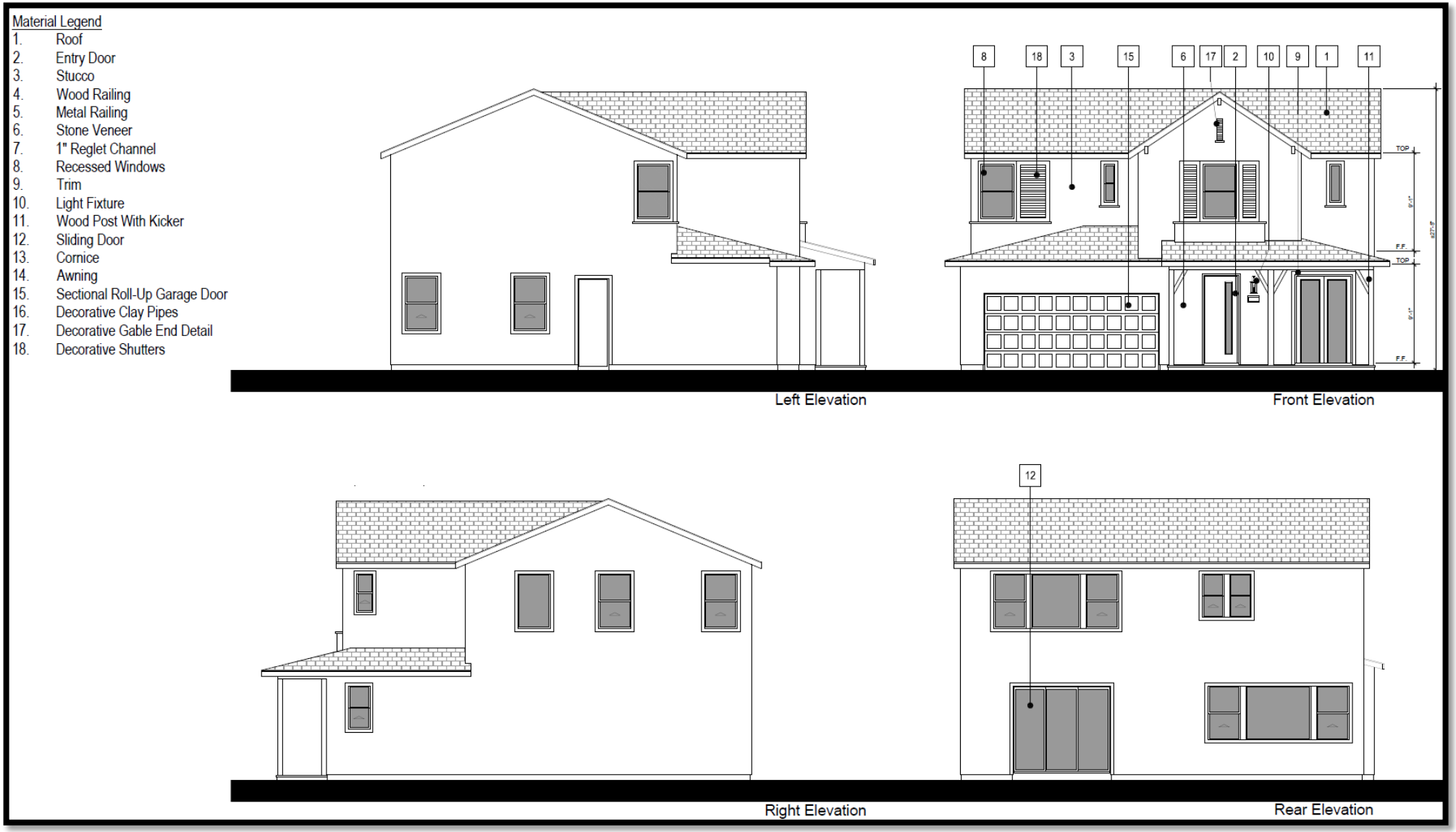


Figure 13c: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

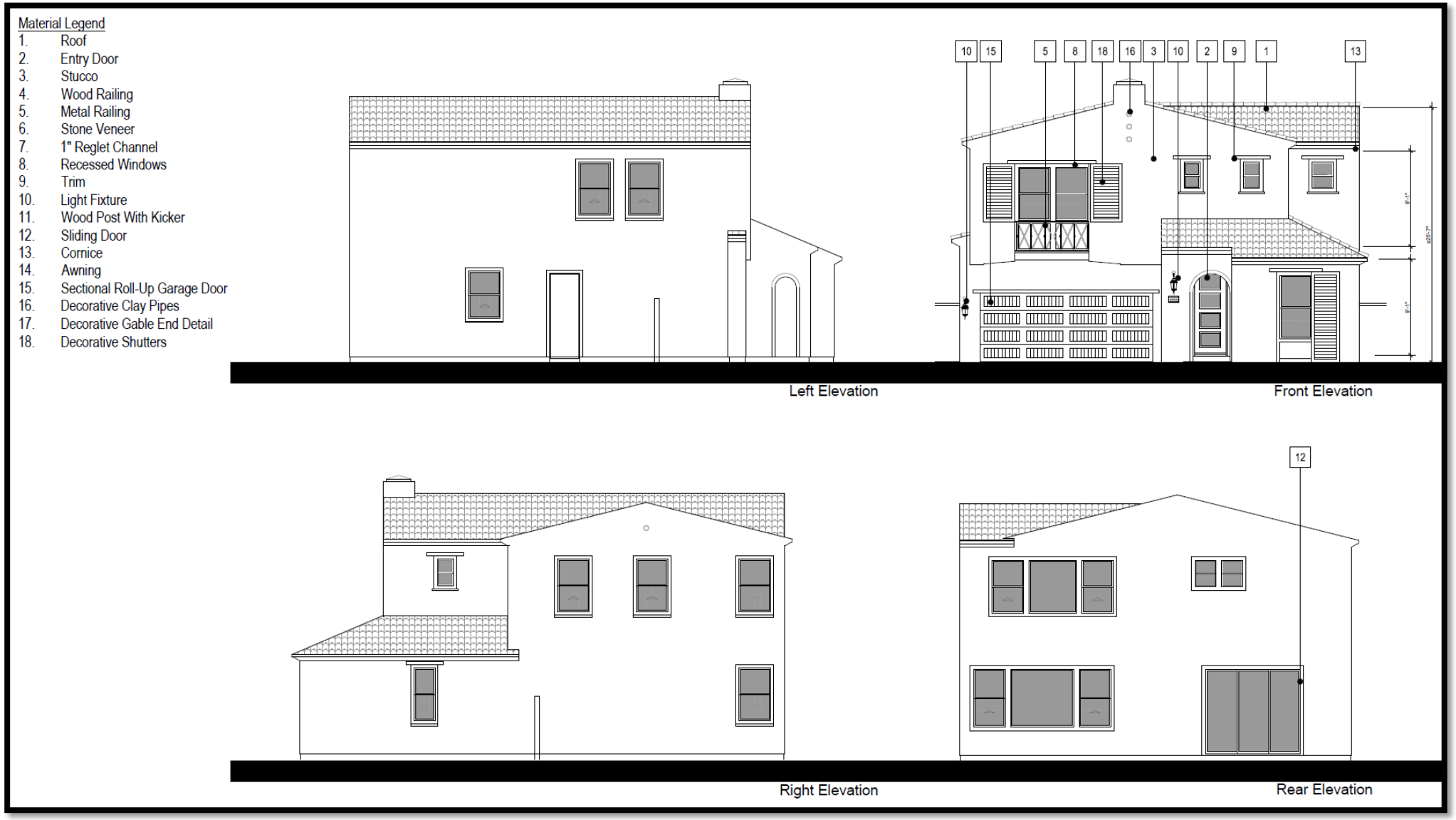


Figure 14a: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

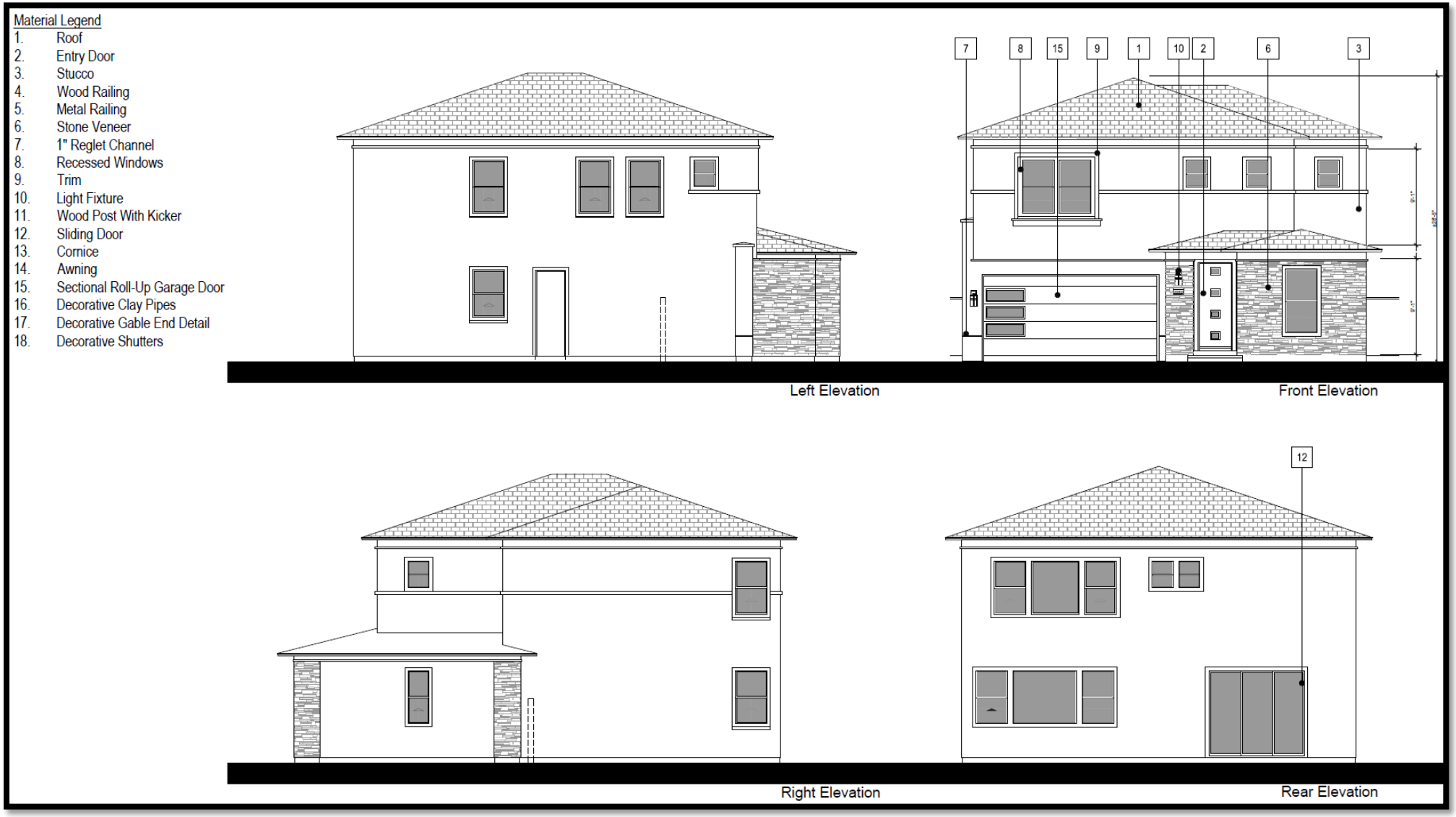


Figure 14b: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

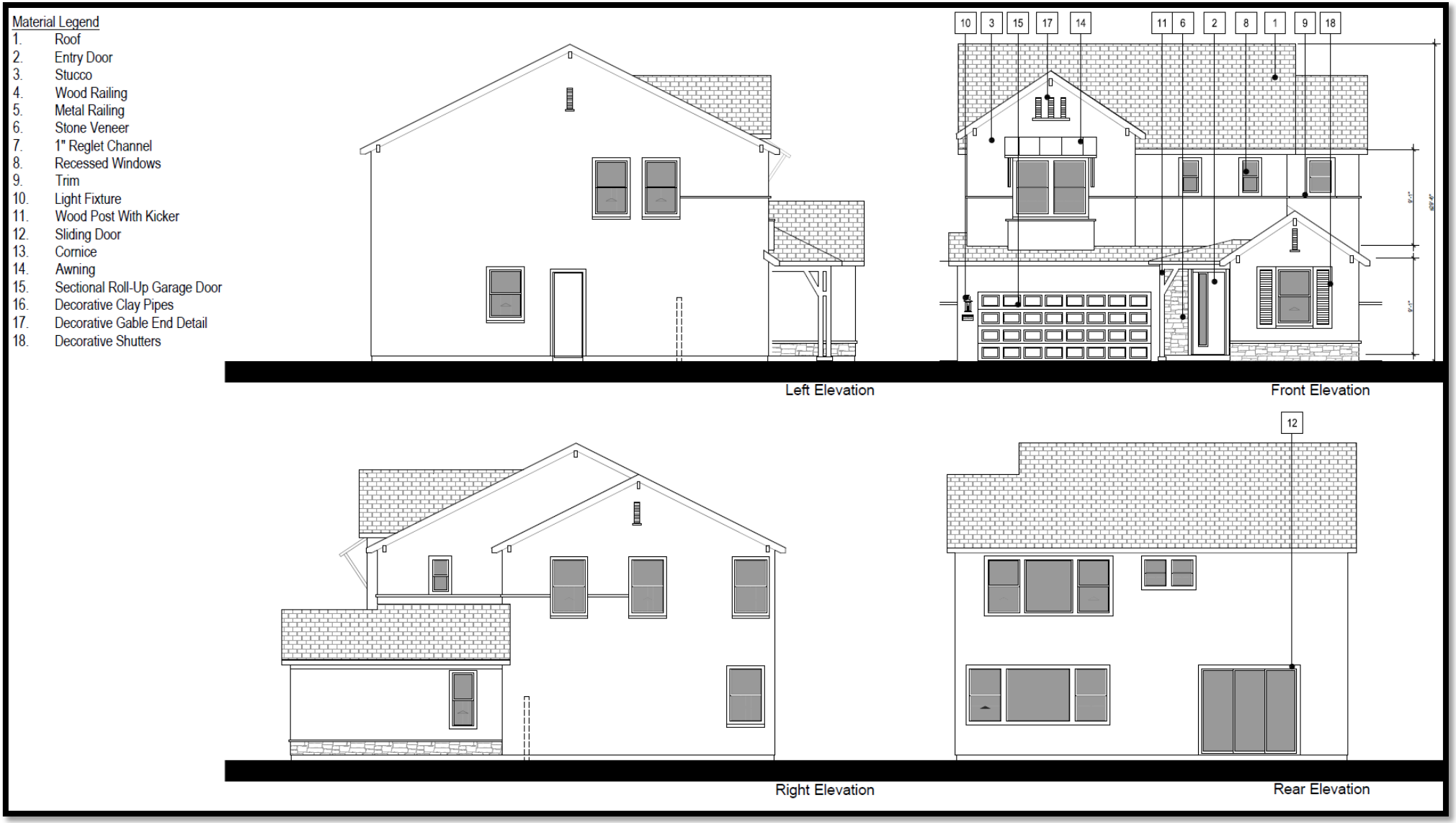


Figure 14c: Conceptual Residential Elevations

Source: ktgy Architecture + Planning

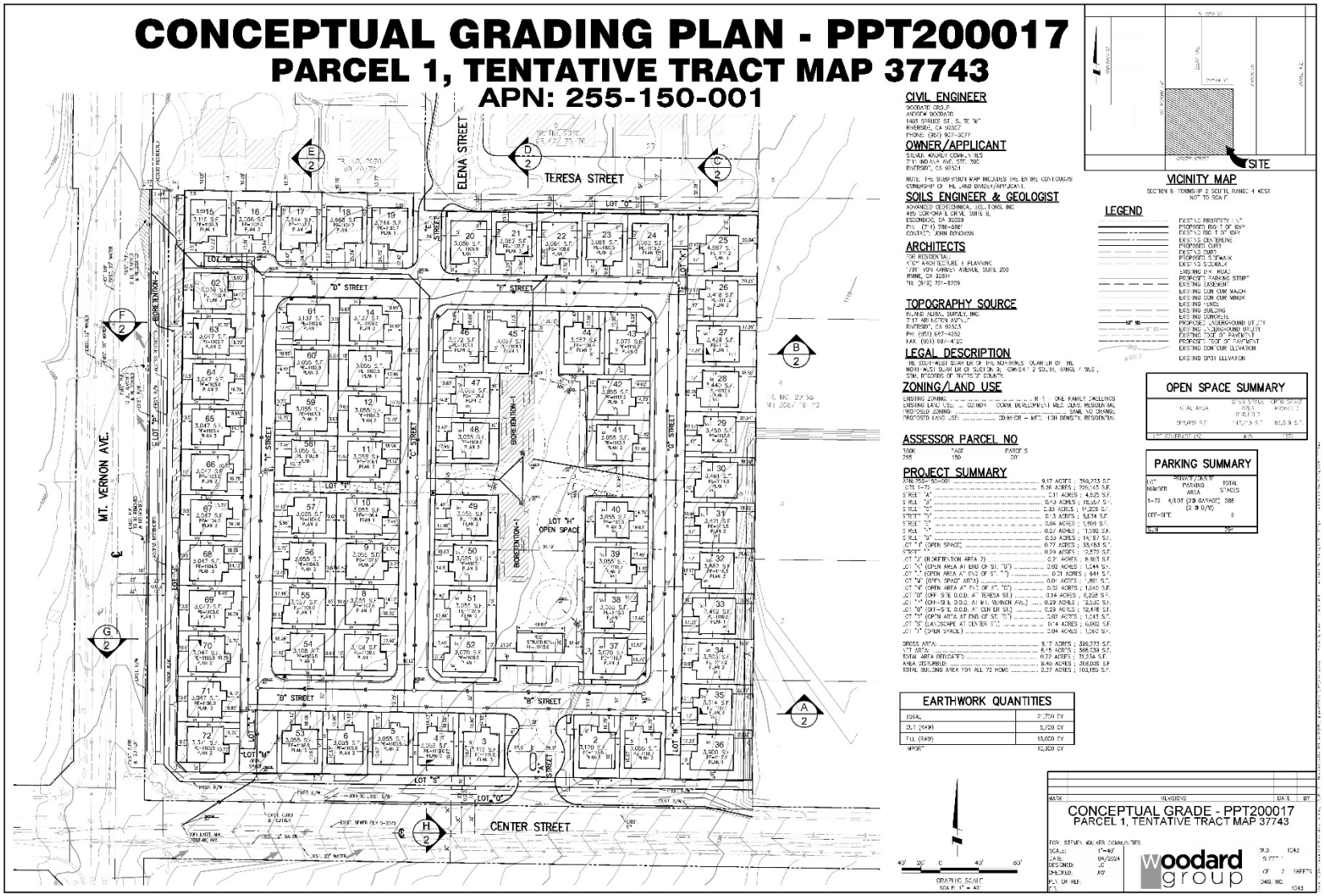


Figure 15a: Conceptual Grading Plan

Source: Woodard Group

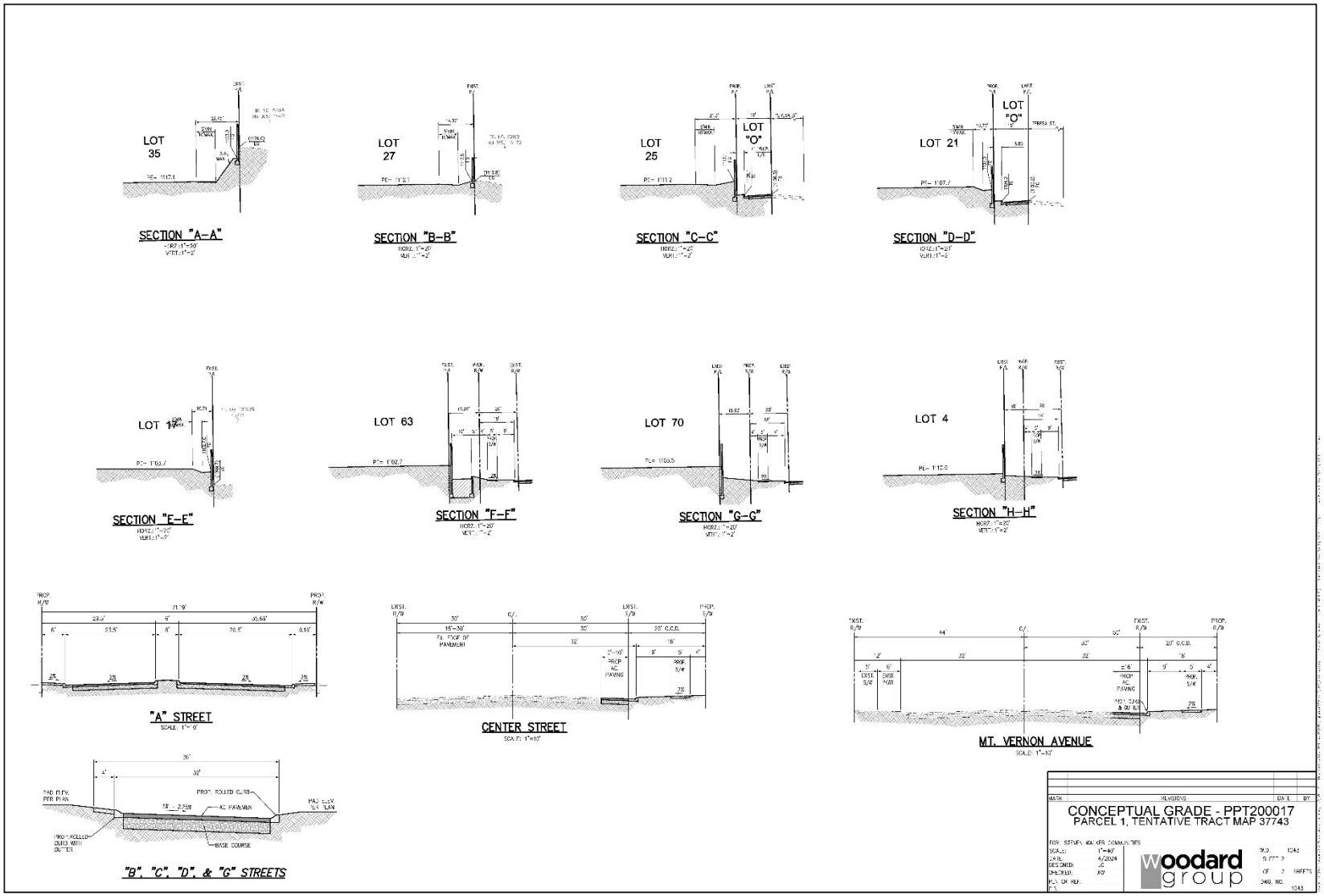


Figure 15b: Conceptual Grading Plan

Source: Woodard Group

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
☒ I find 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, described in this document, have been made or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment, **NO NEW ENVIRONMENTAL DOCUMENTATION IS REQUIRED** because (a) all potentially significant effects of the proposed project have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, (b) all potentially significant effects of the proposed project have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, (c) the proposed project will not result in any new significant environmental effects not identified in the earlier EIR or Negative Declaration, (d) the proposed project will not substantially increase the severity of the environmental effects identified in the earlier EIR or Negative Declaration, I no considerably different mitigation measures have been identified and (f) no mitigation measures found infeasible have become feasible.
☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15162 exist. An **ADDENDUM** to a previously-certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15162 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the project in the changed situation; therefore a **SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT** is required that need only contain the information necessary to make the previous EIR adequate for the project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15162, exist and **a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT** is required: (1)

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

Signature	Date
	For: John Hildebrand *Planning Director*
Printed Name	

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed project to determine any potential significant impacts upon the environment that would result from construction and implementation of the project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the County of Riverside, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed project.

AESTHETICS

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the project:				
1. Scenic Resources a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure C-8 "Scenic Highways"

Findings of Fact:

a. **No Impact.** The Project Site is not located along a designated scenic highway corridor. The closest Designated State Scenic Highway is Highway 243, located approximately 25 miles east of the Project Site. The closest Eligible State Scenic Highway is State Highway 74, approximately 25 miles south of the Project Site. Given the Project Site's location, the Proposed Project would not be visible from either Highway 243 or State Highway 74. Therefore, no potential impacts associated with scenic highway corridor would occur and no mitigation is required.

b. **Less Than Significant Impact**. The Project Site is currently vacant and undeveloped. The Project Site does not contain any scenic resources, trees, rock outcroppings, or unique or landmark features. Blue Mountain, located approximately 0.40 miles east of the Project Site, provides scenic value. However, the Proposed Project would not substantially obstruct views of the Blue Mountain because the proposed development would be similar in nature to the existing surrounding development. Blue Mountain as well as other distant mountain views would continue to be visible from the proposed development area as well as from the existing surrounding development areas. The Proposed Project

would be required to comply with the County's commercial and residential development standards. Therefore, potential impacts associated with scenic vistas or the creation of an aesthetically offensive site to the public view would be less than significant, and no mitigation is required.

c. **Less Than Significant Impact**. The Project Site is currently vacant and undeveloped. The surrounding uses include single-family residences to the north, east and west of the Project Site and a vacant undeveloped lot, zoned R-7 Highest Density Residential, south of the Project Site, just past Center Street. While the Proposed Project would involve the construction of 72 single-family residential units, the Project Site would be surrounded by a 6-foot-tall block wall and utilize lush landscaping and elevated architectural design to lessen the visual impact of the development.

The Proposed Project requests a GPA from MDR to Medium High Residential, MHDR. This change would result in the Proposed Project being consistent with General Plan standards residential developments. Therefore, potential impacts associated with the visual character or quality of the site and its surroundings would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

2. Mt. Palomar Observatory a) Interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655?	☐	☐	☒	☐

Source(s): GIS database; Ordinance No. 655 (Regulating Light Pollution); Ordinance No. 915 (Regulating Outdoor Lighting)

Findings of Fact:

a. **Less Than Significant Impact.** Ordinance No. 665 designates two zones, Zone A and Zone B, that are required to meet specific lighting design standards to minimize light that could have a detrimental effect on Mt. Palomar Observatory's astronomical observation and research. Zone A includes areas within 15 miles from the observatory. Zone B includes areas between 15 and 45 miles from the observatory. The Project Site is approximately 52 miles northwest of the Mt. Palomar Observatory, and is not within Zone A or Zone B. As such, impacts to Mt. Palomar Observatory would be less than significant. The Proposed Project must also comply with another County ordinance regarding lighting. Ordinance No. 915 provides minimum requirements for outdoor lighting in order to reduce light trespass, and to protect the health, property, and well-being of residents in the unincorporated areas of the County. All outdoor lighting shall be hooded and directed so as not to shine directly upon adjoining property or public rights-of-way. All outdoor luminaires shall be appropriately located and adequately shielded and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Outdoor luminaires shall not blink, flash, or rotate. To ensure that lighting meets the required standards, the Proposed Project is required to submit lighting plans for approval as part of the permitting process to the Department of Building and Safety. Therefore, potential impacts associated with the interference with nighttime use of Mt. Palomar Observatory would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Other Lighting Issues a) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
b) Expose residential property to unacceptable light levels?	☐	☐	☒	☐

Source(s): On-site Inspection, Project Application Description

Findings of Fact:

a. **Less Than Significant Impact.** Since the Project Site is undeveloped, the Proposed Project would create new sources of lighting from construction and operation of the proposed residential and commercial development. The Project Site is situated generally in the southeast corner of Center Street and Mt Vernon Avenue and the primary sources of light in the project vicinity are streetlights and lights from vehicles along the nearby roadways. The selection of building materials and colors would be subject to County plan check review to reduce potential architectural glare. Incorporation of the Project Site streetscape landscape would serve to further shield surrounding properties from light and /or glare generated on site. The Proposed Project must comply with County Ordinance No. 915, which requires outdoor lighting to reduce light trespass. Therefore, potential impacts associated with substantial light/and glare would be less than significant and no mitigation is required.

Less Than Significant Impact. As noted in Response V.I.(3)(a), the Proposed Project would comply with County Ordinance No. 915 which requires all outdoor lighting to reduce light trespass by shielding and redirecting light downwards as to not shine directly upon adjoining property or public rights-of-way. All outdoor luminaires shall be appropriately located and adequately shielded and directed such that no direct light falls outside the parcel of origin, or onto the public right-of-way. Compliance with County Ordinance No. 915 would reduce impacts related to lighting. Therefore, potential impacts associated with exposure of unacceptable light levels at residential properties would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

AGRICULTURAL & FOREST RESOURCES

AGRICULTURE & FOREST RESOURCES Would the project:				
4. Agriculture 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?	☐	☐	☐	☒
b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source(s): Riverside County General Plan, Multipurpose Open Space Element, Figure OS-2 "Agricultural Resources;" CA Farmland Conservancy Farmland Finder Map (2016) GIS database; Project Application Materials, Map My County

Findings of Fact:

a. No Impact. According to Riverside County's General Plan and California Farmland Conservancy[2], the Project Site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland). However, the County's General Plan Multipurpose Open Space Element, Figure OS-2 "Agricultural Resources" shows the Project Site is designated as Farmland of Local Importance. The Multipurpose Open Space Element defines local important farmlands as farmlands not covered by Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, but land of locally significant economic importance. Farmland of Local Importance includes the following:

- Lands with soils that would be classified as Prime or Statewide Important Farmlands but lack available irrigation water.
- Lands planted in 1980 or 1981 in dry land grain crops such as barley, oats, and wheat.
- Lands producing major crops for Riverside County but that are not listed as Unique Farmland crops. Such crops are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelon.
- Dairylands including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more.
- Lands identified by Riverside County with Agriculture land use designations or contracts.
- Lands planted with jojoba that are under cultivation and are of producing age.

According to the Phase I Environmental Site Assessment (Appendix E) for the Proposed Project, between 1931 to 1980, the Project Site was occupied by an orchard/agricultural use. According to Appendix E, the Project Site has remained vacant since 1980 and not used for agricultural or farming

[2] California Department of Conservation Farmland Mapping and monitoring Program (2016). (https://www.conservation.ca.gov/dlrp/fmmp/ Accessed April 20,2020.)

uses, including the use of dry land farming or production of crops such as summer squash, okra, eggplant, radishes, and watermelon. The Project Site does not contain dairylands, including corrals, pasture, milking facilities, or hay and manure storage areas as it is currently vacant and disturbed land. The Project Site is not designated with an agriculture land use as the Project Site is currently designated Medium Density Residential. The Project Site is not subject to an agricultural contract by the County. According to the General Biology Assessment (Appendix B) for the Proposed Project, the Project Site is currently vacant with vegetation of exotic grasses and forbs. The Project Site does not contain grain crops such as barley, oats, and wheat, nor does it contain jojoba. The Project Site does not meet any of the qualifying criteria the County considers to be local important farmlands pursuant to the General Plan. The Proposed Project would not result in the loss of potential farmland of local importance which meets the County's General Plan qualifying criteria on the Project Site. The Proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agriculture uses. Therefore, no potential impacts associated with Prime Farmland, Unique farmland, or Farmland of Statewide Importance would occur and no mitigation is required.

b. No Impact. The Project Site is currently zoned R-1, One Family Dwelling, and is not within or adjacent to a site zoned for agricultural. The Project Site is not land subject to a Williamson Act contract or land within Riverside County Agricultural Preserve. Therefore, no potential impacts associated with agricultural zoning, agricultural use, a Williamson Act contract, or a Riverside County Agricultural Preserve would occur, and no mitigation is required.

c. No Impact. Areas to the north, east and west of the Project Site are zoned R-1, One Family Dwelling. Areas to the south of the Project Site are zoned R-7, Highest Density Residential. The Project Site is not located within 300-feet of any agriculturally zoned property. No non-agricultural development would occur within 300-feet of an agriculturally zoned property. Therefore, no potential impacts associated with non-agricultural development within 300 ft. of an agriculturally zoned property would occur and no mitigation is required.

d. No Impact. No agricultural operations are located on, or adjacent to the Project Site. The Project Site and the surrounding areas are zoned for residential uses. The areas immediately to the north, east, and west of the Project Site are residential developments fully built out. The area south of the Project Site, is zoned R-7, Highest Density Residential. As no agricultural activities occur or are intended to occur on or in the vicinity of the Project Site, no conversion of Farmland to non-agriculture use would occur. Therefore, no potential impacts associated with the conversion of Farmland to non-agricultural use would occur, and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Forest	☐	☐	☐	☒
a) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g))?				
b) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	☐	☐	☐	☒

Source(s): Riverside County General Plan, Multipurpose Open Space Element, Figure OS-3a "Forestry Resources Western Riverside County Parks, Forests, and Recreation Areas," Figure OS-3b "Forestry Resources Eastern Riverside County Parks, Forests, and Recreation Areas," Project Application Materials

Findings of Fact:

a.- c. No Impact. No lands within the Project Site are zoned for forest land, timberland, or Timberland Production. Therefore, no potential impacts associated with the loss of forest land or cause other changes in the existing environment which could result in the conversion of forest land to non-forest use would occur, and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

AIR QUALITY

AIR QUALITY Would the project:				
6. Air Quality Impacts a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors, which are located within one (1) mile of the project site, to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Source(s): *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project*, Vista Environmental, September 23, 2021 (Appendix A), *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Air Quality and Greenhouse Gas Emissions Technical Memorandum*, Vista Environmental, January 2, 2024 (Appendix A.1), Riverside County General Plan, Riverside County Climate Action Plan ("CAP"), SCAQMD CEQA Air Quality Handbook

Findings of Fact:

General: Criteria pollutant analyses presented as a part of Findings of Fact for the Air Quality Impact Analysis are based on and summarized from Appendix A - *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project* (Vista Environmental, 2021) and Appendix A.1 - *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Air Quality and Greenhouse Gas Emissions Technical Memorandum* (Vista Environmental, 2024).

This analysis below is based on implementation of the following project design features that are either already depicted on the Proposed Project site plans and architectural plans or are required from County and State Regulations.

Project Design Feature AQ 1:

PDF-AQ-1: Prior to issuance of an occupancy permit, the property owner/developer shall provide all single-family homes with separate bins for trash and recycling.

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Regional Air Quality

Many air quality impacts that derive from dispersed mobile sources, which are the dominate pollution generators in the Air Basin, often occur hours later and miles away after photochemical processes have converted primary exhaust pollutants into secondary contaminants such as ozone. The incremental regional air quality impact of an individual project is generally very small and difficult to measure. Therefore, SCAQMD has developed significance thresholds based on the volume of pollution emitted rather than on actual ambient air quality because the direct air quality impact of a project is not quantifiable on a regional scale. The SCAQMD CEQA Handbook states that any project in the Air Basin with daily emissions that exceed any of the identified significance thresholds should be considered as

having an individually and cumulatively significant air quality impact. For the purposes to this air quality impact analysis, a regional air quality impact would be considered significant if emissions exceed the SCAQMD significance thresholds identified in Table 1 - *SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance.*

Table 1 – SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance

	Pollutant Emissions (pounds/day)						
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**	**Lead**
Construction	75	100	550	150	150	55	3
Operation	55	55	550	150	150	55	3

Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

Local Air Quality

Project-related construction air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. In order to assess local air quality impacts, the SCAQMD has developed Localized Significant Thresholds (LSTs) to assess the project-related air emissions in the project vicinity. SCAQMD has also provided Final Localized Significance Threshold Methodology (LST Methodology), July 2008, which details the methodology to analyze local air emission impacts. The LST Methodology found that the primary emissions of concern are NO2, CO, PM10, and PM2.5.

The LST Methodology provides Look-Up Tables with different thresholds based on the location and size of the Project Site and distance to the nearest sensitive receptors. As detailed in Appendix A, Section 7.3, the Project Site is located in Monitoring Area 23, which covers Metropolitan Riverside County. The Look-Up Tables provided in the LST Methodology include Project Site acreage sizes of 1-acre, 2-acres, and 5-acres. The 5-acre Project Site values in the Look-Up Tables have been utilized in this analysis since that is the nearest size available for the 9.17-acre Project Site. The nearest offsite sensitive receptors include single-family homes located directly adjacent to the north and east sides of the Project Site. Single-family residences are also located 80-feet to the west across Mr. Vernon Street. According to LST Methodology, any receptor located closer than 25 meters (82 feet) shall be based on the 25-meter thresholds. Table 2 - *SCAQMD Local Air Quality Thresholds of Significance* shows the LSTs for NO2, PM10 and PM2.5 for both construction and operational activities.

Table 2 – SCAQMD Local Air Quality Thresholds of Significance

	Allowable Emissions (pounds/day)[1]			
Activity	**NOx**	**CO**	**PM10**	**PM2.5**
Construction	270	1,577	13	8
Operation	270	1,577	4	2

Notes:
[1] The nearest offsite sensitive receptors are single-family homes located adjacent to the north and east sides of the Project Site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25-meter threshold.
Source: Calculated from SCAQMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 23, Metropolitan Riverside County

Toxic Air Contaminants

According to the SCAQMD CEQA Handbook, any project that has the potential to expose the public to toxic air contaminants in excess of the following thresholds would be considered to have a significant air quality impact:

- If the Maximum Incremental Cancer Risk is 10 in one million or greater; or

- Toxic air contaminants from the proposed project would result in a Hazard Index increase of 1 or greater.

In order to determine if the Proposed Project may have a significant impact related to toxic air contaminants (TACs), the Health Risk Assessment Guidance for analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, (Diesel Analysis) prepared by SCAQMD, August 2003, recommends that if the Proposed Project would create TACs through stationary sources or regular operations of diesel trucks on the Project Site, then the proximity of the nearest receptors to the source of the TAC and the toxicity of the hazardous air pollutant (HAP) should be analyzed through a comprehensive facility-wide health risk assessment (HRA).

Odor Impacts

The SCAQMD CEQA Handbook states that an odor impact would occur if the Proposed Project created an odor nuisance pursuant to SCAQMD Rule 402, which 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 to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
>
> The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

If the Proposed Project results in a violation of Rule 402 with regards to odor impacts, then the Proposed Project would create a significant odor impact.

a. Less Than Significant Impact. The Proposed Project would not conflict with or obstruct implementation of the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP). The following section discusses the Proposed Project's consistency with the SCAQMD AQMP.

SCAQMD Air Quality Management Plan

CEQA requires a discussion of any inconsistencies between a Proposed Project and applicable General Plans and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the Proposed Project includes the SCAQMD AQMP and so this section discusses any potential inconsistencies of the Proposed Project with the AQMP.

The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the Proposed Project would interfere with the region's ability to comply with Federal and State air quality standards. If the decision-makers determine that the Proposed Project is inconsistent, the lead agency may consider project modifications or inclusion of mitigation to eliminate the inconsistency.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A Proposed Project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

> (1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP, or increments based on the year of project buildout and phase.

Criterion 1 - Increase in the Frequency or Severity of Violations?

Based on the air quality modeling analysis contained in Appendix A, short-term regional construction air emissions would not result in significant impacts based on SCAQMD regional thresholds of significance discussed in Section 9.1 of Appendix A (p. 57) or local thresholds of significance discussed in Section 9.2 (p. 57). The ongoing operation of the Proposed Project would generate air pollutant emissions that are inconsequential on a regional basis and would not result in significant impacts based on SCAQMD thresholds of significance discussed in Appendix A. The analysis for long-term local air quality impacts showed that local pollutant concentrations would not be projected to exceed the air quality standards. Therefore, potential long-term impacts associated with an increase in severity or frequency of air quality violations would be less than significant and no mitigation would be required.

Based on the information provided above, the Proposed Project would be consistent with the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by performing an analysis of the Proposed Project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted for the Proposed Project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the Connect SoCal and 2019 Federal Transportation Improvement Program (FTIP). The Connect SoCal is a major planning document for the regional transportation and land use network within Southern California. The Connect SoCal is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The 2019 FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds within Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the County of Riverside General Plan's Land Use Plan defines the assumptions that are represented in AQMP.

The Proposed Project is currently designated as Community Development: Medium Density Residential (CD: MDR) in the General Plan and is zoned One-Family Dwellings (R-1). The Proposed Project would require a General Plan Amendment to Community Development: Medium High Density Residential (CD: MHDR). Due to the Proposed Project's nominal size and consistency with the surrounding neighborhood, the Proposed Project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMPs. The Proposed Project consists of an infill residential development in an area of Southern California with a shortage of housing. The Proposed Project would not exceed the AQMP assumptions for the Project Site and is found to be consistent with the AQMP for the second criterion. Therefore, potential impacts associated with exceeding assumptions in the AQMP would be less than significant and no mitigation would be required.

The Proposed Project would not result in an inconsistency with the SCAQMD AQMP. Therefore, potential impacts associated with the conflict or obstruction of the implementation of the applicable air quality plan would be less than significant and no mitigation is required.

b. Less Than Significant Impact. The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal, State, or local ambient air quality standard. The following section provides calculations of the potential air emissions associated with the construction and operations of the Proposed Project and compares the emissions to the SCAQMD standards. For detailed information related to the calculations, refer to Appendix A.

Construction Emissions

The construction activities for the Proposed Project would include site preparation and grading of the Project Site, building construction and application of architectural coatings to the proposed structures, and paving of the proposed parking spaces, onsite roads, and driveways. The construction emissions have been analyzed for both regional and local air quality impacts.

Construction-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from construction were analyzed through utilizing the methodology described in *Localized Significance Threshold Methodology* (LST Methodology), prepared by SCAQMD, revised October 2009. The LST Methodology found the primary criteria pollutant emissions of concern are NOx, CO, PM10, and PM2.5. In order to determine if any of these pollutants require a detailed analysis of the local air quality impacts, each phase of construction was screened using the SCAQMD's Mass Rate LST Look-up Tables. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily onsite emissions of CO, NOx, PM10, and PM2.5 from the Proposed Project could result in a significant impact to the local air quality.

The CalEEMod Version 2022.1.21 model and input parameters utilized to calculate the construction-related regional emissions from the Proposed Project are detailed in Appendix A.1. The worst-case summer or winter daily construction-related criteria pollutant emissions from the Proposed Project for each phase of construction activities are shown in Table 3 – *Construction-Related Criteria Pollutant Emissions* and the CalEEMod daily printouts are shown in Appendix A.1.

Table 3 shows that none of the analyzed criteria pollutants would exceed the regional or local emissions thresholds during any season or year of construction. Therefore, potential regional air quality impacts associated with project construction would be less than significant and no mitigation is required.

Table 3 – Construction-Related Criteria Pollutant Emissions

Season and Year of Construction	Maximum Daily Pollutant Emissions (pounds/day)					
	VOC	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Summer 2024	3.74	36.0	34.4	0.05	6.94	4.15
Winter 2024	1.33	11.7	14.8	0.03	0.91	0.56
Summer 2025	53.6	10.8	15.1	0.03	0.84	0.50
Winter 2025	1.24	10.8	14.6	0.03	0.84	0.50
Project Maximum Daily Construction Emissions	**53.6**	**36.0**	**34.4**	**0.05**	**6.94**	**4.15**
SCQAMD Regional Thresholds	75	100	550	150	150	55
SCAQMD Local Thresholds[1]	--	270	1,577	--	13	8
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] The nearest sensitive receptors are single-family homes located adjacent to the north and east sides of the project site. According to SCAQMD methodology, all receptors closer than 25 meters are based on the 25 meter threshold. Calculated from SCAMD's Mass Rate Look-up Tables for five acres in Air Monitoring Area 23, Metropolitan Riverside County.
Source: CalEEMod Version 2022.1

Operational Emissions

The on-going operation of the Proposed Project would result in a long-term increase in air quality emissions. This increase would be due to emissions from the project-generated vehicle trips, emissions from energy usage, and onsite area source emissions created from the on-going use of the Proposed Project. The following section provides an analysis of potential long-term air quality impacts due to regional air quality and local air quality impacts with the on-going operations of the Proposed Project.

Operations-Related Criteria Pollutant Analysis

The operations-related regional criteria air quality impacts created by the Proposed Project were analyzed through use of the CalEEMod Version 2022.1 model and the input parameters utilized in this analysis are detailed in Appendix A.1. The worst-case summer or winter VOC, NOx, CO, SO_2, PM10, and PM2.5 daily emissions created from the Proposed Project's long-term operations have been calculated and are summarized in Table 4 – *Operational Criteria Pollutant Emissions* and the CalEEMod daily emissions printouts are shown in Appendix A.1.

Table 4 shows that none of the analyzed criteria pollutants would exceed the regional emissions thresholds.

Table 4 – Operational Criteria Pollutant Emissions

	Pollutant Emissions (pounds/day)					
Emissions Source	**VOC**	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Mobile Sources[1]	2.96	2.97	25.2	0.06	5.22	0.85
Area Sources[2]	4.23	1.23	4.58	0.01	0.10	0.10
Energy Usage[3]	0.04	0.65	0.28	<0.01	0.05	0.05
Total Regional Emissions	**7.23**	**4.85**	**30.06**	**0.07**	**5.37**	**1.51**
SCQAMD Regional Thresholds	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	No	No	No	No	No	No
Total Local Emissions[4]	--	1.95	5.49	--	0.28	0.18
SCQAMD Local Thresholds	--	270	1,577	--	4	2
Exceeds Threshold?	N/A	No	No	N/A	No	No

Notes:
[1] Mobile sources consist of emissions from vehicles and road dust.
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consist of emissions from natural gas usage.
[4] Total Local Emissions based on 2.5 percent of the Mobile Source emissions, which is the ratio utilized in the Original Air Report.
Source: Calculated from CalEEMod Version 2022.1..

In *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 (also referred to as "*Friant Ranch*"), the California Supreme Court held that when an EIR concluded that when a project would have significant impacts to air quality impacts, an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." In order to determine compliance with this Case, the Court developed a multi-part test that includes the following:

1) The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter.

This analysis details the specific health risks created from each criteria pollutant detailed in Section 4.1 of Appendix A (Table B, p. 16). The specific health risks created from diesel particulate matter is detailed in Appendix A, Section 2.2 (p. 9). As substantiated in Appendix A, the analysis meets the part 1 requirements of the Friant Ranch Case.

2) The analysis shall identify the magnitude of the health risks created from the Project. The Ruling details how to identify the magnitude of the health risks. Specifically, on page 24 of the ruling it states "The Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision makers of possible adverse health effects. The County could have, for example, identified the Project's impact on the days of nonattainment per year."

The Friant Ranch Case found that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf) (Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. The SCAQMD discusses that it may be infeasible to quantify health risks caused by projects similar to the proposed Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). The Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)).

Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk, it does not necessarily mean anyone will contract cancer as a result of the Project. The Brief also cites the author of the CARB methodology, which reported that a PM2.5 methodology is not suited for small projects and may yield unreliable results. Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NOX or VOC emissions from relatively small projects, due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful.

On the other hand, for extremely large regional projects (unlike the Proposed Project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 pounds per day of NOx and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As detailed in Table 3, project-related construction activities would generate a maximum of 53.6 pounds per day of VOC and 36.0 pounds per day of NOx. As shown in Table 4, operation of the Proposed Project would generate 7.23 pounds per day of VOC and 4.85 pounds per day NOx. The Proposed Project would not generate anywhere near these levels of 6,620 pounds per day of NOx or 89,190 pounds per day of VOC emissions. Therefore, the Proposed Project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

This analysis does evaluate the Proposed Project's localized impact to air quality for emissions of CO, NOX, PM10, and PM2.5 by comparing the Proposed Project's onsite emissions to the SCAQMD's applicable LST thresholds. As evaluated in this analysis, the Proposed Project would not result in emissions that exceeded the SCAQMD's LSTs. The Proposed Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NOX, PM10, and PM2.5. Therefore, potential regional air quality impacts associated with project operation would be less than significant and no mitigation is required.

Operations-Related Local Air Quality Impacts

Project-related air emissions may have the potential to exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin. Appendix A analyzes the potential local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from on-site operations of the Proposed Project. The following analyzes the vehicular CO emissions and local impacts from on-site operations.

Local CO Hotspot Impacts from Project-Generated Vehicular Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential local air quality impacts. Local air quality impacts can be assessed by comparing future without and with project CO levels to the State and Federal CO standards of 20 ppm over one hour or 9 ppm over eight hours.

At the time of the 1993 Handbook, the Air Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Air Basin and in the state have steadily declined. In 2007, the Air Basin was designated in attainment for CO under both the CAAQS and NAAQS. SCAQMD conducted a CO hot spot analysis for attainment at the busiest intersections in

Los Angeles that had traffic volumes of 100,000 daily trips or more[3] during the peak morning and afternoon periods and did not predict a violation of CO standards. Since the most impacted intersection of Center Street and Mt Vernon Avenue will have a volume of approximately 15,000 daily trips for the cumulative with project condition (Appendix J), which is a much smaller intersection with less traffic than what was analyzed by the SCAQMD, no local CO Hotspot would be created from the Proposed Project and no CO Hotspot modeling was performed. Therefore, potential impacts associated with long-term air quality of local air quality with the on-going use of the Proposed Project would be less than significant and no mitigation is required.

Local Criteria Pollutant Impacts from Onsite Operations

Project-related air emissions from onsite sources consisting of architectural coatings, landscaping equipment, and onsite usage of natural gas appliances may have the potential to create emissions areas that exceed the State and Federal air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact to the Air Basin.

The local air quality emissions from onsite operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the methodology described in LST Methodology. The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NOx, PM10, and PM2.5 from the Proposed Project could result in a significant impact to the local air quality. Table 7 – *Operations-Related Local Criteria Pollutant Emissions* shows the onsite emissions from the CalEEMod model that includes area sources, energy usage, and vehicles operating in the immediate vicinity of the Project Site and the calculated emissions thresholds.

Table 5 – Operations-Related Local Criteria Pollutant Emissions

Onsite Emission Source	Pollutant Emissions (pounds/day)			
	NOx	**CO**	**PM10**	**PM2.5**
Mobile Sources[1]	0.74	0.63	0.13	0.02
Area Sources[2]	1.23	4.58	0.10	0.10
Energy Usage[3]	0.65	0.28	0.05	0.05
Total Emissions	**1.95**	**5.49**	**0.28**	**0.17**
SCAQMD Local Operational Thresholds[2]	**270**	**1,577**	**4**	**2**
Exceeds Threshold?	No	No	No	No

Notes:
[1] Mobile sources consist of emissions from vehicles and road dust
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment
[3] Energy usage consists of emissions from natural gas
[4] Total Local emissions based on 2.5 percent of the Mobile Source emissions
Source: Calculated from CalEEMod Version 2022.1.

Table 5 shows that the on-going operations of the Proposed Project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance discussed in Table 2 – *SCAQMD Regional Criteria Pollutant Emission Thresholds of Significance*. Therefore, potential impacts associated with local air quality due to onsite emissions from the on-going operations of the Proposed Project would be less than significant and no mitigation is required.

Therefore, potential impacts associated with a cumulatively considerable net increase of any criteria pollutant would be less than significant, and no mitigation is required.

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

c. Less Than Significant Impact. The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. The local concentrations of criteria pollutant emissions produced in the nearby vicinity of the Proposed Project, which may expose sensitive receptors to substantial concentrations, are calculated in Section V.III(b) for both construction and operations, which are discussed separately. The discussion also includes an analysis of the potential impacts from toxic air contaminant emissions. The nearest sensitive receptors to the Project Site are single-family homes located adjacent to the north and east sides of the site.

Construction-Related Sensitive Receptor Impacts

The construction activities for the Proposed Project would include grading of the Project Site, building construction and application of architectural coatings, and paving of the proposed parking area and driveways. Construction activities may expose sensitive receptors to substantial pollutant concentrations of localized criteria pollutant concentrations and from toxic air contaminant emissions created from onsite construction equipment.

Local Criteria Pollutant Impacts from Construction

The local air quality impacts from construction of the Proposed Project are analyzed in Section V.III(b) which shows that the construction of the Proposed Project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of significance (Table 2). Therefore, potential impacts associated with construction of the Proposed Project would to local air quality would be less than significant and no mitigation is required.

Toxic Air Contaminants Impacts from Construction

The greatest potential for toxic air contaminant emissions would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction of the Proposed Project. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of “individual cancer risk”. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. It should be noted that the most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors (OEHHA, 2015).

Given the relatively limited number of heavy-duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and the short-term construction schedule, the Proposed Project would not result in a long-term (i.e., 30 or 70 years) substantial source of toxic air contaminant emissions and corresponding individual cancer risk. California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to CARB of their fleet’s usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment and by January 2023 no commercial operator is allowed to purchase Tier 2 equipment. In addition to the purchase restrictions, equipment operators need to meet fleet average emissions targets that become more stringent each year between years 2014 and 2023. As of January 2019, 25 percent or more of all contractors’ equipment fleets must be Tier 2 or higher. No significant short-term toxic air contaminant impacts would occur during construction of the Proposed Project. Therefore, potential impacts associated with exposure of sensitive receptors to substantial pollutant concentrations during construction of the Proposed Project would be less than significant and no mitigation is required.

Operations-Related Sensitive Receptor Impacts

The on-going operations of the Proposed Project may expose sensitive receptors to substantial pollutant concentrations of local CO emission impacts from the project-generated vehicular trips and from the potential local air quality impacts from onsite operations. The following analyzes the vehicular CO emissions. Local criteria pollutant impacts from onsite operations, and toxic air contaminant impacts.

Local CO Hotspot Impacts from Project-Generated Vehicle Trips

CO is the pollutant of major concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and are used as an indicator of potential impacts to sensitive receptors. The analysis provided in Section V.III(b) shows that no local CO Hotspots would be created at any nearby intersections from the vehicle traffic generated by the Proposed Project. Therefore, potential impacts associated with exposure of offsite sensitive receptors to substantial pollutant concentrations from the operation of the Proposed Project would be less than significant and no mitigation is required.

Local Criteria Pollutant Impacts from Onsite Operations

The local air quality impacts from the operation of the Proposed Project would occur from onsite sources consisting of architectural coatings, landscaping equipment, and onsite usage of natural gas appliances. The analysis provided in Section V.III(b) found that the operation of the Proposed Project would not exceed the local NOx, CO, PM10 and PM2.5 thresholds of shown in Table 2 - *SCAQMD Local Air Quality Thresholds of Significance*. Therefore, potential operations-related impacts to local air quality due to on-site emissions associated with the on-going operations of the Proposed Project would be less than significant and no mitigation is required.

Therefore, potential impacts associated with the exposure of sensitive receptors to substantial pollutant concentrations from operation of the Proposed Project would be less than significant and no mitigation is required.

d. Less Than Significant Impact. The Proposed Project would not create objectionable odors affecting a substantial number of people. Individual responses to odors are highly variable and can result in a variety of effects. Generally, the impact of an odor results from a variety of factors including frequency, duration, offensiveness, location, and sensory perception. The frequency is a measure of how often an individual is exposed to an odor in the ambient environment. The intensity refers to an individual's or group's perception of the odor strength or concentration. The duration of an odor refers to the elapsed time over which an odor is experienced. The offensiveness of the odor is the subjective rating of the pleasantness or unpleasantness of an odor. The location accounts for the type of area in which a potentially affected person lives, works, or visits; the type of activity in which he or she is engaged; and the sensitivity of the impacted receptor.

Sensory perception has four major components: detectability, intensity, character, and hedonic tone. The detection (or threshold) of an odor is based on a panel of responses to the odor. There are two types of thresholds: the odor detection threshold and the recognition threshold. The detection threshold is the lowest concentration of an odor that will elicit a response in a percentage of the people that live and work in the immediate vicinity of the Project Site and is typically presented as the mean (or 50 percent of the population). The recognition threshold is the minimum concentration that is recognized as having a characteristic odor quality, this is typically represented by recognition by 50 percent of the population. The intensity refers to the perceived strength of the odor. The odor character is what the substance smells like. The hedonic tone is a judgment of the pleasantness or unpleasantness of the odor. The hedonic tone varies in subjective experience, frequency, odor character, odor intensity, and duration. Potential odor impacts have been analyzed separately for construction and operations.

Construction-Related Odor Impacts

Potential sources that may emit odors during construction activities include the application of coatings (e.g., asphalt pavement, paints, and solvents) and from emissions from diesel equipment. Standard construction requirements that limit the time of day when construction may occur as well as SCAQMD Rule 1108 that limits VOC content in asphalt and Rule 1113 that limits the VOC content in paints and solvents would minimize odor impacts from construction. The objectionable odors that may be produced during the construction process would be temporary and would not likely be noticeable for extended periods of time beyond the Project Site's boundaries. Through compliance with the applicable regulations that reduce odors, and due to the transitory nature of construction odors, potential impacts associated with construction related odor would be less than significant and no mitigation is required.

Operations-Related Odor Impacts

The Proposed Project would consist of the development 72 single-family homes. Potential sources that may emit odors during the on-going operations of the Proposed Project would primarily occur from odor emissions from the trash storage areas. Pursuant to County regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Through compliance with SCAQMD's Rule 461, approval of a permit to operate from SCAQMD, and compliance County trash storage regulations, no significant impact related to odors would occur during the on-going operations of the Proposed Project. Therefore, potential impacts associated with odor would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES Would the project:				
7. Wildlife & Vegetation a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☐	☐	☒
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☐	☒	☐
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☐	☐	☒
f) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

Source(s): GIS database; Western Riverside Multiple Species Habitat Conservation Plan WRCMSHCP; *General Biology, Including Habitat Assessment of Burrowing Owl and Other Biological Resources*, Osbourne Biological Consulting, April 11, 2020 (Appendix B)

Findings of Fact:

General: Biological resource analyses presented as a part of Findings of Fact for the Biological Resources Impact Analysis are based on and summarized from Appendix B - *General Biology, Including Habitat Assessment of Burrowing Owl and Other Biological Resources* (Osbourne Biological Consulting, April 11, 2020).

a. No Impact. The Project Site is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project Site does not overlap or occur adjacent to any area conserved or targeted for conservation by the MSHCP; however, the Project Site is located within a designated area requiring surveys for Burrowing Owl (*Athene cunicularia*). During the field investigation, the Project Site was also assessed for the presence of river/riparian, wetland,

vernal pool, sage scrub, and jurisdictional waters. The required assessments conducted February 15, 2020, concluded that the Project Site or the surrounding 500-foot buffer area (Appendix B, Figure 12) contained unsuitable habitat for the Burrowing Owl and no evidence of animal burrows or soil cavities suitable for Burrowing Owls were observed on the Project Site. However, the Project Site is within the MSHCP Local Development Mitigation Fee (LDMF) and would be required to pay category fees per residential unit development and per acre of commercial development. The payment of LDMF is in accordance with MSHCP and is a County standard condition of approval during the plan check review process. Therefore, no potential impacts associated with the conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan would occur, and no mitigation is required.

b.-c. Less Than Significant Impact. The Project Site occurs generally in a partially developed area that includes residences to north, east, and west and vacant undeveloped land to the south. The Project Site is an open disked field.

Prior to the field investigation, a literature review was prepared with respect to conservation objectives relevant to the Project Site and surrounding area. References pertaining to wildlife, plants, their habitats, and identification were also conducted as needed. The field investigation, conducted on February 15, 2020, assessed the Project Site for potential Burrowing Owl habitat. Consideration was also given to potential presence of riparian habitats, wetlands, vernal pools, and drainages subject to state or federal jurisdiction. Notes were taken on vegetation communities and structure and plant or animal species observed on the Project Site.

The results of the Biological Assessment did not identify suitable habitat for the Burrowing Owl and no evidence of animal burrows or soil cavities suitable for Burrowing Owls were observed on the Project Site or the surrounding 500-foot buffer area (Appendix B, Figure 12). The Project Site contains nonnative annual grassland/forb vegetation and is not linked with habitat that would support endangered, threatened species, species identified as a candidate, sensitive, or special status species. The Project Site is not in an area that requires surveys for sensitive mammals. A list of animal species observed at the Project Site is in Appendix B. Wetlands and riparian vegetation do not occur on the Project Site that would support arroyo chub, California red-legged frog and western pond. Riparian woodland habitat that would support sensitive bird species, including least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo, is absent from on the Project Site. The environment surrounding the Project Site on three sides (residential developments) all tend to preclude movement of bobcat and mountain lion through the Project Site. Therefore, potential impacts associated with species identified as endangered, threatened, candidate, sensitive, or special status species either directly or through habitat modifications, would be less than significant, and no mitigation is required.

Though the burrowing owl survey did not identify any evidence of the species within the Project Site, in compliance with the Western Riverside County MSHCP requirements, a condition of approval has been included that required a burrowing owl survey within 30 days prior to issuance of a grading permit (COA-BIO-1). Furthermore, if potential bird habitats will be cleared during the nesting season (February 15 through August 31st), a nesting bird survey will also be performed and submitted to the Riverside County Environmental Programs Division (EPD) prior to issuance of grading or building permits (COA-BIO-2).

COA-BIO-1 30-Day Burrowing Owl Preconstruction Survey

Pursuant to Objectives 6 & 7 of the Species Account for the Burrowing Owl included in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), within 30 days prior to the issuance of a grading permit, a pre-construction

presence/absence survey for the burrowing owl shall be conducted by a qualified biologist who holds a Memorandum of Understanding with the County. The survey results shall be provided in writing to the Environmental Programs Division (EPD) of the Planning Department. If the grading permit is not obtained within 30 days of the survey, a new survey shall be required.

If it is determined that the project site is occupied by the Burrowing Owl, take of "active" nests shall be avoided pursuant to the MSHCP and the Migratory Bird Treaty Act.

Burrowing Owl relocation shall only be allowed to take place outside of the burrowing owl nesting season (nesting season is March 1 through August 31) and is required to be performed by a qualified biologist familiar with relocation methods. The County Environmental Programs Department shall be consulted to determine appropriate type of relocation (active or passive) and potential translocation sites. Burrowing Owl Protection and Relocation Plans and Biological Monitoring Plans are required to be reviewed and approved by the California Department of Fish and Wildlife.

COA-BIO-2 Nesting Bird Survey

Birds and their nests are protected by the Migratory Bird Treaty Act (MBTA) and California Department of Fish and Wildlife (CDFW) Codes. Since the project supports suitable nesting bird habitat, removal of vegetation or any other potential nesting bird habitat disturbances shall be conducted outside of the avian nesting season. Nesting bird season is February 15st through August 31st. If habitat or structures that support nesting birds must be cleared during the nesting season, a preconstruction nesting bird survey shall be conducted.

The preconstruction nesting bird survey must be conducted by a biologist who holds a current MOU with the County of Riverside. If nesting activity is observed, appropriate avoidance measures shall be adopted to avoid any potential impacts to nesting birds. The nesting bird survey must be completed no more than 3 days prior to any ground disturbance. If ground disturbance does not begin within 3 days of the survey date a second survey must be conducted. Prior to the issuance of a grading permit the project proponent must provide written proof to the Riverside County Planning Department, Environmental Programs Division (EPD) that a biologist who holds an MOU with the County of Riverside has been retained to carry out the required survey. Documentation submitted to prove compliance prior to grading permit issuance must at a minimum include the name and contact information for the Consulting Biologist and a signed statement from the Consulting Biologist confirming that they have been contracted by the applicant to conduct a Preconstruction Nesting Bird Survey. In some cases EPD may also require a Monitoring and Avoidance Plan prior to the issuance of a grading permit.

Prior to finalization of a grading permit or prior to issuance of any building permits the projects consulting biologist shall prepare and submit a report to Environmental Programs Division (EPD) documenting the results of the pre-construction nesting bird survey.

d. Less than significant. Wildlife corridors are linear features that connect areas of open space and provide avenues for the migration of animals and access to additional areas of foraging. The Project Site does not contain, or is it adjacent to, any wildlife corridors. The Project Site is surrounded by roadways, residential, and vacant land. Although the site is near a vacant and undeveloped land, each vacant parcel is bound by roadways and developed land uses. Appendix B notes that the built environment surrounding the Project Site on three sides precludes larger mammal movement, for example, bobcats and mountain lions. The only existing linkages to an open space or habitat area are the existing roadway corridors, which would not be modified by the Proposed Project. Therefore, potential impacts associated with native resident or migratory wildlife corridors would be less than significant, and no mitigation is required.

e.-f. No Impact. As defined in the MSHCP, riparian/riverine areas are lands that contain habitat dominated by trees, shrubs, persistent emergent or emergent mosses and lichens that occur close to or depend on a nearby freshwater source or areas that contain a freshwater flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depressions, typically have wetland indicators that represent all three parameters (soils, vegetation, and hydrology), and are defined based on vernal pool indicator plant species during the wetter portion of the growing season but normally lack wetland indicators associated with vegetation and/or hydrology during the drier portion of the growing season. Vernal pool conditions do not exist on the Project Site. There are no depressions, basins, impoundment, or tire ruts on the Project Site suggestive of any water retention or of possessing hydric soil conditions. Soils on the Project Site appear to be sufficiently silty, sandy, and porous as to be incapable of holding water for vernal pools, even if the depressions did exist on the site. The biological functions and values of vernal pools do not exist for the development of any fairy shrimp species. Riverine/riparian and vernal pool habitats do not occur on the Property Site. No evidence of blue-line drainages, ponds, or lakes. Moreover, there are no drainage features on the Project Site. The Proposed Project would not result in a substantial adverse effect on any riparian habitat or other sensitive natural community. The Project Site does not contain any natural drainage features and is absent of federally protected wetlands as defined by Section 404 of the Clean Water Act. Therefore, no potential impacts associated with riparian habitat sensitive natural community, or wetlands would occur, and no mitigation is required.

g. No Impact. The Proposed Project would not conflict with any local policies or ordinances protecting biological resources. The County of Riverside Ordinance No. 559 regulates the removal of trees above 5,000 feet in elevation. The Project Site does not contain trees and the elevation of the Project Site ranges from 1,100 feet to 1,120 feet. Therefore, no potential impacts associated with the conflict of any local policies or ordinances protecting biological resources, including a tree preservation policy or ordinance would occur, and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

CULTURAL RESOURCES

CULTURAL RESOURCES Would the project:				
8. Historic Resources a) Alter or destroy a historic site?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of a historical resource, pursuant to California Code of Regulations, Section 15064.5?	☐	☐	☒	☐

Source(s): *A Phase I Archaeological Records Search and Survey Report,* L&L Environmental, Inc., July 27, 2020, Riverside County General Plan Figure OS-7 "Historical Resources," On-site Inspection, Project Application Materials

Findings of Fact:

General: Cultural resources analyses presented as a part of Findings of Fact for the Cultural Resources Impact Analysis are based on and summarized from Appendix C - *A Phase I Archaeological Records Search and Survey Report* (L&L Environmental, Inc., November 24, 2020).

Appendix C entails a Phase I cultural resources study to identify, evaluate, and assess the impacts of the proposed development on historical resources in compliance with CEQA. During this investigation, L&L Environmental, Inc. completed a record search at the EIC, historic records background research on the Project Site, pedestrian survey of the project area, and communicated with the NAHC and local Native American groups regarding sacred lands and other Native American resources.

Appendix C details a record search from the EIC, housed at the University of California, Riverside (UCR), which was requested on March 27, 2020. However, due to mandatory closure of UCR and the EIC from shelter-at-home orders from the California government, a response was not provided until July 24, 2020. The records search included the Proposed Project area and all land found within a one-mile radius.

An intensive pedestrian survey was completed on July 27, 2020, via north-south trending transects at intervals of no more than 15 meters. In the central portion of the eastern half of the project area, an approximate 400 foot long by 50-75-foot-wide soil stockpile/dumping location was noted. It trends north/south and modern construction debris consisting of gravel, crushed concrete, and other miscellaneous items were observed in the pile as shown in the photographs located within Appendix C. In the northern extent of the debris pile, six (6) segments of modern concrete pipe were observed. The pipes varied in size from approximately 4-5 feet in length by 1.5 inches to 2 feet (interior diameter). Two (2) segments of pipe that measured approximately 8 feet long by 3 feet (interior diameter) were also identified. Stenciled inside the pipes were dates indicating that they had been formed 06-16-05 and 08-17-05 (Appendix C: Photo 6). It is likely that these materials are remains of the adjacent residential construction identified in the 2005 aerial photograph. No cultural resources were identified during the survey.

a. - b. Less Than Significant Impact. The project area is currently vacant and mostly devoid of vegetation due to recent disking. Non-native weeds are scattered throughout the parcel and along the edges near the adjacent housing development and the roadways. Several Mexican Palms are located near the wooden power poles along Center Street. Aerial photographs from 1938 document the project area's historical citrus orchard cultivation. Between 1980 and 1994 the trees were removed, and the site has been regularly disked since, presumably for weed abatement. In 2005, the eastern half of the parcel was disturbed by heavy machinery during the adjacent housing development's construction.

Historic General Land Office (GLO) Plat maps available online at the Bureau of Land Management (BLM) were consulted for any evidence of historic resources located within the project area (BLM GLO Records 2020). Neither the 1877 or 1880 GLO maps showed cultural resources or historical references for this area, although the Road to San Jacinto is documented to the east, near the base of Blue Mountain (Appendix C, Figure 5, p. 36).

Historic aerial photographs reviewed illustrated whether any impacts to the project area had occurred. In 1938, the parcel appears as full orchards with a small structure located in the northeast corner and a windbreak planted along Center Street. However, by 1948 the structure was no longer present and the entire property, including where the structure once stood, was orchards.

The project area remained the same for the next 40 years (1959, 1966, 1967, 1968, 1977, 1978, 1980). Consistent with the 1969 topographic map, the aerial photographs show the northern residential development as constructed by 1966. On the 1994 photograph, there are no remains of the orchard, and the windbreak appears still extant. Parcels west of Mt Vernon Avenue appear to be converted to residential tract homes. Aerial photographs show the parcel in 1995 and 2002 as disked, presumably for weed abatement or possibly ground crops. In 2005 the development immediately adjacent to the east of the parcel was mid construction and as a result, the eastern half of the project area appears to have been either a stockpile area or a turn-around for heavy machinery and the windbreak on the project area has been removed. No additional project impacts other than off-road vehicle trails and occasional trash dumping can be seen (2009, 2010, 2012, 2014, 2016).

According to the County of Riverside's General Plan, Figure OS-7 – "Historical Resources," the nearest historical resources to the Project Site are located generally west and southwest of the site. Three resources are located west of SR-91 and the remainder are located south of I-215 and SR-91 intersection. Due to intervening topography and built infrastructure (e.g., freeways, buildings) the Proposed Project would not significantly impact any of the County's designated resources. Appendix C details that no historical structures or sites are located on the Project Site. Therefore, potential impacts associated with altering or destroying a historical site that would cause a substantial adverse change to a historical resource would be less than significant, and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Archaeological Resources				
a) Alter or destroy an archaeological site?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code of Regulations, Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Source(s): *A Phase I Archaeological Records Search and Survey Report,* L&L Environmental, Inc., July 27, 2020, On-site Inspection, Project Application Materials

Findings of Fact:

General: Cultural resources analyses presented as a part of Findings of Fact for the Cultural Resources Impact Analysis are based on and summarized from Appendix C - *A Phase I Archaeological Records Search and Survey Report* (L&L Environmental, Inc., November 24, 2020).

Appendix C entails a Phase I cultural resources study to identify, evaluate, and assess the impacts of the proposed development on historical resources in compliance with CEQA. During this investigation, L&L Environmental, Inc. completed a record search at the EIC, historic records background research on the Project Site, pedestrian survey of the project area, and communicated with the NAHC and local Native American groups regarding sacred lands and other Native American resources.

Appendix C details a record search from the EIC, housed at the University of California, Riverside (UCR), which was requested on March 27, 2020. However, due to mandatory closure of UCR and the EIC from shelter-at-home orders from the California government, a response was not provided until July 24, 2020. The records search included the Proposed Project area and all land found within a one-mile radius.

An intensive pedestrian survey was completed on July 27, 2020, via north-south trending transects at intervals of no more than 15 meters. In the central portion of the eastern half of the project area, an approximate 400 foot long by 50-75-foot-wide soil stockpile/dumping location was noted. It trends north/south and modern construction debris consisting of gravel, crushed concrete, and other miscellaneous items were observed in the pile as shown in the photographs located within Appendix C. In the northern extent of the debris pile, six (6) segments of modern concrete pipe were observed. The pipes varied in size from approximately 4-5 feet in length by 1.5 inches to 2 feet (interior diameter). Two (2) segments of pipe that measured approximately 8 feet long by 3 feet (interior diameter) were also identified. Stenciled inside the pipes were dates indicating that they had been formed 06-16-05 and 08-17-05 (Appendix C: Photo 6). It is likely that these materials are remains of the adjacent residential construction identified in the 2005 aerial photograph. No cultural resources were identified during the survey.

a. – b. Less Than Significant Impact with Mitigation Incorporated. During the pedestrian survey, digital photographs and notes were taken to characterize conditions in the project area. The primary purpose of the pedestrian survey is to locate and document previously recorded or new archaeological resource sites or isolates that are more than 45 years old within the project boundaries, and to determine whether such resources would be or could be impacted by Project implementation. An intensive survey can be impacted by various factors, all of which affect the accuracy of the survey, which may include dense vegetation, previous construction/grading activities, animals, and agricultural activities.

Archaeological Research within the Boundaries of the Project Area

The results of the records search indicated that there are no previously recorded cultural resources or isolates found within the Project Site. One (1) previous cultural resource study conducted covered a portion of the Project area (RI-5056):

- An Archaeological survey report was prepared for the proposed Riverside-Corona Feeder Master Plan Project by McKenna et al (2003). The linear project traversed the western boundary of the project area along Mt. Vernon Avenue and no cultural resources were identified. According to the study, "the project area covers a relatively large area in western Riverside County, including linear alignments within existing street…dirt access roads…[and] numerous roadways (McKenna et al 2003:1)." A records search, survey, and final report were produced as a result of the efforts.

Potentially significant cultural resources could consist of, but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including structural remains, historic dumpsites, hearths, and middens. Midden features are characterized by darkened soil and could conceal material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Due to historic agricultural use of the area, ground disturbance could uncover tool remains, foundations related to the previous structure on the parcel, or other historic items.

Archaeological Research within the One-Mile Radius of the Project Area

Fifteen (15) cultural resources have been recorded within a one-mile radius, none of them within the project parcel. Two (2) resources are identified as previously recorded within 0.25-mile, four (4) are within 0.50-mile, and the remaining nine (9) are at least 0.50 to 1 mile away (Appendix C). Further, only two (2) of the resources were prehistoric, with the remaining related to historic water and agricultural use of the area. The record search also indicated that within a one-mile radius, 28 archaeological studies have been conducted resulting in approximately 50 percent of land within the one-mile radius being formally surveyed.

Based on the results of the records search, pedestrian survey, and research efforts, implementation of **MM-CUL-1** would be required, which requires Cultural Resources Monitoring Program (CRMP) to occur as a part of the project. Specifically, MM CUL-1 would require:

Prior to issuance of grading permits: The property owner/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A CRMP shall be developed in coordination with the consulting tribes that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. This document shall be provided to the County Archaeologist for review and approval prior to issuance of the grading permit.

The CRMP shall contain at a minimum the following:

Archaeological Monitor An adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading, and trenching onsite and for all offsite improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined sand directed by the Project Archaeologist.

Cultural Sensitivity Training - The Project Archaeologist and if required, a representative designated by the Tribe shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity

Training for all construction personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; the areas to be avoided during grading activities; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training, and all construction personnel must attend prior to beginning work on the project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

Unanticipated Resources - In the event that previously unidentified potentially significant cultural resources are discovered, the Archaeological and/or Tribal Monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist, in consultation with the Tribal monitor, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. Further, before construction activities are allowed to resume in the affected area, the artifacts shall be recovered, and features recorded using professional archaeological methods. The Project Archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed.

Artifact Disposition- the landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery.

The Professional Archaeologist may submit a detailed letter to the County of Riverside during grading requesting a modification to the monitoring program if circumstances are encountered that reduce the need for monitoring.

Additional details on the specific implementation standards for **MM-CUL-1** related to artifact disposition, the Phase IV monitoring report, and unanticipated discovered are provided in County recommended conditions of approval COA-CUL-1 through COA-CUL-3.

Therefore, with implementation of **MM-CUL-1,** potential impacts associated with altering or destroying an archaeological site that would cause a substantial adverse change to an archaeological resource would be less than significant.

c. Less Than Significant Impact with Mitigation Incorporated. Where construction is proposed in undeveloped areas, disturbance on vacant lands could have the potential to disturb or destroy buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. In the unexpected event human remains are found, those remains would require proper treatment, in accordance with applicable laws. California State Health and Safety Code 7050.5 dictates that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition pursuant to CEQA regulations and PRC Section 5097.98.

If human remains are discovered during any phase of construction, including disarticulated or cremated remains and grave goods, **MM-CUL-2** would be implemented as follows: Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and - Planning-CUL. 1 Artifact Disposition (cont.) Not Satisfied free from disturbance until a final decision as to the treatment and their disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted by the coroner within the period specified by

law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "Most Likely Descendant". The Most Likely Descendant shall then make recommendations and engage in consultation with the property owner concerning the treatment of the remains and any associated items as provided in Public Resources Code Section 5097.98.

Therefore, with implementation of **MM-CUL-2** and compliance with existing regulations and procedures, potential impacts associated with disturbance of human remains would be less than significant.

Mitigation:

MM-CUL-1: Prior to issuance of grading permits: The applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A CRMP shall be developed in coordination with the consulting tribes that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this project. This document shall be provided to the County Archaeologist for review and approval prior to issuance of the grading permit.

The CRMP shall contain at a minimum the following:

Archaeological Monitor An adequate number of qualified archaeological monitors shall be onsite to ensure all earth moving activities are observed for areas being monitored. This includes all grubbing, grading, and trenching onsite and for all offsite improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined sand directed by the Project Archaeologist.

Cultural Sensitivity Training - The Project Archaeologist and if required, a representative designated by the Tribe shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; the areas to be avoided during grading activities; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training, and all construction personnel must attend prior to beginning work on the project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

Unanticipated Resources - In the event that previously unidentified potentially significant cultural resources are discovered, the Archaeological and/or Tribal Monitor(s) shall have the authority to divert or temporarily halt ground disturbance operations in the area of discovery to allow evaluation of potentially significant cultural resources. The Project Archaeologist, in consultation with the Tribal monitor, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. Further, before

construction activities are allowed to resume in the affected area, the artifacts shall be recovered, and features recorded using professional archaeological methods. The Project Archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis. Isolates and clearly non-significant deposits shall be minimally documented in the field and the monitored grading can proceed.

Artifact Disposition- the landowner(s) shall relinquish ownership of all cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery.

The Professional Archaeologist may submit a detailed letter to the County of Riverside during grading requesting a modification to the monitoring program if circumstances are encountered that reduce the need for monitoring.

MM-CUL-2: Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and - Planning-CUL. 1 Artifact Disposition (cont.) Not Satisfied free from disturbance until a final decision as to the treatment and their disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted by the coroner within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the “Most Likely Descendant”. The Most Likely Descendant shall then make recommendations and engage in consultation with the property owner concerning the treatment of the remains and any associated items as provided in Public Resources Code Section 5097.98.

COA-CUL-1 *Artifact disposition*

In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources and provide evidence to the satisfaction of the County Archaeologist that all archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been handled through the following methods.

Prehistoric and/or Tribal Cultural Resources

One of the following treatments shall be applied.

1. Preservation–in-place, if feasible is the preferred option. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.

2. Reburial of the resources on the Project property. The measures for reburial shall be culturally appropriate as determined through consultation with the consulting Tribe(s)and include, at least, the following: Measures to protect the reburial area from any future impacts in perpetuity. Reburial

shall not occur until all required cataloguing (including a complete photographic record) and analysis have been completed on the cultural resources, with the exception that sacred and ceremonial items, burial goods, and Native American human remains are excluded. No cataloguing, analysis, or other studies may occur on human remains grave goods, and sacred and ceremonial items. Any reburial processes shall be culturally appropriate and approved by the consulting tribe(s). Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County under a confidential cover and not subject to a Public Records Request.

Human Remains

Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted by the Coroner within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "Most Likely Descendant". The Most Likely Descendant shall then make recommendations and engage in consultation with the property owner concerning the treatment of the remains and any associated items as provided in Public Resources Code Section 5097.98.

COA-CUL-2 Phase IV Monitoring Report

Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan.

COA-CUL-3 Unanticipated Discoveries

The developer/permit holder or any successor in interest shall comply with the following for the life of this permit.

If during ground disturbance activities, unanticipated cultural resources* are discovered, the following procedures shall be followed:

- All ground disturbance activities within 100 feet of the discovered cultural resource shall be halted and the applicant shall call the County Archaeologist immediately upon discovery of the cultural resource. A

meeting shall be convened between the developer, the project archaeologist**, the Native American tribal representative (or other appropriate ethnic/cultural group representative), and the County Archaeologist to discuss the significance of the find. At the meeting with the aforementioned parties, a decision is to be made, with the concurrence of the County Archaeologist, as to the appropriate treatment (documentation, recovery, avoidance, etc.) for the cultural resource. Resource evaluations shall be limited to nondestructive analysis.

- Further ground disturbance shall not resume within the area of the discovery until the appropriate treatment has been accomplished.

* A cultural resource site is defined, for this condition, as being a feature and/or three or more artifacts in close association with each other.

** If not already employed by the project developer, a County approved archaeologist shall be employed by the project developer to assess the significance of the cultural resource, attend the meeting described above, and continue monitoring of all future site grading activities as necessary.

Monitoring: Archaeological Monitoring will be required as detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

ENERGY

ENERGY Would the project:				
10. Energy Impacts a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Source(s): *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project*, Vista Environmental, September 23, 2021 (Appendix A), Riverside County General Plan, Riverside County Climate Action Plan ("CAP"), Project Application Materials

Findings of Fact:

General: Criteria pollutant analyses presented as a part of Findings of Fact for the Air Quality Impact Analysis are based on and summarized from Appendix A - *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project* (Vista Environmental, 2021).

The new 2018 amendments and additions to the CEQA Checklist now includes an Energy Section that analyzes the Proposed Project's energy consumption in order to avoid or reduce inefficient, wasteful, or unnecessary consumption of energy. Since the Energy Section was recently added, no state or local agencies have adopted specific criteria or thresholds to be utilized in an energy impact analysis. However, the 2018 Guidelines for the Implementation of the California Environmental Quality Act, provide the following direction on how to analyze a project's energy consumption:

> "If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency."

If the Proposed Project creates inefficient, wasteful, or unnecessary consumption of energy during construction or operation activities or conflicts with a state or local plan for renewable energy or energy efficiency, then the Proposed Project would create a significant energy impact.

a. Less Than Significant Impact. The Proposed Project would impact energy resources during construction and operation. Energy resources that would be potentially impacted include electricity, natural gas, and petroleum-based fuel supplies and distribution systems. This analysis includes a discussion of the potential energy impacts of the Proposed Project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. A general definition of each of these energy resources are provided below.

- Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of system components, including substations and transformers that lower transmission line power (voltage) to a level appropriate for on-site distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid. Conveyance of electricity through transmission lines is typically responsive to market demands. In 2018, Southern California Edison, which provides electricity to the project vicinity provided 85,276 Gigawatt-hours per year of electricity ((http://www.ecdms.energy.ca.gov/elecbyutil.aspx).
- Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs, mainly located outside the State, and delivered through high-pressure transmission pipelines. The natural gas transportation system is a nationwide network and, therefore, resource availability is typically not an issue. Natural gas satisfies almost one-third of the State's total energy requirements and is used in electricity generation, space heating, cooking, water heating, industrial processes, and as a transportation fuel. Natural gas is measured in terms of cubic feet. In 2018, Riverside County consumed 398.54 million Therms of natural gas[4].
- Petroleum-based fuels currently account for a majority of the California's transportation energy sources and primarily consist of diesel and gasoline types of fuels. However, the state has been working on developing strategies to reduce petroleum use. Over the last decade California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHG emissions from the transportation sector, and reduce vehicle miles traveled (VMT). Accordingly, petroleum-based fuel consumption in California has declined. Accordingly, petroleum-based fuel consumption in California has declined. In 2015, 15.1 billion gallons of gasoline was sold in the State[5]. Diesel represents 17 percent of total fuel sales behind gasoline and in 2015, 4.2 billion gallons of diesel was sold in California[6].

The following section calculates the potential energy consumption associated with the construction and operations of the Proposed Project and provides a determination if any energy utilized by the Proposed Project is wasteful, inefficient, or unnecessary consumption of energy resources.

Construction Energy

The construction activities for the Proposed Project would include site preparation and grading of the Project Site, building construction and application of architectural coatings to the proposed structures, and paving of the proposed parking lots, onsite roads, and driveways. The Proposed Project would consume energy resources during construction in three (3) general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project Site, as well as delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities);
2. Electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary

[4] Obtained from: http://www.ecdms.energy.ca.gov/gasbycounty.aspx
[5] Obtained from: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/
[6] Obtained from: https://ww2.energy.ca.gov/almanac/transportation_data/diesel.html

lighting during construction, electronic equipment, or other construction activities necessitating electrical power; and,

3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction-Related Electricity

During construction, the Proposed Project would consume electricity to construct the new structures and infrastructure. Electricity would be supplied to the Project Site by Southern California Edison (SCE) and would be obtained from the existing electrical lines in the vicinity of the site. The use of electricity from existing power lines, rather than temporary diesel or gasoline powered generators, would minimize impacts on energy use. Electricity consumed during project construction would vary throughout the construction period based on the construction activities being performed. Various construction activities include electricity associated with the conveyance of water that would be used during project construction for dust control (supply and conveyance) and electricity to power any necessary lighting during construction, electronic equipment, or other construction activities necessitating electrical power. Such electricity demand would be temporary, nominal, and would cease upon the completion of construction. Overall, construction activities associated with the Proposed Project would require limited electricity consumption that would not be expected to have an adverse impact on available electricity supplies and infrastructure. The use of electricity during project construction would not be wasteful, inefficient, or unnecessary.

Since there are power poles running along the south side of the Project Site, only nominal improvements would be required to SCE distribution lines and equipment with development of the Proposed Project. Where feasible, the new service installations and connections would be scheduled and implemented in a manner that would not result in electrical service interruptions to other properties. Compliance with County's guidelines and requirements would ensure that the Proposed Project fulfills its responsibilities relative to infrastructure installation, coordinates any electrical infrastructure removals or relocations, and limits any impacts associated with construction of the project. Construction of the project's electrical infrastructure would not adversely affect the electrical infrastructure serving the surrounding uses or utility system capacity. Therefore, potential impacts to the electricity supply and infrastructure associated with project construction would be less than significant and no mitigation is required.

Construction-Related Natural Gas

Construction of the Proposed Project typically would not involve the consumption of natural gas. Natural gas would not be supplied to support construction activities, thus there would be no demand generated by construction. Since the Project Site is an infill development where natural gas service is currently provided to the area, construction of the Proposed Project would be limited to installation of new natural gas connections within the Project Site. Development of the Proposed Project would likely not require extensive infrastructure improvements to serve the site. Construction-related energy usage impacts associated with the installation of natural gas connections are expected to be confined to trenching in order to place the lines below surface. Prior to ground disturbance, the Proposed Project would notify and coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service. Therefore, potential impacts to natural gas supply and infrastructure associated with the project construction would be less than significant and no mitigation is required.

Construction-Related Petroleum Fuel Use

Petroleum-based fuel usage represents the highest amount of transportation energy potentially consumed during construction, which would be utilized by both off-road equipment operating on the Project Site and on-road automobiles transporting workers to and from the site and on-road trucks transporting equipment and supplies to the Project Site.

Off-Road Construction Equipment

The off-road construction equipment fuel usage was calculated through use of the CalEEMod model's default off-road equipment assumptions detailed in Appendix A. For each piece of off-road equipment, the fuel usage was calculated through use of the *2017 Off-road Diesel Emission Factors* spreadsheet, prepared by CARB (https://ww3.arb.ca.gov/msei/ordiesel.htm). The Spreadsheet provides the following formula to calculate fuel usage from off-road equipment:

Fuel Used = Load Factor x Horsepower x Total Operational Hours x BSFC / Unit Conversion

Where:

Load Factor - Obtained from CalEEMod default values

Horsepower – Obtained from CalEEMod default values

Total Operational Hours – Calculated by multiplying CalEEMod default daily hours by CalEEMod default number of working days for each phase of construction

BSFC – Brake Specific Fuel Consumption (pounds per horsepower-hour) – If less than 100 Horsepower = 0.408, if greater than 100 Horsepower = 0.367

Unit Conversion – Converts pounds to gallons = 7.109

Table 6 - *Off-Road Equipment and Fuel Consumption from Construction of the Proposed Project* shows the off-road construction equipment fuel calculations based on the above formula. Table 6 shows that the off-road equipment utilized during construction of the Proposed Project would consume 37,226 gallons of fuel.

Table 6 – Off-Road Equipment and Fuel Consumption from Construction of the Proposed Project

Equipment Type	Equipment Quantity	Horse-power	Load Factor	Operating Hours per Day	Total Operational Hours[1]	Fuel Used (gallons)
Site Preparation						
Rubber Tired Dozer	3	247	0.40	8	240	1,224
Tractor/Loader/Backhoe	4	97	0.37	8	320	659
Grading						
Excavator	1	158	0.38	8	160	496
Grader	1	187	0.41	8	160	633
Rubber Tired Dozer	1	247	0.40	8	160	816
Tractors/Loaders/Backhoes	3	97	0.37	8	480	989
Building Construction						
Crane	1	231	0.29	7	1,610	5,568
Forklifts	3	89	0.20	8	5,520	5,639
Generator Set	1	84	0.74	8	1,840	6,564
Tractors/Loaders/Backhoes	3	97	0.37	7	4,830	9,949
Welder	1	46	0.45	8	1,840	2,186
Paving						
Pavers	2	130	0.42	8	320	902
Paving Equipment	2	132	0.36	8	320	785
Rollers	2	80	0.38	8	320	558
Architectural Coating						
Air Compressor	1	78	0.48	6	120	258
Total Off-Road Equipment Fuel Used during Construction (gallons)						**37,226**

Notes:
[1] Based on: 10 days for Site Preparation; 20 days for Grading; 230 days for Building Construction; 20 days for Paving; and 20 days for Painting.
Source: CalEEMod Version 2016.3.2 (see Appendix A); CARB, 2017.

On-Road Construction-Related Vehicle Trips

The on-road construction-related vehicle trips fuel usage was calculated through use of the construction vehicle trip assumptions from the CalEEMod model run as detailed in Appendix A. The calculated total construction miles were then divided by the fleet average for all of Southern California miles per gallon rates for the year 2021 calculated through use of the EMFAC2017 model (https://www.arb.ca.gov/emfac/2017/) and the EMFAC2017 model printouts are shown in Appendix A. The worker trips were based on the entire fleet average miles per gallon rate for gasoline powered vehicles and the vendor trips were based on the Heavy-Heavy Duty Truck (HHDT), Medium Duty Vehicle (MDV), and Medium Heavy-Duty Vehicle (MHDV) fleet average miles per gallon rate for diesel-powered vehicles. Table 7 – *On-Road Vehicle Trips and Fuel Consumption from Construction of the Proposed Project* shows the on-road construction vehicle trips modeled in CalEEMod and the fuel usage calculations.

Table 7 – On-Road Vehicle Trips and Fuel Consumption from Construction of the Proposed Project

Vehicle Trip Types	Daily Trips	Trip Length (miles)	Total Miles per Day	Total Miles per Phase[1]	Fleet Average Miles per Gallon[2]	Fuel Used (gallons)
Site Preparation						
Worker Trips	18	14.7	265	2,646	25.3	105
Grading						
Worker Trips	15	14.7	221	4,410	25.3	175
Building Construction						
Worker Trips	10	14.7	1,470	338,100	25.3	213,388
Vendor Truck Trips	38	6.9	262	60,306	8.0	7,567
Paving						
Worker Trips	15	14.7	221	4,410	25.3	175
Architectural Coating						
Worker Trips	20	14.7	294	5,880	25.3	233
	Total Fuel Used from On-Road Construction Vehicles (gallons)					**21,642**

Notes:
[1] Based on: 10 days for Site Preparation; 20 days for Grading; 230 days for Building Construction; 20 days for Paving; and 20 days for Painting.
[2] From EMFAC 2017 model (see Appendix B). Worker Trips based on entire fleet of gasoline vehicles and Vendor Trips based on only truck fleet of diesel vehicles.
Source: CalEEMod Version 2016.3.2; CARB, 2018.

Table 7 shows that the on-road construction-related vehicle trips would consume 21,642 gallons of fuel and Table 6 shows that the off-road construction equipment would consume 37,226 gallons of fuel. This would result in the total consumption of 58,868 gallons of petroleum fuel from construction of the Proposed Project.

Construction activities associated with the Proposed Project would be required to adhere to all State and SCAQMD regulations for off-road equipment and on-road trucks, which provide minimum fuel efficiency standards. Development of the Proposed Project would not result in the need to manufacture construction materials or create new building material facilities specifically to supply the Proposed Project. It is difficult to measure the energy used in the production of construction materials including asphalt, steel, and concrete; however, it is reasonable to assume that the production of these building materials would employ all reasonable energy conservation practices in the interest of minimizing the cost of doing business. Construction activities for the Proposed Project would not result in the wasteful, inefficient, and unnecessary consumption of energy resources. Therefore, potential impacts associated with construction-related petroleum fuel use for transportation and associated infrastructure would be less than significant and no mitigation is required.

Operational Energy

The on-going operation of the Proposed Project would require the use of energy resources for multiple purposes including, but not limited to, heating/ventilating/air conditioning (HVAC), refrigeration, lighting, appliances, and electronics. Energy would also be consumed during operations related to water usage, solid waste disposal, landscape equipment and vehicle trips. The original scope for the Proposed Project included a 4,088-sf convenience store, a gas station with 12 fueling positions, an 8,373-sf retail building, and 52 single family homes. The energy analysis conducted in Appendix A calculated energy usage with these commercial and residential inputs using the CalEEMod model for the 2019 Energy Code. The Proposed Project, with 72 single family homes and no commercial component, would be less energy intensive than the original project analyzed in Appendix A. Additionally, the Proposed

Project would be required to meet the 2022 Energy Code standards, which expands solar standards and moves to onsite energy storage. Therefore, the Proposed Project would be less impactful than the previously analyzed project.

Operations-Related Electricity

Operation of the Proposed Project would result in consumption of electricity at the Project Site. As detailed in Appendix A, the Proposed Project would consume 245,414 kilowatt-hours per year of electricity.

The Proposed Project would be required to meet the 2022 Title 24, Part 6 building energy efficiency standards developed to meet the State's goal of zero-net-energy use for new homes. The zero net energy use would be achieved through a variety of measures to make new homes more energy efficient and by also requiring installation of photovoltaic systems of adequate size to generate enough electricity to meet the zero-net energy use standard. The size of the PV system required for the project pursuant to the 2019 Title 24 standards was calculated in Appendix A, Section 8.1, which found that the Proposed Project would need to install at least 147 Kilowatts of photovoltaic panels within the Proposed Project. Although the CalEEMod model found that with implementation of the 2019 Title 24 Part 6 standards the Proposed Project would continue to utilize a nominal amount of power, it should be noted that the electricity usage and emission rates utilized by the CalEEMod model are based on regional average usage rates for existing homes. The existing homes utilized in this regional average were not all built to the most current Title 24 Part 6, standards, so the CalEEMod model provides a conservative or worst-case analysis of electricity use from the Proposed Project. The Proposed Project would be designed and built to minimize electricity use, and existing and planned electricity capacity and electricity supplies would be sufficient to support the Proposed Project's electricity demand. Therefore, potential impacts to the electricity supply and infrastructure associated with project operation would be less than significant and no mitigation is required.

Operations-Related Natural Gas

Operation of the Proposed Project would result in increased consumption of natural gas at the Project Site. The Proposed Project would consume 1,528 MBTU per year of natural gas, as detailed in Section 8.3 of Appendix A.

The Proposed Project would comply with all Federal, State, and City requirements related to the consumption of natural gas, which includes CCR Title 24, Part 6 *Building Energy Efficiency Standards* and CCR Title 24, Part 11: *California Green Building Standards.* The CCR Title 24, Part 6 and Part 11 standards require numerous energy efficiency measures to be incorporated into the proposed structures, including enhanced insulation as well as use of efficient natural gas appliances and HVAC units. The Proposed Project would be designed and built to minimize natural gas use, and existing and planned natural gas capacity and natural gas supplies would be sufficient to support the Proposed Project's natural gas demand. Therefore, potential impacts to natural gas supply and infrastructure associated with the project operation would be less than significant and no mitigation is required.

Operations-Related Vehicular Petroleum Fuel Usage

Operation of the Proposed Project would result in increased consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. As detailed in Section 8.3 of Appendix A, the Proposed Project would consume 122,454 gallons of petroleum fuel per year from vehicle travel.

The Proposed Project would comply with all Federal, State, and City requirements related to the consumption of transportation energy. The Proposed Project would be located as near as 260 feet from the existing Riverside Transit Center and Mt Vernon Bus Stop. The Proposed Project would be designed and built to minimize transportation energy through the promotion of the use of clean air vehicles,

including electric-powered vehicles. Existing and planned capacity and supplies of transportation fuels would be sufficient to support the Proposed Project's demand. Therefore, potential impacts associated with operation-related petroleum fuel use for transportation and associated infrastructure capacity would be less than significant and no mitigation is required.

The Proposed Project would comply with regulatory compliance measures outlined by the State and City related to Air Quality, Greenhouse Gas Emissions (GHG), Transportation/Circulation, and Water Supply. The Proposed Project would be constructed in accordance with all applicable City Building and Fire Codes. The Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, potential impacts associated with the wasteful, inefficient, or unnecessary consumption of energy resources would be less than significant, and no mitigation is required.

b. Less Than Significant Impact. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The applicable energy plan for the Proposed Project is the *County of Riverside General Plan 2035*, July 17, 2018. The Proposed Project's consistency with the applicable energy-related policies in the General Plan are shown in Table 8.

Table 8 – Proposed Project Compliance with Applicable General Plan Energy Policies

Policy No.	General Plan Policy	Proposed Project Implementation Actions
AQ 4.1	Require the use of all feasible building materials/ methods which reduce emissions.	**Consistent.** The proposed structures will be designed to meet the 2022 Title 24 Part 6 building standards that require enhanced insulation in order to reduce energy usage and associated emissions.
AQ 4.2	Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.	**Consistent.** The proposed structures will be designed to meet the 2022 Title 24 Part 11 building standards that require all installed appliances to be energy efficient.
AQ 4.3	Require centrally heated facilities to utilize automated time clocks or occupant sensors to control heating where feasible.	**Consistent.** The proposed structures will be designed to meet the 2022 Title 24 Part 11 building standards that require the use of occupant sensors.
AQ 4.4	Require residential building construction to comply with energy use guidelines detailed in Part 6 (California Energy Code) and/or Part 11 (California Green Building Standards Code) of Title 24 of the California Code of Regulations.	**Consistent.** The proposed single-family homes will be designed to meet the new 2022 Title 24 Part 6 and Title 24 Part 11 building standards.
AQ 5.4	Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.	**Consistent.** The Proposed Project has been designed to incorporate energy-efficient design elements that include site orientation and the use of shade trees to reduce fuel consumption.
AQ 20.7	Reduce VMT through increased densities in urban centers and encouraging emphasis on mixed use to provide residential, commercial and employment opportunities in closer proximity to each other. Such measures will also support achieving the appropriate jobs-housing balance within the communities. (AI 47, 53, 117, 146)	**Consistent.** The Proposed Project consists of small lot single-family homes, which provide for increased densities in a developed area.
AQ 20.8	Reduce VMT by increasing options for non-vehicular access through urban design principles that promote higher residential densities with easily accessible parks and recreation opportunities nearby. (AI 115, 117, 146)	**Consistent.** The Proposed Project will include Lot "Q" Open Space that will provide a park area for the proposed residents as well as installation of sidewalks on onsite roads as well as onto the portions of Mt Vernon Avenue and Center Street that the Project Site is adjacent to. As detailed above, the project consists of a mixed use residential and commercial project that will reduce VMT by providing commercial and park uses in close proximity to the proposed homes.
AQ 20.9	Reduce urban sprawl in order to minimize energy costs associated with infrastructure construction and transmission to distant locations, and to maximize protection of open space. (AI 26)	**Consistent.** The Proposed Project is an infill development that is bordered by residential uses on three sides. As such the infrastructure in the vicinity of the Project Site was designed of adequate size to support the Proposed Project and only minimal offsite improvements to infrastructure will be required as a result of development of the Proposed Project.

Policy No.	General Plan Policy	Proposed Project Implementation Actions
AQ 20.10	Reduce energy consumption of the new developments (residential, commercial, and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design. (AI 147)	**Consistent.** The Proposed Project has been designed to incorporate energy-efficient design elements that include solar orientation and shading.
AQ 20.11	Increase energy efficiency of the new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design. Also, increase energy efficiency through use of energy efficient mechanical systems and equipment. (AI 147)	**Consistent.** The proposed structures will be designed to meet the 2022 Title 24 Part 6 and Title 24 Part 11 building standards that require the installation of energy efficient lights, appliances, and ventilation systems as well as the installation of low-flow fixtures and use of water efficient irrigation systems.
AQ 20.18	Encourage the installation of solar panels and other energy-efficient improvements and facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.). (AI 147)	**Consistent.** The proposed single-family homes will be designed to meet the 2022 Title 24 Part 6 building standards that require the installation of a minimum of 147 kilowatts of photovoltaic solar panels onto the proposed homes.

Source: County of Riverside, 2018.

As shown in Table 7, the Proposed Project would be consistent with all applicable energy-related policies from the General Plan. Therefore, potential impacts associated with the Proposed Project conflicting or obstructing a state or local plan for renewable energy or energy efficiency would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

GEOLOGY AND SOILS

GEOLOGY AND SOILS Would the project directly or indirectly:				
11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones a) Be subject to 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?	☐	☐	☒	☐

Source(s): Geotechnical Soils Report (Appendix D); Riverside County General Plan, Safety Element, Figure S-2 "Earthquake Fault Study Zones;" California Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application

Findings of Fact:

a) **Less Than Significant Impact.** According got the Riverside County General Plan and the California Department of Conservation[7], Project Site is not within an Alquist-Priolo Fault Zone. The closest Alquist-Priolo Earthquake Fault zones are the San Bernardino South located approximately 2.43 miles east of the Project Site. The potential for surface rupture to adversely impact the proposed structures is very low. Moreover, the Proposed Project would be required to comply with applicable provisions of the 2022 California Building Code (CBC). Title 24, Part 2, the CBC establishes minimum standards for building design in the state, and it is consistent with or more stringent than Uniform Building Code requirements. Local codes are permitted to be more restrictive than Title 24 but are required to be no less restrictive. The CBC is designed and implemented to improve building safety, sustainability, and consistency, and to integrate new technology and construction methods to construction projects throughout California. Moreover, the Riverside County Department of Building and Safety permitting process would ensure that all required CBC seismic safety measures are incorporated into the building. Therefore, potential impacts associated with rupture of a known earthquake fault would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[7] Department of Conservation, EQ Zapp: California Earthquake Hazards Zone Application,2019. (https://www.conservation.ca.gov/cgs/geohazards/eq-zapp Accessed on April 21, 2020.)

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Liquefaction Potential Zone a) Be subject to seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

Source(s): Riverside County General Plan Safety Element, Figure S-3 "Generalized Liquefaction;" Geotechnical Soils Report (Appendix D)

Findings of Fact:

a. Less Than Significant Impact. Liquefaction occurs when vibrations or water pressure causes soil particles to lose its friction properties. As a result, soil behaves like a liquid, has an inability to support weight, and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. However, effects of liquefaction can include sand boils, settlement, and structural foundation failures. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands in areas where the groundwater table is within approximately 50 feet below ground surface.

The Project Site is located within an area mapped by Riverside County GIS as having a low liquefaction susceptibility. The Geotechnical/Soils Report also determined that the potential for liquefaction susceptibility is low to remote because the historical groundwater table is in excess of 50 feet and the presence of underlying gravelly sandy soils with numerous rocks.

All structures built in the County are required to be developed in compliance with the CBC (California Code of Regulations, Title 24, Part 2) which is adopted by the County of Riverside. Compliance with the CBC, requires proper construction of building footings and foundations ensuring that the building withstand the effects of potential ground movement, including liquefaction.

The Riverside County Department of Building and Safety reviews structural plans and geotechnical data prior to issuance of a grading permit and conducts inspections during construction, which would ensure that all required CBC measures are incorporated. Therefore, potential impacts associated with seismic-related ground failure, including liquefaction would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Ground-shaking Zone a) Be subject to strong seismic ground shaking?	☐	☐	☒	☐

Source(s): Geotechnical Soils Report (Appendix D); Riverside County General Plan Figure S-4 Safety Element, "Earthquake-Induced Slope Instability Map"

Findings of Fact:

a) Less Than Significant Impact. The Project Site, like most of southern California, could be subject to seismically related strong ground shaking. Ground shaking is a major cause of structural damage from earthquakes. 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.

The Project Site is located approximately 2.4 miles from the San Bernardino South Fault Zone. A major earthquake along this fault could cause substantial seismic ground shaking at the Project Site. However, structures built in the County are required to be built in compliance with the CBC (California Code of Regulations, Title 24, Part 2) that provides provisions for earthquake safety based on factors including building occupancy type, the types of soils onsite, and the probable strength of ground motion. Compliance with the CBC would require 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 would withstand the effects of strong ground shaking.

The Riverside County Department of Building and Safety permitting process would ensure that all required CBC seismic safety measures are incorporated into the Proposed Project. Therefore, potential impacts associated with strong seismic ground shaking would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Landslide Risk a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?	☐	☐	☒	☐

Source(s): Geotechnical Soils Report (Appendix D); On-site Inspection, Riverside County General Plan Figure S-5 "Regions Underlain by Steep Slope;" Highgrove Plan Area, Figure 11 "Highgrove Area Plan Steep Slope."

Findings of Fact:

a) Less Than Significant Impact. Landslides are the downhill movement of masses of earth and rock and are often associated with earthquakes; but other factors, including 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 and the adjacent parcels are generally flat and do not contain any hills or steep slopes. The Project Site ranges from 1,100 feet to 1,120 feet in elevation and no landslides on or adjacent to the Project Site would occur. The Project Site is not identified in the General Plan or the Highgrove Plan as an area having a risk of landslides. Therefore, potential impacts associated with landslide risk would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Ground Subsidence a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?	☐	☐	☒	☐

Source(s): Geotechnical Soils Report (Appendix D); Riverside County General Plan Figure S-7 "Documented Subsidence Areas Map;"

Findings of Fact:

a) Less Than Significant Impact. Ground subsidence is a general lowering of the ground surface over a large area that is generally attributed to lowering of the ground water levels within a groundwater basin. Localized or focal subsidence or settlement of the ground can occur as a result of earthquake motion in an area where groundwater in a basin is lowered. The Project Site overlies the Riverside North Basin which is part of the Riverside Basin and the Riverside Basin Groundwater Management Plan (GMP), which optimizes groundwater levels, enhances water quality, and minimizes land subsidence. Because the Riverside North Basin is managed through this GMP, which limits the allowable withdrawal of water from the basin by water purveyors, and the Proposed Project would not pump water from the Project Site (as water supplies would be provided by City of Riverside), impacts related to subsidence would be less than significant.

Compliance with the California Building Code is a standard practice and would be required by the Riverside County Department of Building and Safety. Compliance with the requirements of the CBC as part of the building plan check and development review process, would ensure that potential soil stability impacts would be less than significant. Therefore, potential impacts associated with ground subsidence would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Other Geologic Hazards a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?	☐	☐	☐	☒

Source(s): On-site Inspection, Project Application Materials, Geology Report

Findings of Fact:
a) No Impact. Seiches are oscillations in enclosed bodies of water that ae caused by a number of factors, most often by wind or by seismic activity. There are no water bodies near enough to the Project Site to pose a flood hazard, seiche or mudflow. The nearest major water of body feature is the Evans Lake, located approximately 3.7 miles southeast of the Project Site. Therefore, no impacts would occur. There are no known volcanoes in the Project region. Therefore, no impacts associated with geological hazards would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. Slopes a) Change topography or ground surface relief features?	☐	☐	☒	☐
b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?	☐	☐	☐	☒
c) Result in grading that affects or negates subsurface sewage disposal systems?	☐	☐	☐	☒

Source(s): Riv. Co. 800-Scale Slope Maps, Project Application Materials, Project Specific Water Quality Management Plan (Appendix H)

Findings of Fact:

a. Less Than Significant Impact. Topographically, the Project Site is relatively flat, with no abrupt major grade changes. Grading for the Proposed Project would not significantly change the topography and ground surface relief features of the site and would preserve the existing drainage patterns on site. The most significant topographical features on the Project Site are slight slopes located at the southeast corner of the site. The Proposed Project would retain these slope areas (Figure 15a and 15b – *Conceptual Grading Plan*). Therefore, potential impacts associated with change to topography or ground surface relief features would be less than significant and no mitigation is required.

b.-c. No Impact. The Proposed Project would maintain the general flat topography of the existing site. Though the scope of the project has changed to a fully residential project, the underlying grading of the site will be consistent with the grading plans previously prepared for the project plan (Figure 15a and 15b – *Conceptual Grading Plan)*. The south and west portion of the site, previously identified for commercial use but now to be developed with residential units, would not create cut or fill slopes no greater than 2:1 or higher than 10-feet. NAs noted in Section V.VII(17)(a), the proposed grading for the balance of the project site would retain the existing southeastern slopes. The proposed grading for the Project Site would not affect or negate subsurface sewage disposal systems due to existing or proposed slopes associated with the Proposed Project. Therefore, no impacts associated with cut or fill slopes and sewage disposal systems would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Soils a) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
b) Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
c) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

Source(s): Geotechnical Soils Report (Appendix D); U.S.D.A. Soil Conservation Service Soil Surveys, Project Application Materials, On-site Inspection

Findings of Fact:

a. Less Than Significant Impact. The Proposed Project would result in the grading of the Project Site to accommodate the development of the commercial and residential portions of development. However, Appendix D outlines the earthwork specifications and grading details for the project to reduce and prevent soil erosion and loss of topsoil. These specifications include planting immediately after grading and maintaining proper drainage to avoid ponding of water. The Proposed Project must also comply with the County's grading permit requirements, which would ensure that construction practices include BMPs to protect exposed soils. During operation of the project, the Project Site would be covered with asphalt for drive aisles and roads, along with sidewalks and pedestrian pathways. Areas of permeable surface (e.g., common open space and landscape planters) would be landscaped to reduce and prevent soil erosion and topsoil loss. Therefore, impacts associated with potential loss of topsoil or soil erosion would be less than significant and no mitigation is required.

b. Less Than Significant Impact. According to Appendix D, the Project Site's existing conditions include soil which is sandy in nature and considered non-critically expansive. Based on field explorations, laboratory testing, and engineering analysis completed for the Project Site, design recommendations outlined in Appendix D are based on the use of non-expansive soil types. Recommendations of the site-specific geotechnical report include the use of non-expansive materials for import, to be approved by the soils engineer. The Proposed Project would be required to undergo the County's grading and building plan check process, which would include staff review of the site-specific geotechnical report to ensure the recommendations outlined in Appendix D are implemented. Therefore, potential impacts associated with expansive soils would be less than significant and no mitigation is required.

c. No Impact. The Proposed Project would not involve the use of septic tanks or alternative wastewater disposal systems. The Proposed Project would include connecting to existing sewer infrastructure located within Center Street. The Proposed Project would connect to an existing 8-inch sewer line and would not rely on alternative means of wastewater disposal. Therefore, no impacts associated with soils incapable of adequately supporting alternative wastewater disposal would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. Wind Erosion and Blowsand from project either on or off site. a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure S-8 "Wind Erosion Susceptibility Map," Ord. No. 460, Article XV & Ord. No. 484, *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project*, Vista Environmental, September 23, 2021 (Appendix A), Geotechnical Soils Report (Appendix D)

Findings of Fact:

a) Less Than Significant Impact. Wind and wind-blown sand are an environmentally limiting factor throughout much of Riverside County. Approximately 20% of the land area of Riverside County is vulnerable to "high" and "very high" wind erosion susceptibility. As noted in Section V.VII(18)(a), the General Plan Safety Element, Figure S-8 – "Wind Erosion Susceptibility Map" shows the Project Site is located within a "high" wind erodibility rated area and would be subject to General Plan policy S 3.11. The County's Ordinance No. 484 requires property consisting of sandy soils to protect the site from windblow erosion of sand. According to Appendix D, the Project Site consists of sandy soils and Ordinance No. 484 would be applicable to the Project Site. In addition to the County's regulations on sandy soils to prevent windblown erosion, SCAQMD requires implementation of Rule 403 to control fugitive dust and is applicable to any activity capable of generating fugitive dust. Appendix A stipulates that Rule 403 would be applicable to the Proposed Project, which entails preventative measures to ensure fugitive dust is controlled and does not cause significant impacts to air quality. These preventative measures include, but are not limited to, watering all exposed areas on active sites at least three times per day, pre watering areas prior to clearing and soil moving activities, and replanting all distributed areas as soon as practically possible. Upon completion of the Proposed Project, the site would contain asphalt and concrete cover, as well as landscaped areas, all of which would reduce and suppress potential blowsand generation from the Project Site. With application of the County's regulations and SCAQMD requirements, impacts surrounding wind erosion and blowsand would be reduced. Therefore, impacts associated with an increase in wind erosion and blown sand, either on or off site, would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

GREENHOUSE GAS EMISSIONS

GREENHOUSE GAS EMISSIONS Would the project:				
20. Greenhouse Gas Emissions a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Source(s): *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project*, Vista Environmental, September 23, 2021 (Appendix A), *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Air Quality and Greenhouse Gas Emissions Technical Memorandum,* Vista Environmental, January 2, 2024 (Appendix A.1), Riverside County General Plan, Riverside County Climate Action Plan ("CAP"), Project Application Materials

Findings of Fact:

General: Criteria pollutant analyses presented as a part of Findings of Fact for the Air Quality Impact Analysis are based on and summarized from Appendix A - *Air Quality, Energy, and Greenhouse Gas Emissions Impact Analysis—Highgrove Residential/Commercial Project* (Vista Environmental, 2021) and Appendix A.1 - *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Air Quality and Greenhouse Gas Emissions Technical Memorandum* (Vista Environmental, 2024).

The *County of Riverside Climate Action Plan* (CAP) was adopted in December 2015 and revised in November 2019. The 2015 CAP utilized a GHG emissions reduction target of a 15 percent decrease from 2008 levels by the year 2020, in order to meet the requirements of AB 32 and SB 375. The County's 2008 GHG emissions were calculated at 7,012,938 MTCO2e and in order to reach the reduction target, the County of Riverside will need to reduce community-wide emissions to 5,960,998 MTCO2e by the year 2020. The CAP was updated in 2019 in order to address a 2017 Settlement Agreement with the Sierra Club and other groups as well as to bring the CAP in conformance with SB 32 and AB 197 that set a statewide 2030 goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The 2030 target is an interim year goal set to make it possible to reach the ultimate goal of reducing GHG emissions 80 percent below 1990 levels by 2050. The 2019 CAP provides several new measures to meet the 2030 target that include promoting energy efficiency, renewable energy and development and promotion of zero-emission vehicles, water conservation and increased waste diversion.

The CAP has developed a process for determining significance of GHG impacts from new development projects that includes (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing Screening Tables to mitigate project GHG emissions that exceed the threshold level. The CAP has provided a threshold of 3,000 MTCO2e per year to be used to identify projects that require the use of Screening Tables. If the 3,000 MTCO2e per year threshold is exceeded, then specific mitigation from the CAP's Screening Tables would be selected to garner a total of 100 points or greater. According to the CAP, such projects that implement 100 points of mitigation measures from the Screening Tables would be determined to have a less than significant individual impact for greenhouse gas emissions.

a. Less Than Significant Impact. The Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. The Proposed Project would consist of the development of 72 single-family homes. The Proposed Project would generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. The project's GHG emissions have been calculated with the CalEEMod model based on the construction and operational parameters detailed Appendix A.1. A summary of the results is shown in Table 9 and the CalEEMod model run annual printouts are provided in Appendix A.

Table 9 – Project Related Greenhouse Gas Annual Emissions

	Greenhouse Gas Emissions (Metric Tons per Year)			
Category	**CO_2**	**CH_4**	**N_2O**	**CO_2e**
Area Sources[1]	18.4	<0.01	<0.01	18.5
Energy Usage[2]	242	0.02	<0.01	243
Mobile Sources[3]	954	0.04	0.05	970
Solid Waste[4]	5.89	0.59	0.00	20.6
Water and Wastewater[5]	17.8	0.10	<0.01	21.0
Construction[6]	12.7	<0.01	<0.01	12.8
Refrigeration[7]	--	--	--	0.19
Total Emissions	1,250	0.75	0.05	**1,286**
County of Riverside CAP Threshold of Significance				**3,000**
Exceed Threshold?				**No**

Notes:
[1] Area sources consist of GHG emissions from consumer products, architectural coatings, hearths, and landscaping equipment.
[2] Energy usage consists of GHG emissions from electricity and natural gas usage.
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[6] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009. Source: CalEEMod Version 2016.3.2.
[7] Refrigeration includes GHG emissions from refrigerants in air conditioning units.

Table 9 shows that the Proposed Project would create 1,286 $MTCO_2e$ per year. According to the County of Riverside CAP threshold of significance, if a project creates less than 3,000 $MTCO_2e$ per year, the GHG emissions from a project is determined to be less than significant. It should also be noted that the proposed structures would be required to meet the 2022 Title 24 Part 6 building standards that require all new homes to be designed to use net zero energy, through a combination of energy efficiency measures as well as requiring all new homes to install rooftop photovoltaic systems that are of adequate size to generate enough electricity to meet the net-zero energy requirements. The County also requires that all new developments institute the water conservation measures that are detailed in the California Green Building Code. Therefore, potential impacts associated with the adverse generation of greenhouse gas emissions, either directly or indirectly, from project construction and operation would be less than significant and no mitigation is required.

b. Less Than Significant Impact. The Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing GHG emissions. The County of Riverside adopted the *County of Riverside Climate Action Plan* in December 2015 and updated November 2019. The 2015 CAP utilized a GHG emissions reduction target of a 15 percent decrease from 2008 levels by the year 2020, in order to meet the requirements of AB 32 and SB 375. The CAP was updated in 2019 in order to address a 2017 Settlement Agreement with the Sierra Club and other groups as well as to bring the CAP in conformance with SB 32 and AB 197 that set a statewide 2030 goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The 2017 Settlement

Agreement updated the CAP to also be in alignment with the goal and policies for new development provided in *California's 2017 Climate Change Scoping Plan*, prepared by CARB, November 2017. Specifically, the 2017 Settlement Agreement now requires all new residential developments to install EV charging stations in the garages of new residential units, requires rooftop solar PV systems to be installed on all new homes and new commercial buildings that total more than 100,000 square feet of building space, and use of high-efficiency bulbs in new traffic signals.

The CAP has developed a process for determining significance of GHG impacts from new development projects that includes (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing Screening Tables to mitigate project GHG emissions that exceed the threshold level. The CAP has provided a threshold of 3,000 $MTCO_2e$ per year, which was based on capturing 90 percent of emission from all projects in the County, to be used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. As detailed in Appendix A.1, the Proposed Project would generate 1,286 $MTCO_2e$ per year, which is within the 3,000 $MTCO_2e$ per year threshold. It should also be noted that the proposed homes would be required to meet the 2022 Title 24 Part 6 building standards that require all new homes to be designed to use net zero energy, through a combination of energy efficiency measures as well as requiring all new homes to install rooftop photovoltaic systems that are of adequate size to generate enough electricity to meet the net-zero energy requirements. Therefore, potential impacts associated with the conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS Would the project:				
21. Hazards and Hazardous Materials a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?	☐	☐	☒	☐
d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter (1/4) mile of an existing or proposed school?	☐	☐	☐	☒
e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

Source(s): *Phase I Environmental Site Assessment,* AEI Consultants, October 2020, *Limited Phase II Environmental Site Assessment*, Tetra Tech Co, August 2012, *Limited Phase II Subsurface Investigation,* AEI Consultants, May 2022, Project Application Materials, CalEPA Cortese List Data Resources (https://calepa.ca.gov/SiteCleanup/CorteseList/), Highgrove Area Plan, Figure 6 – "Highgrove Area Plan Circulation"

Findings of Fact:

General: Hazards and hazardous material analyses presented as a part of Findings of Fact for the Hazards and Hazardous Materials Impact Analysis are based on and summarized from Appendix E - *Phase I Environmental Site Assessment* (AEI Consulting, October 12, 2020) and Appendix F - *Limited Phase II Subsurface Investigation* (AEI Consultants, May 2022) and *Limited Phase II Environmental Site Assessment*, Tetra Tech Co, August 2012.

a. – b. Less Than Significant Impact. Soil sampling discussed in Appendix E evaluated the potential for the existence of organochlorine pesticides, herbicides, or arsenic-based pesticides associated with the former use of the property as an orchard. Soil samples collected contained relatively low concentrations and yielded the conclusion that all detected concentrations were below the residential soil California Human Health Screening Levels (CHHSL), and that further attenuation would occur from future grading activities associated with site development. Soil stockpile samples collected contained relatively low concentrations of oil-range petroleum hydrocarbons and all detected concentrations were below the San Francisco RWQCB screening values for protection of groundwater resources in residential land use scenarios and would be further attenuated as future grading activities are conducted. Arsenic was detected above the CHHSL; however, laboratory analytical results also indicated that arsenic concentrations in all soil samples fell within the range of typical concentrations in California, suggesting that the arsenic concentrations are naturally occurring and not the result of human activity. Since the Project Site is vacant, no building components containing suspect asbestos or lead-based paint containing materials are identified onsite.

Construction of the Proposed Project would entail routine transport of potentially hazardous materials, including gasoline, oil solvents, cleaners, paint, and soil from the Project Site. Proper BMPs, preparation of a SWPPP, and hazardous material handling protocols would be required to ensure safe storage, handling, transport, use, and disposal of all hazard materials during the construction phase of the Proposed Project. Construction would also be required to adhere to any local standards set forth by the County, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risks to the public, including California OSHA requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code.

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Operation of the Proposed Project would involve routine occurrences associated with single-family residences, which include the presence of household cleaning supplies, as well as landscaping and maintenance. Proper handling of the use and disposal of hazardous materials would reduce the potential for exposure. Therefore, potential impacts to the public or the environment through the routine transport, use, or disposal of hazardous materials or upset and accident conditions involving the release of hazardous materials would be less than significant and no mitigation would be required.

c. Less Than Significant Impact. The Proposed Project would not substantially change the way emergency access is provided to the Project Site via Mt Vernon Avenue or Center Street. The closest emergency services facility is Riverside County Fire Department Station no. 19 located approximately 0.4 miles west of the Project Site on Center Street. The proposed on-site accessways meet the turning radii and street width requirements of the Riverside County Fire Department, as shown on Figures 4 – *Overall Site Plan* and 11 – *Conceptual Fire Access Plan*. The Proposed Project includes two access points for the proposed residential portion of the project, and three access points for the proposed commercial portion. As part of the plan check process, the Proposed Project would undergo a safety review by the Riverside County Fire Protection Planning division to ensure compliance with the County's fire standards.

The County's Circulation Plan routes are considered the backbone routes for evacuation purposes. Mt Vernon Avenue and Center Street are labeled secondary roadways and would serve as evacuation routes within the Highgrove area. Residents would utilize these thoroughfares to travel westward to Iowa Avenue which is designated an arterial and major roadway, and a primary access way for evacuation. The Proposed Project would not reduce the number of lanes or public right-of-way on either Mt Vernon Avenue or Center Street. Therefore, potential impacts associated with an adopted emergency response plan or emergency evacuation plan would be less than significant and no mitigation would be required.

d. No Impact. The Project Site is not located within one-quarter mile of an existing or proposed school. The closest school to the site is Highgrove Elementary School, located approximately 0.6 miles to the west. Therefore, no impacts associated with emissions of hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school would occur and no mitigation is required.

e. No Impact. The Project Site is not included on a list of hazardous materials sites pursuant to Government Code Section 65962.5., also known as the Cortese List. Therefore, no impacts associated with sites listed pursuant to Government Code Section 65962.5 would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
22. Airports a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure S-20 "Airport Locations;" Highgrove Plan Area, Figure 4 "Highgrove Area Plan Overlays and Policy Areas" and Figure 5 "Highgrove Area Plan March Joint Air Reserve Base Airport Influence Area"

Findings of Fact:

a. No Impact. In accordance with Riverside County General Plan Figure S-20 and the Highgrove Plan Area Figures 4 and 5, the Project Site is not within a planning area of an Airport Master Plan. Therefore, no impacts associated with inconsistencies with an Airport Master Plan would occur and no mitigation is required.

b. No Impact. The Project Site is not within a planning area of an Airport Master Plan and would not require review by the Airport Land Use Commission. Therefore, no impacts associated with review by the Airport Land Use Commission would occur and no mitigation is required.

c. No impact. The Project Site is not within the planning area of an airport land use plan or within two miles of a public airport or public use airport. Therefore, no impacts associated with an airport safety hazard for people residing or working in the project area would occur and no mitigation is required.

d. No Impact. The Project Site is not within the vicinity of a private airstrip or heliport. Therefore, no impacts associated with an airport safety hazard for people residing or working in the project area would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY Would the project:				
23. Water Quality Impacts a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces?	☐	☐	☒	☐
d) Result in substantial erosion or siltation on-site or off-site?	☐	☐	☒	☐
e) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?	☐	☐	☒	☐
f) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
g) Impede or redirect flood flows?	☐	☐	☒	☐
h) In flood hazard, tsunami, or seiche zones, risk the release of pollutants due to project inundation?	☐	☐	☐	☒
i) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Source(s): *Hydrology and Hydraulics Study for Highgrove Commercial Development,* Woodard Group, January 2024 (Appendix G), *Project Specific Water Quality Management Plan,* Woodard Group, January 2024 (Appendix H), *Will Serve Letters* (Appendix L), Riverside County General Plan Figure S-9 "Special Flood Hazard Areas," Figure S-10 "Dam Failure Inundation Zone," Riverside County Flood Control District Flood Hazard Report/ Condition, GIS database, Highgrove Area Plan Figure 8 – "Highgrove Area Plan Flood Hazards," 2015; Geotechnical Soils Report (Appendix D), 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan

Findings of Fact:

General: Hydrology resource analyses presented as a part of Findings of Fact for the Hydrology Resources Impact Analysis are based on and summarized from Appendix G - *Hydrology and Hydraulics Study for Highgrove Commercial Development* (Woodard Group, 2024a), Appendix H – *Project Specific Water Quality Management Plan* (Woodard Group, 2024b), and Appendix L – *Will Serve Letters* (Riverside Highland Water Company and City of Riverside, April 2019 (Revised September 14, 2021 and October 2020).

a. Less Than Significant Impact. Construction of the Proposed Project would include grading, and other earthmoving activities that have the potential to cause erosion that would subsequently degrade

water quality and/or violate water quality standards. As required by the Clean Water Act, the Property Owner/Developer would comply with the Santa Ana Municipal Separate Storm Sewer (MS4) National Pollution Discharge Elimination System (NPDES) Permit (Order No. R8-2010-0033, NPDES Permit No. CAS618033)[8]. The NPDES MS4 Permit Program, which is administered in the project area by the County of Riverside and is issued by the Santa Ana Regional Water Quality Control Board (RWQCB), regulates storm water and urban runoff discharges from developments to natural and constructed storm drain systems in the County of Riverside. Since the Proposed Project would disturb one or more acres of soil, the Property Owner/Developer would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). Construction activities subject to the Construction General Permit include clearing, grading, and disturbances including stockpiling or excavation. The Construction General Permit requires implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would generally contain a site map showing the construction perimeter, proposed buildings, storm water collection and discharge points, general pre- and post-construction topography, drainage patterns across the Project Site, and adjacent roadways.

Drainage on the Project Site generally drains from the east to the west. Under the operating condition, the Project Site drainage would match the existing drainage pattern and connect via on-site storm drain to the existing 42-inch Riverside County Flood Control (RCFC) maintained storm drain system. Runoff from the Proposed Project's added impervious surface area would be directed into vegetated swales which would drain into the curb and gutter and then to a bioretention basin. Only the overflow from the bioretention would be collected in the proposed onsite storm drain system, which would then connect to the RCFC maintained storm drain system. The Department of Water Resources shows depth to groundwater at 158 feet below ground surface in a well off Sanrive Avenue located roughly one mile west from the site. Depth to groundwater is not expected to impact the site development. The Project Site is not located within any flood hazard areas, as detailed within the Highgrove Area Plan, Figure 8 – "Highgrove Area Plan Flood Hazards." Appendix H outlines best management practices (BMPs) the Proposed Project would implement in order to limit potential sources of runoff pollutants. These BMPs include but are not limited to, construction of two (2) bioretention facilities for onsite retention of runoff and minimum to no use of pesticides in landscaped areas.

Therefore, with incorporation of these policies and requirements, potential impacts associated with water quality standards or waste discharge requirements would be less than significant and no mitigation would be required.

b. Less Than Significant Impact. Groundwater resources in Riverside County are defined by their quality as well as quantity. Most groundwater basins within Riverside County store local and imported water for later use to meet seasonal and drought-year demands. Under these groundwater recharge programs; groundwater is artificially replenished in wet years with surplus imported water. Water is then extracted during drought years or during emergency situations. Groundwater recharge that may also involve the recharge of reclaimed water, enhances the region's ability to meet water demand during years of short supply, and increases overall local supply reliability. Groundwater recharge is also affected by reduced natural percolation capacity due to impervious, urban surfaces and pollution from specific intensive industrial and agricultural uses. Floodplains are a natural filtering system, with water percolating back into the ground and replenishing groundwater. When a watercourse is divorced from its floodplain with levees and other flood control facilities, then natural, built in benefits are either lost, altered, or significantly reduced, including those related to groundwater replenishment and quality. As discussed in Section V.X(a), the Project Site is not located within any flood hazard area associated with

[8] Riverside County Flood Control and Water Conservation District, *Riverside County Watershed Protection,* 2021 (http://content.rcflood.org/NPDES/SantaAnaWS.aspx Accessed July 27, 2021)

the floodplains and watercourses that run through the Highgrove area. Although the Proposed Project would result in additional impervious surfaces onsite, the project includes LID BMP bioretention systems with underground retention chambers which would detain and treat stormwater runoff for infiltration. The Riverside Highland Water Company would provide water service to the Project Site, as stipulated in Appendix L. Riverside Highland Water Company (RHWC) is a Mutual Water Company, shareholder owned and regulated by the California Corporation Commission and governed by a nine-member Board of Directors. Currently serving the City of Grand Terrace, the Highgrove area of Riverside County and small portions of San Bernardino County and the City of Colton, RHWC provides domestic and irrigation water services. The water service is provided to single and multi-family residential, commercial, industrial, and agricultural users. The Riverside Highland Water Company is a part of those agencies listed under the 2020 Integrated Regional Urban Water Management Plan, which provides a detailed analysis of anticipated supply and demands for the area under years 2020 through 2045. RHWC extracts potable water from the San Bernardino Basin (SBB, including the Bunker Hill Basin and Lytle Basin) and the Riverside Arlington Basin (including the Riverside North Basin and Riverside South Basin)[9] However, the Proposed Project does not include direct extraction of groundwater from basins and would be served by the Riverside Highland Water Company through existing entitlements. The Proposed Project would infiltrate stormwater runoff onsite through the use of bioretention basins on both the commercial and residential portions of the site. Therefore, potential impacts associated with groundwater supplies would be less than significant, and no mitigation is required.

c. Less Than Significant Impact. The Proposed Project would involve the development of 72 single family homes. The drainage for the entire Project Site generally drains from the east to the west, and the proposed drainage pattern of the project would match the existing drainage pattern and connect via on-site storm drain to the existing 42-inch municipally maintained storm drain system. Runoff from the Proposed Project's added impervious surface area would be directed into vegetated swales which would drain into the curb and gutter and then to a bioretention basin. Only the overflow from the bioretention would be collected in the proposed onsite storm drain system, which would then connect to the municipally maintained storm drain system. The Project Site contains no rivers or streams onsite. There are no depressions, basins, impoundment, or tire ruts on the Project Site suggestive of any water retention or of possessing hydric soil conditions. Therefore, potential impacts associated with the altering of existing drainage patters would be less than significant and no mitigation is required.

d. Less Than Significant Impact. Grading activities during construction of the Proposed Project may result in wind driven soil erosion and loss of topsoil. However, all construction and grading activities would comply with the County's grading requirements which would be monitored through the grading permit plan check, as well as the recommended erosion specifications outlined in Appendix D. Upon project completion, the Project Site would be developed with a development consisting of residential units and retail commercial, paved surfaces, and landscaping, which would prevent substantial erosion from occurring. Therefore, potential impacts from erosion would be less than significant and no mitigation would be required.

e. – g. Less Than Significant Impact. Drainage on the Project Site generally drains from the east to the west. Under the operating condition, the Project Site drainage would match the existing drainage pattern and runoff would be contained onsite via the bioretention basin systems. Runoff would be collected via onsite curb and gutters directed into vegetated swales that drain into the bioretention system which would filter and treat water collected and allow for natural infiltration. Only overflow from the bioretention system would be collected in onsite storm drains that would connect to the existing

[9] 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan, (June 2021) https://www.sbvmwd.com/home/showpublisheddocument/9246/637614377683630000 Accessed September 15, 2021

RCFC maintained storm drain system. Proposed site conditions would not result in flooding on or offsite due to increased rates of runoff. Since runoff would be captured, stored, and infiltrated onsite, the existing 42-inch storm drain infrastructure located within Center Street would only receive overflow runoff via the proposed onsite storm drain system. The Project Site is not located within any flood hazard areas. Appendix H outlines best management practices (BMPs) the Proposed Project would implement in order to limit potential sources of runoff pollutants. These BMPs include but are not limited to, construction of two (2) bioretention facilities for onsite retention of runoff and minimum to no use of pesticides in landscaped areas. Therefore, impacts associated with amount of surface runoff which could lead to flooding or impact existing storm drain infrastructure would be less than significant and no mitigation is required.

h. No Impact. Seismic seiches are standing waves set up on rivers, reservoirs, ponds, and lakes when seismic waves from an earthquake pass through the area. They are in direct contrast to tsunamis which are giant sea waves created by the sudden uplift of the sea floor. The Project Site is surrounded by a relatively flat and urbanized area and not adjacent to any enclosed body of water (e.g., a lake or reservoir) and is not located within a flood hazard zone. The Project Site is located approximately 45 miles from the Pacific Ocean and would not likely be impacted by a tsunami. The surrounding topography of the Project Site is generally flat and would not be subject to inundation by mudflow. Therefore, no impacts related to seiche, tsunami, or mudflow would occur, and no mitigation would be required.

i. Less Than Significant Impact. The Proposed Project would preserve the existing drainage pattern for the Project Site. Drainage on the Project Site currently flows in n east to west direction. Under the operating condition, the Project Site drainage would be similar except that onsite drainage would be collected, stored, and treated via the bioretention basins proposed. Overflows would be collected via the proposed onsite storm drain system and connect to the existing 42-inch storm drain in Center Street. Development of the Proposed Project would not significantly alter the existing drainage pattern of the Project Site or alter the course of a stream or river. Implementation of the NPDES permit requirements would reduce potential impacts from erosion and siltation during the Project Site's preparation and earthmoving phases. Therefore, potential impacts associated with obstruction or conflict with a water management plan would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

LAND USE AND PLANNING

LAND USE AND PLANNING Would the project:				
24. Land Use a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Source(s): Riverside County General Plan, GIS database, Project Application Materials

Findings of Fact:

a. Less Than Significant Impact. The Proposed Project involves a change in the land use designation for the Project Site in order to construct 72 residential units. Though the change in land use designation would require a General Plan Amendment, the existing standards outlined for the proposed land use designation would be applicable to the Proposed Project and require compliance with these plans, policies, and regulations.

The Proposed Project would involve a tentative tract map to subdivide the subject parcel into 72 numbered lots for the development of single family residential units and 20 lettered lots for the purposes of private street dedication, open space and landscape area dedication, and right-of-way dedication to the County.. The proposed residential development includes a density consistent with the proposed land use designation. The proposed general plan designation of Community Development: High-Density Residential land use permits for a density of 8.0 to 14.0 dwelling units per acre (du/ac). The residential development's density would be 8.5 du/ac, which is permitted per Table 1 – *Land Use Designations Summary* of the Highgrove Area Plan. The number of dwelling units proposed is consistent with the General Plan. The proposed development permits through the County would be subject to Chapter 17.24 – R-1 One Family Dwelling Zone, which establishes a procedure for the development of parcels of land. Therefore, potential impacts associated with a significant environmental impact due to conflicts with any applicable land use plan for the purpose of avoiding or mitigating an environmental effect would be less than significant.

b. No Impact. The Project Site is located at the southwest corner of Center Street and Mt Vernon Avenue. The Project Site is surrounded by existing single-family residential development to the north, west, and east. Vacant residentially zoned property is located directly south of the Project Site. The Proposed Project would occur within the boundaries of the Project Site, with exception of right-of-way improvements proposed. The Proposed Project would not physically divide an established community, as it is a designated lot within a residentially zoned portion of the County. Therefore, no impacts associated with disruption or division of an established community would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

MINERAL RESOURCES

MINERAL RESOURCES Would the project:				
25. Mineral Resources a) Result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Potentially expose people or property to hazards from proposed, existing, or abandoned quarries or mines?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure OS-6 “Mineral Resources Area”

Findings of Fact:

a.-b. No Impact. The Riverside County General Plan Figure OS-6 “Mineral Resources Area” identifies the project area as within MRZ-3 Mineral Resource Zone, which indicates that information related to mineral deposits is unknown. Implementation of the Proposed Project would have no impacts regarding the loss of availability of a known mineral resource that would be of value to the region or the residents of the state or a mineral resource recovery site delineated on a land use plan would not occur. Therefore, no impacts associated with the loss of a known mineral resource would occur and no mitigation is required.

c. No Impact. There are no existing surface mines in the vicinity of the Project Site. Therefore, no impacts associated with implementation of the Proposed Project related to incompatible land uses in mine areas, and impacts related to exposure to hazards from quarries or mines would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

NOISE

NOISE Would the project result in:				
26. Airport Noise a) For a project located within an airport land use plan or, where such a plan has not been adopted, within two (2) miles of a public airport or public use airport would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
b) For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Source(s): *Noise Impact Analysis Highgrove Residential/Commercial Project*, Vista Environmental, September 28, 2021 (Appendix I), *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Noise Technical Memorandum*, Vista Environmental, December 15, 2023 (Appendix I.1), Riverside County General Plan Figure S-20 "Airport Locations," County of Riverside Airport Facilities Map

Findings of Fact:

a.-b. No Impact. The nearest airport is Flabob Airport, located as near as 5.4 miles southwest of the Project Site. However, the Project Site is located outside of the 60 dBA CNEL noise contours of Flabob Airport. Therefore, no potential impacts associated with aircraft noise would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
27. Noise Effects by the Project				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source(s): *Noise Impact Analysis Highgrove Residential/Commercial Project*, Vista Environmental, September 28, 2021 (Appendix I), *County of Riverside – Proposed All Residential Development for Highgrove Tentative Tract Map 37743 Project Noise Technical Memorandum*, Vista Environmental, December 15, 2023 (Appendix I.1), Riverside County General Plan, Table N-1 ("Land Use Compatibility for Community Noise Exposure"), Project Application Materials

Findings of Fact:

General

This analysis below is based on implementation of the following project design features that are either already depicted on the Proposed Project site plans and architectural plans or are required from County and State Regulations.

Project Design Feature NOI 1:

PDF-NOI-1: Prior to issuance of a building permit, the property owner/developer shall demonstrate on building plans that the proposed homes will utilize standard dual pane windows with a minimum Sound Transmission Class (STC) rating of 26 STC for all conditioned rooms.

Project Design Feature NOI 2:

PDF-NOI-2: Prior to issuance of a building permit, the property owner/developer shall demonstrate on building plans that the proposed single-family homes will utilize a "windows closed" condition, which requires a means of mechanical ventilation per Chapter 12, Section 1205 of the Uniform Building Code. This shall be achieved with a standard forced air conditioning and heating system with a filtered outside air intake vent for each residential unit.

Project Design Feature NOI 3:

PDF-NOI-3: Prior to the issuance of the grading permit, the property owner/developer shall submit a construction-related noise mitigation plan to the County for review and approval. The plan shall depict the locations of where construction equipment would operate on the Project Site and how the noise from the construction equipment would be mitigated during construction of the project, through use of such methods as:

1. Temporary noise attenuation fences;
2. Preferential location of equipment; and
3. Use of current noise suppression technology and equipment.

Project Design Feature NOI 4:

PDF-NOI-4: The project applicant shall construct a 6-foot high concrete masonry unit (CMU) wall depicted on the Landscape Plan that is located on the east side of Mt. Vernon Avenue. The CMU wall shall be free of any decorative cutouts or openings.

a. Less Than Significant with Mitigation Incorporated. The Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The following section calculates the potential noise emissions associated with the temporary construction activities and long-term operations of the Proposed Project and compares the noise levels to the County standards.

Construction-Related Noise

The construction activities for the Proposed Project would include site preparation and grading of the Project Site, building construction and application of architectural coatings to the proposed structures, and paving of the proposed parking areas, onsite roads, and driveways. Noise impacts from construction activities associated with the Proposed Project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the Project Site are single-family homes located directly adjacent to the north and east sides of the Project Site. There are also single-family homes located as near as 80 feet to the west of the Project Site that are on the west side of Mt Vernon Avenue.

General Plan Policy N 13.1 requires construction noise impacts be minimized on adjacent uses through acceptable practices. General Plan Policy N 13.2 requires construction activities be limited to established hours of operation in order to mitigate the generation of excessive or adverse noise impacts on the surrounding community. Ordinance 847 of the County Code of Ordinances provides the established hours of construction operations and details that construction activities that occurs between 6:00 a.m. and 6:00 p.m. during the months of June through September and between 7:00 a.m. and 6:00 p.m. during the months of October through May are exempt from the Noise Ordinance. General Plan Policy N 13.3 requires construction of subdivisions that are adjacent to occupied noise sensitive land uses to submit a construction-related noise mitigation plan to the County that depicts how construction noise would be mitigated through use of temporary noise fences, preferred location of equipment and use of current noise suppression technology and equipment.

Project Design Feature NOI 3 (PDF-NOI-3) is included in this analysis to ensure compliance with General Plan Policy N 13.3, which requires the County to review and approve a construction-related noise mitigation plan, prior to issuance of the grading permit for the Proposed Project. General Plan Policy 13.4 requires that all construction equipment utilize noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than what was originally installed by the manufacturer. Based on local regulations regarding potential noise impacts, and through implementation of PDF-3, construction of the Proposed Project would not exceed the applicable standards in the General Plan and Municipal Code.

However, the County construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the County standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents. In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, Appendix I utilizes the FTA construction noise criteria thresholds detailed in Table 10 – *FTA Construction Noise Criteria*, which shows that a significant construction noise

impact would occur if construction noise exceeded 80 dBA averaged over 8 hours during the daytime at any of the nearby homes.

Table 10 – FTA Construction Noise Criteria

Land Use	Day (dBA $Leq_{(8\text{-hour})}$)	Night (dBA $Leq_{(8\text{-hour})}$)	30-day Average (dBA Ldn)
Residential	80	70	75
Commercial	85	85	80(1)
Industrial	90	90	85(1)

Construction noise impacts to the nearby sensitive receptors were calculated through use of the FHWA's Roadway Construction Noise Model (RCNM) and the parameters and assumptions detailed in Appendix I, Section 6.1, including Table F – *Construction Equipment Noise Emissions and Usage Factors* (p. 21). The results are shown in Table 11 – *Construction Noise Levels at the Nearby Homes* and the RCNM printouts are provided in Appendix I.

Table 11 – Construction Noise Levels at the Nearby Homes

Construction Phase	Construction Noise Level[1] (dBA Leq) at: Homes to North	Homes to East	Homes to West[3]
Site Preparation[2]	70	70	70
Grading[2]	70	70	69
Building Construction	71	71	70
Paving	66	66	65
Painting	58	58	57
FTA Construction Noise Threshold[4]	**80**	**80**	**80**
Exceed Thresholds?	**No**	**No**	**No**

[1] The distance from the center of the project site to the homes to the north was measured at 320 feet.
[2] The distance from the center of the project site to the homes to the east was measured at 315 feet.
[3] The distance from the center of the project site to the homes to the west was measured at 350 feet.
[4] FTA Construction Noise Threshold obtained from Table 9.
Source: RCNM, Federal Highway Administration, 2006

Table 11 shows that the greatest noise impacts would occur during the site preparation phase of construction, with a noise level as high as 78 dBA Leq at the nearest homes that are located adjacent to the north and east sides of the Project Site. All calculated construction noise levels shown in Table 13 are within the FTA daytime construction noise standard of 80 dBA averaged over eight hours. Therefore, through adherence to the allowable construction times detailed in Ordinance 847 of the County Code of Ordinances and through implementation of PDF-NOI-3, which requires the preparation of a construction-related noise mitigation plan prior to the issuance of the grading plan, the Proposed Project would not create a substantial temporary increase in ambient noise levels from construction of the Proposed Project. Therefore, potential construction-related noise impacts associated with a substantial temporary increase in ambient noise levels would be less than significant.

Operational-Related Noise

The Proposed Project would consist of the development of 72 single-family homes. Potential noise impacts associated with the operations of the Proposed Project would be from project-generated vehicular traffic on the nearby roadways and from onsite activities, which are analyzed separately. The proposed homes would be adjacent to Mt Vernon Avenue and Center Street, which may create exterior and interior noise levels in excess of County standards at the proposed homes.

Roadway Vehicular Noise Impacts to Nearby Existing Homes

Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The Proposed Project does not involve any uses that would require a substantial number of truck trips, nor would the Proposed Project alter the speed limit on any existing roadway. The Proposed Project's potential offsite noise impacts focus on the noise impacts associated with the change of volume of traffic that would occur with development of the Proposed Project.

General Plan Policy N 9.3 requires development projects that generate increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses provide appropriate mitigation measures. However, General Plan Policy 9.3, nor any other General Plan policy, defines or details what constitutes a "substantial permanent increase to ambient noise levels". As a result, this impact analysis utilized guidance from the Federal Transit Administration for a moderate impact as shown in Table 12 – *FTA Project Effects on Cumulative Noise Exposure*, which highlights that the project contribution to the noise environment can range between 0 and +7 dB and is dependent on the existing roadway noise levels.

Table 12 – FTA Project Effects on Cumulative Noise Exposure

Existing Noise Exposure (dBA Leq or Ldn)	Allowable Noise Impact Exposure dBA Leq or Ldn		
	Project Only	Combined	Noise Exposure Increase
45	51	52	+7
50	53	55	+5
55	55	58	+3
60	57	62	+2
65	60	66	+1
70	64	71	+1
75	65	75	0

Source: Federal Transit Administration, 2006.

The potential offsite traffic noise impacts created by the on-going operations of the Proposed Project were analyzed through utilization of the FHWA model and parameters described in Appendix I, Section 6.2 and the FHWA model traffic noise calculation spreadsheets are provided in Appendix I. The Proposed Project's potential offsite traffic noise impacts are analyzed for the existing year, existing plus ambient year 2022, and existing plus ambient year 2022 plus cumulative projects scenarios that are discussed separately. Appendix I analyzed the original project which consisted of 52 single family homes, a convenience store, 12 fueling position gas station, and 8,373 square foot retail building. Appendix I found that for all scenarios analyzed, the roadway noise increases crated by the original project would not exceed the applicable roadway noise increase thresholds and project generated roadway noise would not result in a substantial permanent increase in ambient noise levels.

The Proposed Project would generate 679 daily trips whereas the original project would have generated 2,154 daily trips, which results in a reduction of 1,475 daily trips. As such, since the original project noise report (Appendix I) found that the original project would create a less than significant impact to roadway noise and the Proposed Project would generate 1,475 fewer daily trips, it can be reasonably concluded that the Proposed Project would also create a less than significant impact to roadway noise and would not result in a substantial permanent increase in ambient noise levels at the nearby homes.

Existing Conditions

The Proposed Project's potential offsite traffic noise impacts were calculated through a comparison of the Existing scenario to the Existing with Project scenario. The results of this comparison are shown in Table 13 – *Existing Year Traffic Noise Contributions*.

Table 13 – Existing Year Traffic Noise Contributions

		dBA Ldn at Nearest Receptor[1]			
Roadway	Segment	Existing	Existing Plus Project	Project Contribution	Increase Threshold[2]
Michigan Avenue	North of Center Street	51.7	52.1	0.3	+5 dBA
Michigan Avenue	South of Center Street	49.6	50.3	0.8	+5 dBA
Mt Vernon Avenue	North of Main Street	62.4	62.6	0.2	+2 dBA
Mt Vernon Avenue	North of Project Driveway 1	61.9	62.2	0.3	+2 dBA
Mt Vernon Avenue	North of Center Street	57.5	58.0	0.5	+3 dBA
Mt Vernon Avenue	South of Center Street	56.3	56.6	0.3	+3 dBA
Main Street	West of Mt Vernon Avenue	55.3	55.5	0.2	+3 dBA
Center Street	West of Michigan Avenue	60.9	61.4	0.5	+2 dBA
Center Street	West of Mt Vernon Avenue	56.8	58.2	1.3	+3 dBA
Center Street	East of Project Driveway 4	55.5	55.7	0.2	+3 dBA

Notes:
[1] Distance to nearest residential use shown in Appendix I, does not consider existing noise barriers.
[2] Increase Threshold obtained from the FTA's allowable noise impact exposures detailed in Table 14.
Source: FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table 13 shows that the Proposed Project's permanent roadway noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the FTA's allowable increase thresholds detailed in Table 12. The Proposed Project would not result in a substantial permanent increase in ambient noise levels for the existing conditions. Therefore, potential operation-related traffic noise impacts associated with the Proposed Project's existing conditions plus project scenario would be less than significant.

Existing Plus Ambient Growth Year 2022 Conditions

The Proposed Project's potential offsite traffic noise impacts were calculated through a comparison of the existing plus ambient growth year 2022 scenario to the existing plus ambient growth year 2022 with project scenario. The results of this comparison are shown in Table 14 – *Existing Plus Ambient Growth Year 2022 Traffic Noise Contributions*.

Table 14 – Existing Plus Ambient Growth Year 2022 Traffic Noise Contributions

		dBA Ldn at Nearest Receptor[1]			
Roadway	Segment	Ambient Without Project	Ambient With Project	Project Contribution	Increase Threshold[2]
Michigan Avenue	North of Center Street	51.9	52.2	0.3	+5 dBA
Michigan Avenue	South of Center Street	49.7	50.4	0.8	+5 dBA
Mt Vernon Avenue	North of Main Street	62.6	62.8	0.2	+2 dBA
Mt Vernon Avenue	North of Project Driveway 1	62.1	62.3	0.3	+2 dBA
Mt Vernon Avenue	North of Center Street	57.5	58.0	0.5	+3 dBA
Mt Vernon Avenue	South of Center Street	56.5	56.8	0.3	+3 dBA
Main Street	West of Mt Vernon Avenue	55.4	55.6	0.2	+3 dBA
Center Street	West of Michigan Avenue	61.0	61.5	0.5	+2 dBA
Center Street	West of Mt Vernon Avenue	56.9	58.2	1.3	+3 dBA
Center Street	East of Project Driveway 4	55.6	55.8	0.2	+3 dBA

Notes:
[1] Distance to nearest residential use shown in Table H of Appendix I, does not consider existing noise barriers.
[2] Increase Threshold obtained from the FTA's allowable noise impact exposures detailed in Table 11.
Source: FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table 14 shows that the Proposed Project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the FTA's allowable increase thresholds detailed in Table 12. The Proposed Project would not result in a substantial permanent increase in ambient noise levels for the existing plus ambient growth year 2022 conditions. Therefore, potential operation-related traffic noise impacts associated with the Proposed Project's existing plus ambient growth year 2022 conditions scenario would be less than significant.

Existing Plus Ambient Growth Plus Cumulative Projects Year 2022 Conditions

The Proposed Project's potential offsite traffic noise impacts were calculated through a comparison of the existing plus ambient growth plus cumulative year 2022 scenario to the existing plus ambient growth plus cumulative year 2022 with project scenario. The results of this comparison are shown in Table 15 – *Existing Plus Ambient Growth Plus Cumulative Projects Traffic Noise Contributions*.

Table 15 – Existing Plus Ambient Growth Plus Cumulative Projects Traffic Noise Contributions

		dBA Ldn at Nearest Receptor[1]			
Roadway	Segment	Cumulative Without Project	Cumulative With Project	Project Contribution	Increase Threshold[2]
Michigan Avenue	North of Center Street	52.5	52.7	0.2	+5 dBA
Michigan Avenue	South of Center Street	49.9	50.6	0.7	+5 dBA
Mt Vernon Avenue	North of Main Street	63.1	63.2	0.1	+2 dBA
Mt Vernon Avenue	North of Project Driveway 1	62.6	62.9	0.3	+2 dBA
Mt Vernon Avenue	North of Center Street	58.1	58.5	0.4	+3 dBA
Mt Vernon Avenue	South of Center Street	57.0	57.2	0.2	+3 dBA
Main Street	West of Mt Vernon Avenue	56.8	56.9	0.1	+3 dBA
Center Street	West of Michigan Avenue	61.8	62.2	0.4	+2 dBA
Center Street	West of Mt Vernon Avenue	57.9	58.9	1.0	+3 dBA
Center Street	East of Project Driveway 4	56.3	56.4	0.1	+3 dBA

Notes:
[1] Distance to nearest residential use shown Table H of Appendix I, does not consider existing noise barriers.
[2] Increase Threshold obtained from the FTA's allowable noise impact exposures detailed in Table 11.
Source: FHWA Traffic Noise Prediction Model FHWA-RD-77-108.

Table 15 shows the Proposed Project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed the FTA's allowable increase thresholds detailed in Table 12. The Proposed Project would not result in a substantial permanent increase in ambient noise levels for the existing plus ambient growth plus cumulative year 2022 conditions. Therefore, potential operation-related traffic noise impacts associated with the Proposed Project's existing plus ambient growth plus cumulative year 2022 conditions scenario would be less than significant.

Roadway Vehicular Noise Impacts to Proposed Homes

The Proposed Project would consist of the development of a mixed-use development that would include 72 single-family homes. The County's General Plan requires that the interior noise levels in new residential dwellings shall not exceed 45 dB Ldn and that the exterior backyard area noise levels shall not exceed 65 dB Ldn. The primary source of traffic noise to the Project Site would be from Mt Vernon Avenue and Center Street. The proposed homes would also experience some background traffic noise effects from the Proposed Project's internal roadways and neighboring residential roadways. As the traffic on these local streets would consist of low traffic volumes at slower speeds and the traffic noise from these roads would not make a significant contribution to the noise environment, the noise levels from these local roads were not analyzed. The FHWA traffic noise prediction model parameters used in this analysis are discussed in detail in Appendix I, Section 6.2 and the FHWA model printouts are provided in Appendix I.

Roadway Noise Impacts to the Proposed Homes Backyards

The anticipated noise levels were calculated for the backyards that are adjacent to Center Street and Mt Vernon Avenue and the results are shown in Table 16 – *Proposed Homes Exterior Backyard Noise Levels from Nearby Roads*. It should be noted that Project Design Feature NOI 4 requires the construction of a 6-foot-high wall adjacent to Mt. Vernon Avenue as depicted on the Landscape Plan, which has been incorporated into the backyard noise calculations.

Table 16 – Proposed Homes Exterior Backyard Noise Levels from Nearby Roads

Building Number	Roadway	Exterior Backyard Noise Levels (dBA Ldn)		County Exterior Noise Standard	Exceed Standard?
		Without Sound Wall	With Sound Wall		
1	Center Street	65	58	65 dBA Ldn	No
2	Center Street	65	57	65 dBA Ldn	No
3	Center Street	65	58	65 dBA Ldn	No
4	Center Street	65	58	65 dBA Ldn	No
5	Center Street	65	57	65 dBA Ldn	No
15	Mt Vernon Avenue	**67**	58	65 dBA Ldn	No
36	Center Street	65	-58	65 dBA Ldn	No
62	Mt Vernon Avenue	**67**	58	65 dBA Ldn	No
65	Mt Vernon Avenue	**67**	58	65 dBA Ldn	No
68	Mt Vernon Avenue	**67**	58	65 dBA Ldn	No
71	Mt Vernon Avenue	**67**	58	65 dBA Ldn	No

Notes:
Exceedance of County's 65 dBA Ldn residential exterior noise standard shown in **bold**.
Source: FHWA RD-77-108 Model.

Table 16 shows that with the construction of the 6-foot-highh wall adjacent to Mt. Vernon Avenue as depicted on the Landscape Plan, that exterior backyard noise levels of all analyzed homes would be below the County's 65 dBA Ldn noise standard. Therefore, with implementation of Project Design Feature NOI 4, the exterior noise impacts to the proposed homes would be within the County's residential exterior noise standards.

Roadway Noise Impacts to the Proposed Homes Interior Areas

To assess the interior noise levels related to compliance with the dBA Ldn interior noise standard, the same proposed homes analyzed for the exterior private backyard analysis were also analyzed for their interior noise levels. The exterior noise level at the façade of the first and second floors are calculated through use of the same methodology detailed for the outdoor noise calculations and in Section 6.2 of Appendix I. The results are shown in Table 17 – *Proposed Homes Interior Noise Levels from Nearby Roads*. The County of Riverside guidelines establish a noise attenuation value for standard residential architecture of 20 dB of attenuation, which was used to calculate interior noise levels. Table 20 also show the interior noise levels calculated based on 30 dB of attenuation, which is the minimum attenuation rate calculated for the proposed Plan 1 homes in Section 6.3 of Appendix I.

Table 17 – Proposed Homes Interior Noise Levels from Nearby Roads

Building Number	Roadway	Floor	Exterior Noise Level at Building Façade (dBA Ldn)	Interior Noise Levels (dBA Ldn)	
				Standard Design[1]	Proposed Design[2]
1	Center Street	1	59	39	29
		2	65	45	35
2	Center Street	1	58	38	28
		2	65	45	35
3	Center Street	1	59	39	29
		2	65	45	35
4	Center Street	1	59	39	29
		2	65	45	35
5	Center Street	1	58	38	28
		2	65	45	35
15	Mt Vernon Avenue	1	59	39	29
		2	67	**47**	37
36	Center Street	1	59	39	29
		2	65	45	35
62	Mt Vernon Avenue	1	60	40	30
		2	67	**47**	37
65	Mt Vernon Avenue	1	60	40	30
		2	67	**47**	37
68	Mt Vernon Avenue	1	60	40	30
		2	67	**47**	37
71	Mt Vernon Avenue	1	60	40	30
		2	67	**47**	37

Notes:
[1] Standard Design is based on 20 dBA of noise reduction per County of Riverside General Plan.
[2] Proposed Design is based on.30 dBA of noise reduction (see Section 6.3 of Appendix I for calculations).
Exceedance of County 45 dBA Ldn noise standard shown in **bold**.
Source: FHWA RD-77-108 Model.

Table 17 shows that based on the County of Riverside guidelines for standard residential design of 20 dB of noise attenuation, Building Numbers 15, 62, 65, 68, and 71 adjacent to Mt Vernon Avenue, would exceed the County's 45 dBA Ldn interior noise standard. The County of Riverside guidelines also explains that noise analyses may utilize higher exterior to interior attenuation rates if the proposed homes are calculated through modeling, which is provided in Appendix I, Section 6.3, and can show that the proposed Plan 1 (proposed on Lot 1) would provide a minimum of 30 STC of noise reduction. It should be noted that the modeling of the proposed homes provided in Appendix I is limited to the second-floor rooms facing Mt Vernon Avenue, since those are the only rooms detailed in Table 16 that have the potential to exceed the interior noise standards. Table 17 shows with utilization of the calculated noise reduction rates for the proposed homes (Proposed Project) that the interior noise level would be within the County's 45 dBA Ldn interior noise standard. Therefore, potential operation-related impacts associated with interior roadway noise would be less than significant.

Therefore, based on the analysis which includes incorporation of PDF-NOI-3, PDF-NOI-4, potential impacts associated with the temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies would be less than significant.

b. Less Than Significant Impact. The Proposed Project would not expose persons to or generate excessive ground borne vibration or ground borne noise levels. The following section analyzes the potential vibration impacts associated with the construction and operations of the Proposed Project.

Construction-Related Vibration Impacts

The construction activities for the Proposed Project would include site preparation and grading of the Project Site, building construction and application of architectural coatings to the proposed structures, and paving of the proposed parking lots, onsite roads, and driveways. Vibration impacts from construction activities associated with the Proposed Project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptors to the Project Site are single-family homes located adjacent to the north and east sides of the Project Site. There are also single-family homes located as near as 80 feet to the west of the Project Site that are on the west side of Mt Vernon Avenue.

Title 14 of the California Administrative Code Section 15000 requires that all state and local agencies implement the California Environmental Quality Act (CEQA) Guidelines, which requires the analysis of exposure of persons to excessive ground borne vibration. However, no statute has been adopted by the state that quantifies the level at which excessive ground borne vibration occurs.

Caltrans issued the Transportation- and Construction-Induced Vibration Guidance Manual in 2004. The manual provides practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. However, this manual is also used as a reference point by many lead agencies and CEQA practitioners throughout California, as it provides numeric thresholds for vibration impacts. Thresholds are established for continuous (construction-related) and transient (transportation-related) sources of vibration, which found that the human response becomes distinctly perceptible at 0.25 inch per second PPV for transient sources and 0.04 inch per second PPV for continuous sources.

Since neither the County's General Plan nor the Municipal Code provide a quantifiable vibration threshold for construction equipment, Caltrans guidance is utilized, which defines the threshold of perception from transient sources at 0.25 inch per second PPV.

Table 18 – Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L_v)at 25 feet
Pile driver (impact)	Upper range typical	1.518 0.644	112 104
Pile driver (sonic)	Upper range typical	0.734 0.170	105 93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Federal Transit Administration, May 2006.

The primary source of vibration during construction would be from the operation of a bulldozer. From Table 18 – *Vibration Source Levels for Construction Equipment*, a large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite receptor, modeled as 10 feet away per guidance provided in the County of Riverside General Plan, would be 0.24 inch per second PPV. The vibration level at the nearest offsite receptor would be within the 0.25 inch per second PPV threshold. Therefore, potential impacts associated with construction-related vibration would be less than significant and no mitigation is required.

Operations-Related Vibration Impacts

The Proposed Project would consist of the development of 72 single-family homes. The on-going operation of the Proposed Project would not include any known vibration sources other than typical onsite passenger vehicle operations for residential development. Therefore, the potential impacts associated with operational vibration would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

PALEONTOLOGICAL RESOURCES

PALEONTOLOGICAL RESOURCES:				
28. Paleontological Resources a) Directly or indirectly destroy a unique paleontological resource, site, or unique geologic feature?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure OS-8 "Paleontological Sensitivity"

Findings of Fact:

a. Less Than Significant Impact. Paleontological resources are the fossilized biotic remains of ancient environments. They are valued for the information they yield about the history of the earth and its past ecological settings. Riverside County has been inventoried for geologic formations known to potentially contain paleontological resources. Lands with high, low, or undetermined potential for finding paleontological resources are mapped within the Riverside County General Plan Open Space Element, Figure OS-8 – "Paleontological Sensitivity." According to Figure OS-8, the Project Site is located within an area of high sensitivity. According to the General Plan policies OS 19.6 and OS 19.9, the Proposed Project would be required to provide a Paleontological Resource Impact Mitigation Program (PRIMP) with the County Geologist prior to any ground disturbing activities as a condition of approval. General Plan policies OS 19.6 would ensure that in the event a paleontological resource is found during project construction, the required PRIMP would provide specific direction for addressing a potential resource(s) and policy OS 19.9 would ensure the County Geologist would provide guidance to the Applicant and direct them to a facility within Riverside County for curation, including the Western Science Center in the City of Hemet. In addition to the County policies outlined above, there are a number of existing State and federal laws that regulate development impacts to paleontological resources, including those outlined under the California Public Resources Code Paleontological Resources Preservation Act. Therefore, with implementation of General Plan policies OS 19.6 and OS 19.9 and adherence to state regulations, potential impacts to paleontological resources would be less than significant and no mitigation would be required.

Mitigation: No mitigation is required.

Monitoring: A PRIMP shall be required as a condition of approval for the Proposed Project (COA-PALEO-1).

COA-PALEO-1 Paleontological Resource Impact Mitigation Program (PRIMP)

Prior to issuance of grading permits:

1. The applicant shall retain a qualified paleontologist approved by the County to create and implement a project-specific plan for monitoring site grading/earthmoving activities (project paleontologist).

2. The project paleontologist retained shall review the approved development plan and grading plan and conduct any pre-construction work necessary to render appropriate monitoring and mitigation requirements as appropriate. These requirements shall be documented by the project paleontologist in a Paleontological Resource Impact Mitigation Program (PRIMP). This PRIMP shall be submitted to the County Geologist for approval prior to issuance of a Grading Permit. Information to be contained in the PRIMP,

at a minimum and in addition to other industry standards and Society of Vertebrate Paleontology standards, are as follows:

1. A corresponding County Grading Permit (BGR) Number must be included in the title of the report. PRIMP reports submitted without a BGR number in the title will not be reviewed.

2. Description of the proposed site and planned grading operations.

3. Description of the level of monitoring required for all earth-moving activities in the project area.

4. Identification and qualifications of the qualified paleontological monitor to be employed for grading operations monitoring.

5. Identification of personnel with authority and responsibility to temporarily halt or divert grading equipment to allow for recovery of large specimens.

6. Direction for any fossil discoveries to be immediately reported to the property owner who in turn will immediately notify the County Geologist of the discovery.

7. Means and methods to be employed by the paleontological monitor to quickly salvage fossils as they are unearthed to avoid construction delays.

8. Sampling of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates.

9. Procedures and protocol for collecting and processing of samples and specimens.

10. Fossil identification and curation procedures to be employed.

11. Identification of the permanent repository to receive any recovered fossil material. *Pursuant the County “SABER Policy”, paleontological fossils found in the County should, by preference, be directed to the Western Science Center in the City of Hemet. A written agreement between the property owner/developer and the repository must be in place prior to site grading.

12. All pertinent exhibits, maps and references.

13. Procedures for reporting of findings.

14. Identification and acknowledgement of the developer for the content of the PRIMP as well as acceptance of financial responsibility for monitoring, reporting and curation fees. The property owner and/or applicant on whose land the paleontological fossils are discovered shall provide appropriate funding for monitoring, reporting, delivery and curating the fossils at the institution where the

fossils will be placed, and will provide confirmation to the County that such funding has been paid to the institution.

15. All reports shall be signed by the project paleontologist and all other professionals responsible for the report's content (eg. PG), as appropriate. One original signed copy of the report(s) shall be submitted to the County Geologist along with a copy of this condition and the grading plan for appropriate case processing and tracking. These documents should not be submitted to the project Planner, Plan Check staff, Land Use Counter or any other County office. In addition, the applicant shall submit proof of hiring (i.e. copy of executed contract, retainer agreement, etc.) a project paleontologist for the in-grading implementation of the PRIMP.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

POPULATION AND HOUSING

POPULATION AND HOUSING Would the project:				
29. Housing a) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	☐	☐	☒	☐
c) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐

Source(s): Project Application Materials, GIS database, Riverside County General Plan Housing Element

Findings of Fact:

a. No Impact. The Proposed Project involves the subdivision of the existing Project Site into 72 numbered lots for single family residential development, and 20 lettered lots for the purposes of private street dedication, open space and landscape area dedication, and right-of-way dedication to the County. The Project Site is a vacant lot, with no existing residential uses on site. The Proposed Project would not result in the displacement of existing people or housing. Therefore, no potential impacts associated with the displacement of a substantial number of existing housing or people, necessitating the construction of replacement housing elsewhere would occur and no mitigation is required.

b.-c. Less Than Significant Impact. The Proposed Project would result in a substantial unplanned population growth if estimated development would exceed local or regional population growth projections. Federal and State law requires the Southern California Association of Governments (SCAG) to develop an RTP/SCS every four years. The purpose of the RTP/SCS is to provide a "long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals" (SCAG 2019). The RTP/SCS is an important regional document to guide land use planning and transportation projects in the region. Demographic projections and changes in the region are therefore an essential component for the RTP/SCS. In conjunction with the RTP/SCS, SCAG develops the Regional Housing Needs Assessment (RHNA) every eight years. The RHNA allocation for the County of Riverside for the 2021-2029 timeframe is 40,768 units, comprised of very-low, low, moderate, and above moderate-income categories. SCAG's *Employment Density Study Summary Report* (2001) provides statistical information pertaining to average household size and square feet of building area per employee based on use type for the unincorporated Riverside County areas. These values are 3.3 persons and 1,148 sf, respectively[10,11].

The Project Site is located within the Highgrove community and subject to the Highgrove Area Plan (2017). Appendix E-2 of the County's 2015 General Plan details County level data for socioeconomic

[10] https://www.scag.ca.gov/Documents/RiversideCountyLP.pdf (Accessed September 23, 2020)
[11] http://www.mwcog.org/file.aspx?A=QTTITR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D Table 9A, Page 23, Accessed September 22, 2020

build-out assumptions and methodology applied to the General Plan's land uses[12]. Appendix E-2 provides statistical information pertaining to average household size for the Highgrove area and square feet of building area per employee based on use type for the unincorporated County of Riverside. These values are 3.21 persons and 500 sf, respectively[13].

For the purposes of this analysis, the projected population from the proposed residences is a range value based on the 3.21-3.3 persons. The Proposed Project would consist of the proposed subdivision and development of 72 single-family residential units. The total proposed residential units would account for a projected population of between 231 to 238. .

Table 19 - *Population and Housing Growth Projections for the County of Riverside (Unincorporated)* shows that the 2016-2040 RTP/SCS projects that the County of Riverside will experience a growth of 29.5 percent, 33.7 percent, and 61.9 percent in population, housing, and employment respectively, by 2040 based on 2020 levels[14].

Table 19 - Population and Housing Growth Projections for the County of Riverside (Unincorporated)

	2020	2035	2040	Change 2019-2040	Percent Increase	Proposed Project	2040 Plus Project
Population	385,600	471,200	499,200	113,600	29.46%	238	499,438
Household	121,800	153,200	162,900	41,100	33.74%	72	162,972
Source: SCAG. 2016. 2016-2040 RTP-SCS. Appendix: Demographics & Growth Forecast.							

The additional 231 to238 residents would represent less than 0.05 percent of the City's 2040 population. The Proposed Project would not construct or extend roads or other infrastructure that may indirectly induce population growth. The Project Site is a geographically constrained site, with two street frontages and development surrounding it on the remaining two interior property lines. Therefore, potential impacts associated with population growth would be less than significant and no mitigation would be required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[12] https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/appendices/Appendix%20E-2_April%202017.pdf?ver=2017-10-23-153612-743 Table E-2, p. 2, Accessed September 24, 2020
[13] https://planning.rctlma.org/Portals/14/genplan/general_Plan_2017/appendices/Appendix%20E-2_April%202017.pdf?ver=2017-10-23-153612-743 Table E-5, p. 3, Accessed September 24, 2020
[14] http://www.scag.ca.gov/Documents/2016_2040RTPSCS_FinalGrowthForecastbyJurisdiction.pdf, Accessed September 22, 2020

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

PUBLIC SERVICES

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

Source(s): Riverside County General Plan Safety Element, CalFire, Highgrove Area Plan, County of Riverside Code of Ordinances, CalFire, Figure 11 – *Conceptual Fire Access Plan*

Findings of Fact:

Less Than Significant Impact. The Riverside County Department of Building and Safety provides technical expertise in reviewing and enforcing the County Building and Fire Codes. These codes establish site-specific investigation requirements, construction standards, and inspection procedures to ensure that development does not pose a threat to the health, safety, and welfare of the public. They contain baseline minimum standards to guard against unsafe development. The General Plan Safety Element outlines policies related to Building Code and Performance Standards (S 5.1(c)), which require adherence to the Riverside County Fire Code Protection Ordinance (Ordinance No. 787). The Project Site would include two points of access, one primary access point off of Center Street and a secondary access point off of Teresa Street. Both would be gated; however, the gates would be accessible via Knox Box for fire department personnel. The secondary access pointwould act as an emergency exit for the planned community (Figure 11). Street widths proposed would allow for accessibility of fire department vehicles as turning radii. The Proposed Project would be subject to meeting all required applicable building and fire codes to ensure the proposed development does not pose a significant health and safety threat, inclusive of potential fire hazards. The Proposed Project would result in the addition of 231 to 238 residents, which would represent less than 0.05 percent of the City's 2040 population. The Proposed Project would be subject to the County's Development Impact Fee (DIF) outlined in Chapter 4.60 of the Code of Ordinances. The DIF requires all new development bear its fair share cost of providing the facilities (including fire facilities) reasonably needed to serve that development. The project additions to the County would be nominal and would not result in the need for additional fire facilities to be constructed. However, development of the Proposed Project would incrementally increase demand for fire protection services but would be served by the existing fire stations in Riverside County. While the Project Site is not located within a fire hazard severity zone[15], the nearest fire station to the Project Site is Fire Station No. 19, located at 469 Center Street, approximately 0.4 miles from the site. The Proposed Project's compliance with the County's Fire Code, Ordinance 787 of the Riverside County Code of Ordinances, would ensure the project meets standards aimed at alleviating and abating urban fire risk. The Proposed Project would be subject to the building plan check process, which would ensure in-depth review of the Proposed Project in order to meet required building and fire codes, as well as trigger the requirement to pay the applicable DIF. Therefore, potential impacts associated with fire services would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[15] https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414 Accessed September 25, 2020

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
31. Sheriff Services	☐	☐	☒	☐

Source(s): Riverside County General Plan, County of Riverside Code of Ordinances, Riverside County Sheriff's Department

Findings of Fact:

Less Than Significant Impact. The County obtains law enforcement and crime prevention services from the Riverside County Sheriff's Department (RCSD). The Proposed Project would be served by the RCSD, which would incrementally increase demand for sheriff protection services; however, as noted in Section V.XV(b.-c.), the Proposed Project's increase in population would be nominal. The nearest sheriff stations to the Project Site are the Jurupa Valley and Moreno Valley Stations, located approximately 7.4 miles from the site. The Proposed Project would be subject to the County's Development Impact Fee (DIF) outlined in Chapter 4.60 of the Code of Ordinances. The DIF requires all new development bear its fair share cost of providing the facilities (including sheriff facilities) reasonably needed to serve that development. Therefore, potential impacts associated with sheriff services would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
32. Schools	☐	☐	☒	☐

Source(s): Riverside County Office of Education, County of Riverside Code of Ordinances

Findings of Fact:

Less Than Significant Impact. The Proposed Project would be served by the Riverside Unified School District[16]. The Proposed Project would incrementally increase demand for school services; however, as noted in Section V.XV(b.-c.), the Proposed Project's increase in population and employees would be nominal. The potential population increase of 231 to 238 residents from the proposed 72 single-family dwelling units would represent less than 0.05 percent of the City's projected 2040 population. The Proposed Project would be required to pay applicable school impact fees prior to issuance of building permits pursuant to Chapter 4.60 of the Code of Ordinances. Therefore, potential impacts associated with schools would be less than significant and no mitigation would be required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[16] https://www.rcoe.us/school-district-locator/ Accessed September 25, 2020

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
33. Libraries	☐	☐	☒	☐

Source(s): Riverside County General Plan, County of Riverside Code of Ordinances, Riverside Local Area Formation Commission (LAFCO)

Findings of Fact:

Less Than Significant Impact. The Proposed Project would incrementally increase the demand for library facilities within the County of Riverside as it would result in an increase of 231 to 238 residents from the proposed 72 single-family dwelling units. The Project Site is located within the City of Riverside's Sphere of Influence[17] (SOI) area and as a result is subject to the Highgrove Area Plan policy HAP 11.3, which requires standards to provide new development "pay its own way" on community parks, recreation programs, and libraries. The Proposed Project would be subject to the DIF requirements outlined in Ordinance 659 of the County Code of Ordinances to ensure a fair share of costs associated with the Proposed Project are paid for public facilities, including libraries. Therefore, potential impacts associated with libraries would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[17] https://lafco.org/wp-content/uploads/documents/city-boundary-and-soi-maps/Riverside__12-10-19.pdf Accessed September 25, 2020

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
34. Health Services	☐	☐	☒	☐

Source(s): Riverside County General Plan, Appendix A

Findings of Fact:

Less Than Significant Impact. The Proposed project would involve the construction of 72 single family homes. Appendix A and A-1 detailed the Proposed Project's potential air quality impacts and concluded there would be less than significant impacts and that a Health Risk Assessment was not required for the Proposed Project. Appendix A states that operation of the project would not result in a quantitative increase in premature deaths, asthma in children, days children will miss school, asthma-related emergency room visits, or an increase in acute bronchitis among children due to the criteria pollutants created by the Proposed Project. The Proposed Project would incrementally increase the demand for health services within the County of Riverside as it would result in an increase of 231 to 238 residents from the proposed 72 single-family condominium units. However, this increase is nominal and would not require additional health services be constructed or expanded as a result of the Proposed Project. Therefore, potential impacts associated with health services would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

RECREATION

RECREATION Would the project:				
35. Parks and Recreation a) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
b) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
c) Be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☒	☐

Source(s): GIS database, Ord. No. 460, Section 16.20.020 (Regulating the Division of Land – Park and Recreation Fees and Dedications), Ord. No. 659 (Establishing Development Impact Fees), Parks & Open Space Department Review, General Plan Multipurpose Open Space Element

Findings of Fact:

a.-b. Less Than Significant Impact. The Proposed Project would not require the expansion of existing recreational facilities. The Proposed Project involves a General Plan Amendment and Zone Change. However, the resulting land use and zoning designations would not result in substantial increases in the population which would place significant demand on existing recreation facilities. As stated in Section V.XV(b.-c.), the Proposed Project would result in the addition of 231 to 238 residents, which would represent less than 0.05 percent of the City's 2040 population.

The Proposed Project would include the construction of a single-family residential condominium development, consisting of 72 dwelling units and nine common area lots, one of which is a large open space area which includes a shade structure and tot lot. Development of the recreation open space would occur concurrently with the proposed development and would be subject to the requirements of the County of Riverside Code of Ordinances, including, but not limited to grading, soil and erosion control, and water efficient landscaping. The Proposed Project would also be subject to the Land Dedication and Fee Requirements of Ordinance 460 of the County Code of Ordinances, which requires developers of tentative maps to either dedicate or pay in lieu fees, or a combination thereof, for park and recreational purposes. Existing park and recreational spaces within the County would not face substantial physical deterioration because the Proposed Project would provide open space for future residents and the appropriate impact fees would be paid during the building plan check process. Therefore, potential impacts associated with the construction or expansion of recreational facilities and increased use of existing local and regional parks would be less than significant, and no mitigation is required.

c. Less Than Significant Impact. The Project Site is not within a Community Service Area. The Proposed Project would be subject to the in-lieu fees required by the County's Code of Ordinances, which would off-set any increases in demand for park and recreation facilities proportionally to the Proposed Project. Therefore, potential impacts associated with the Project Site's location within a CSA or within a recreation and park district would be less than significant and no mitigation is required.
Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
36. Recreational Trails a) Include the construction or expansion of a trail system?	☐	☐	☐	☒

Source(s): Riverside County General Plan Figure C-6 Trails and Bikeway System, Highgrove Area Plan Figure 7

Findings of Fact:

a. No Impact. The Proposed Project would not include the construction of expansion of a trail system. Figure 7 – "Highgrove Area Plan Trails and Bikeway System" shows the nearest existing trails as urban/suburban trails located to the west and south of the Project Site. The Proposed Project would result in nominal increases to the residents of the County and would not include the modification to the existing trail system, nor construct any additional trail systems. Therefore, no potential impacts associated with trail systems would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TRANSPORTATION

TRANSPORTATION Would the project:				
37. Transportation a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☒	☐
d) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☒	☐
e) Cause an effect upon circulation during the project's construction?	☐	☐	☒	☐
f) Result in inadequate emergency access or access to nearby uses?	☐	☐	☒	☐

Source(s): *TTM 37743-Highgrove Traffic Impact Analysis*, Trames Solutions Inc., October 30, 2020 (Appendix J), *Tentative Tract Map 37743 VMT Evaluation,* Trames Solutions Inc., April 8, 2021 (Appendix K), *Tentative Tract Map 37743 VMT Evaluation*, Trames Solutions Inc., December 12, 2023 (Appendix K.1), Riverside County General Plan, The Highgrove Area Plan, Figure 6 – Circulation, Project Application Materials

Findings of Fact:

General: Project-specific traffic impact analyses presented as a part of Findings of Fact for the Transportation Impact Analysis are based on and summarized from Appendix J – *TTM 37743-Highgrove Traffic Impact Analysis* (Trames Solutions Inc., 2020),Appendix K – *Tentative Tract Map 37743 VMT Evaluation* (Trames Solutions Inc., 2021), and Appendix K.1 - *Tentative Tract Map 37743 VMT Evaluation* (Trames Solutions Inc., 2023).

a. Less Than Significant Impact. In accordance with Senate Bill (SB) 743, the California Natural Resources Agency (CNRA) adopted changes to the CEQA Guidelines in December 2018, which identify that starting on July 1, 2020, vehicle miles traveled (VMT) is the appropriate metric to evaluate a project's transportation impacts. As of December 2018, when the revised CEQA Guidelines were adopted, automobile delay, as measured by "level of service" (LOS) and other similar metrics, no longer constitutes a significant environmental effect under CEQA. Lead agencies in California are required to use VMT to evaluate project-related transportation impacts. Nonetheless, a summary discussion of level of service (LOS) performance standards for intersections in the Project's study area is presented below.

General Plan Consistency

The Riverside County General Plan has established minimum target levels of service for the review of development proposals in the unincorporated areas of Riverside County with respect to transportation impacts on roadways designated in the Riverside County Circulation Plan, Figure C-1, which are currently County maintained, or are intended to be accepted into the County maintained roadway system. LOS "D" apply to all development proposals located within the boundaries of certain Area Plans including the Highgrove Area Plan. A project-specific traffic impact analysis was conducted for the

Proposed Project and concludes the Proposed Project meets the requirements for LOS as established by the County's General Plan.

The daily and peak hour trip generations for the Proposed Project are shown on Table 20. The project is estimated to generate a total of approximately 679 new trip-ends per day with 50 new vehicle trips per hour during the AM peak hour and 60 new vehicle trips per hour during the PM peak hour.

Table 20 – Project Trip Generation Summary

Land Use	ITE Code	Quantity[1]	Peak Hour Trip Results						Daily
			AM			PM			
			IN	OUT	Total	IN	OUT	Total	
Single Family Detached	210	72 DU	13	37	50	42	24	66	679

[1] DU = Dwelling Units

Peak hour intersection analysis has been performed at the study area intersections for each of the project scenarios and for projected future conditions. Improvements are recommended to satisfy the level of service requirements of the County of Riverside and if the following impacts are identified:

1) When existing traffic conditions (Analysis **Existing (2020) Plus Project Traffic**) exceed the General Plan target LOS.

2) When project traffic, when added to existing traffic (Analysis **Existing + Ambient + Project (EAP 2022)**), would deteriorate the LOS to below the target LOS, and impacts cannot be mitigated through project conditions of approval.

3) When cumulative traffic (Analysis **Existing + Ambient + Project + Cumulative (EAPC 2022)**) exceeds the target LOS, and impacts cannot be mitigated through existing infrastructure funding mechanisms.

The E+P, E+A+P, and E+A+P+C condition operations analysis worksheets are provided in Appendix J. The study area intersections are projected to operate at an acceptable level of service (LOS "D" or better) during the peak hours with the recommended geometry and traffic controls. It is important to note that some of these improvements may not be feasible due to right-of-way constraints.

- Mt. Vernon Ave. / Main St. (#3)

  - Northbound: Modify striping to provide a 2nd through lane.

As a result of the analysis, the recommended improvements which would reduce impacts associated with level of service, would be conditioned as a part of the Proposed Project.

Offsite Recommendations

Roadway Improvements for Existing + Ambient + Project + Cumulative Conditions

The northbound striping at the intersection of Mt. Vernon Ave. / Main St. would be restriped to provide a 2nd through lane (see Figure 6-A of Appendix J). This improvement would allow this location to operate at acceptable levels of service during the peak hours. All roadway improvements shall be undertaken in compliance with road improvement standards and specifications as outlined in Ordinance No. 461.

Funding Mechanisms

In order to address the cumulate traffic impacts from the Proposed Project and other developments in the area, the County has the following funding mechanisms available.

Transportation Uniform Mitigation Fee (TUMF)

The Transportation Uniform Mitigation Fee (TUMF) Program was established to assist in funding the Regional System of Highways and Arterials throughout Riverside County. TUMF allows developers to contribute toward sustaining the regional transportation system on a “fair share” basis. Managed by the Western Riverside Council of Governments (WRCOG), the program is not designed to be the only source of revenue but would complement funds generated by Measure A, local transportation fee programs, etc. In compliance with Ordinance No. 824, the Applicant shall pay all applicable TUMF fees related to offsite improvements needed to implement the Proposed Project.

Development Impact Fees (DIF)

The development impact fee (DIF) is intended to construct or acquire needed facilities, preserve open space, and habitat needed to serve new developments. The transportation facilities include roads, bridges, and traffic signals. In compliance with Ordinance No. 659, the Applicant shall pay all applicable DIF fees related to offsite improvements needed to implement the Proposed Project.

Onsite Recommendations

Circulation

Construction of on-site improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes.

Roadway Improvements

- Adjacent to the Project site, construct Mt. Vernon Avenue to its ultimate half-section width as a secondary roadway from Project’s northerly boundary to Center Street.
- Provide stop sign control at the project driveways
- On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.
- Verify that minimum sight distance is provided at the project driveways.

The study area intersections are projected to operate at an acceptable level of service (LOS “D” or better) during the peak hours with the recommended geometry and traffic controls.

RCTC Congestion Management Program (CMP) Consistency

The goal of the State’s CMP is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related impacts, and improve air quality. A number of counties within California have developed a CMP with varying methods and strategies to meet the intent of the CMP legislation. The Riverside County Transportation Commission (RCTC) was designated the CMA in 1990 by the Riverside County Board of Supervisors and a majority of cities representing a majority of the population in the incorporated area. RCTC determined that the traffic LOS method that incorporated a "delay" analysis was the most applicable for CMP purposes and has adopted a minimum LOS standard of “E” for roadways within Riverside County.

As previously discussed, the study area intersections are projected to operate at an acceptable level of service (LOS “D” or better) during the peak hours with the recommended geometry and traffic controls. Therefore, the Proposed Project is in compliance with LOS performance standards set forth in the CMP.

RTA

The Project is designed to accommodate pedestrians via sidewalk improvements along its frontage with Center Street and Mr. Vernon Avenue. All Project driveway exits will be reviewed by the County of Riverside at the time improvement plans are submitted as part of the building permit stage of Project implementation in order to ensure that sight distance meets minimum County safety standards.

The County of Riverside is served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region. There are no existing bus routes along the Project site's frontage. The nearest existing transit route to the Project site is RTA Route 14 located less than a quarter mile to the west of the Project site along Center Street. Because there are no existing or planned public transit facilities along the Project site frontage, and existing bus stops are within walking distance to the Project site, the Project has no potential to conflict with a transit service program.

Therefore, impacts associated with the conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities would be less than significant, and no mitigation is required.

b. Less Than Significant Impact. Senate Bill (SB) 743 changes how transportation impacts are measured under CEQA from using vehicle level of service (LOS) to using vehicle miles traveled (VMT). This change is intended to capture the impacts of driving on the environment compared to the impact on drivers. Concerns about the impact of projects on drivers through the use of LOS or other delay metrics may still occur as part of land use entitlement reviews but LOS will no longer be allowed as a basis for transportation impacts under CEQA. To implement SB 743, lead agencies will need to determine appropriate VMT methodologies, thresholds, and feasible mitigation measures.

The County of Riverside has recently revised their Transportation Analysis Preparation Guide (approved December 2020) to include a vehicle miles traveled (VMT) analysis methodology. The VMT analysis is based on the passage of SB 743 which replaced automobile delay and LOS as the basis of determining CEQA impacts. Land use projects that have the potential to increase the average VMT per service population (compared to the County's baseline threshold) would be evaluated for potential impacts.

The intent of the VMT analysis is to reduce Greenhouse Gas (GHG) emissions while promoting the development of infill land use project and multimodal transportation networks, and to promote a diversity of Land uses within developments. The County has developed a six-step process for evaluating land use projects, which is detailed in Appendix K. The County identifies the below seven screening criteria that would allow a project to have a presumed less than significant impact and eliminate the need for further analysis.

1. Small Projects
2. Projects Near High Quality Transit
3. Local-Serving Retail
4. Affordable Housing
5. Local Essential Service
6. Map-Based Screening
7. Redevelopment Projects

Criteria 1 – Small Projects presumes that low trip generating projects and local serving retail projects would cause a less-than-significant impact if single family residential projects have less than 110 units. The Proposed Project involves 72 units, which is below the required threshold. Due to the size of the proposed residential development, the County's guidelines indicate the project would have a less than significant impact associated with vehicle miles traveled and no further analysis is required. Furthermore, the Proposed Project also qualifies for exemption under Criterion 1, as the Proposed Project is estimated to generate less than 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) emissions, as discussed in Section 20, Greenhouse Gas Emissions. Therefore, potential impacts associated with vehicle miles traveled would be less than significant and no mitigation is required.

c. Less Than Significant Impact. The circulation and design of the Proposed Project would provide 32-feet wide private streets, with access driveways at the north and south portions of the Project Site.

The onsite circulation would not incorporate any hazards. Circulation onsite would adequately serve large vehicles without resulting in dangerous maneuvering due to geometric design features (Figure 4 –*Overall Site Plan* and 12 – *Conceptual Fire Access Plan*). Therefore, potential impacts associated with an increase hazard due to geometric design features or incompatible uses would be less than significant and no mitigation would be required.

d. Less Than Significant Impact. The Proposed Project would result in altered existing roadways as well as the creation of new private roads. As detailed in Section V.XVIII(a), modifications would be made to the northbound striping at the intersection of Mt Vernon Avenue and Main Street to provide a second through lane, allowing for acceptable levels of service during peak hours. Mt Vernon Avenue would be constructed to its ultimate half-section width as a secondary roadway from the Project Site's northerly boundary to Center Street. These proposed on and offsite modifications would allow for adequate levels of service and include additional mechanisms, including stop signs at project driveways and onsite striping, that would improve safety and circulation. The Proposed Project would result in the construction of eight new private roadways, which would be gated at both entrances. The Proposed Project's alterations and new roadways are analyzed throughout this document as they relate to other environmental resources. Therefore, impacts associated with altered or new roadways would be less than significant and no mitigation would be required.

e – f. Less Than Significant Impact. The Proposed Project would generate temporary impacts to circulation during project construction, which includes improvements to Mt Vernon Avenue, Center Street, and Main Street. During construction, standard traffic control devices including warning signs, warning lights, and flaggers would be utilized as applicable to minimize obstructions and ensure the safe passage of emergency vehicles, as necessary. In order to work within the County's right-of-way to construct offsite and/or onsite improvements, an encroachment permit would be required. Improvement plans, which would be reviewed by the County's Transportation Department, would ensure proposed changes to roadways would be compliant with County requirements. Implementation of these traffic control measures would include guidance and navigational tools throughout the project area in order to maintain traffic flow and safety during construction. During construction and operation, the Proposed Project would not result in inadequate emergency access to the site or any nearby uses. Improvements occurring within the County right-of-way would occur to County requirements and would only occur after review through the transportation department. Figure 11 – *Conceptual Fire Access Plan* details that adequate emergency access will be provided for the Proposed Project and would include Knox Boxes for the proposed gates at each access way. Pursuant to the County's requirements, project design would be required to comply with the California Fire Code, Riverside County Ordinance 787, and Riverside County Fire Department Standards, which occurs through review by the County Fire Department. Therefore, impacts associated with construction circulation and emergency access would be less than significant and no mitigation is required.

Mitigation: No mitigation is required. The following condition of approval is recommended:

COA-TRA-1: The Applicant/Developer shall work with the County Public Works Department to study the feasibility of implementing the recommendation for northbound striping improvements at the intersection of Mt. Vernon Ave. / Main St. to provide a 2nd through lane, as shown in Figure 6-A of Appendix J (Traffic Impact Analysis).

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
38. Bike Trails a) Include the construction or expansion of a bike system or bike lanes?	☐	☐	☐	☒

Source(s): Riverside County General Plan, Highgrove Area Plan Figure 7 – "Highgrove Area Plan Trails and Bikeway System"

Findings of Fact:

a. No Impact. The Proposed Project would not include the construction or expansion of a bike system or trail system. According to the Highgrove Area Plan, Figure 7 – "Highgrove Area Plan Trails and Bikeway System," the nearest bike routes are the existing urban/suburban regional trails located directly west and south of the Project Site. These routes are located approximately a half-mile and a quarter mile from the Project Site, respectively. Therefore, no impacts resulting from the construction of expansion of a bike system or lanes would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TRIBAL CULTURAL RESOURCES

TRIBAL CULTURAL RESOURCES Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, or 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:				
39. Tribal Cultural Resources 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)?	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? (In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)	☐	☐	☒	☐

Source(s): County Archaeologist, AB52 Tribal Consultation

Findings of Fact:

a. and b. Less Than Significant Impact. Changes in the California Environmental Quality Act, effective July 2015, require that the County address a new category of cultural resources – tribal cultural resources – not previously included within the law's purview. Tribal Cultural Resources are those resources with inherent tribal values that are difficult to identify through the same means as archaeological resources. These resources can be identified and understood through direct consultation with the tribes who attach tribal value to the resource. Tribal cultural resources may include Native American archaeological sites, but they may also include other types of resources such as cultural landscapes or sacred places. The appropriate treatment of tribal cultural resources is determined through consultation with tribes compliance with Assembly Bill 52 (AB52), notices regarding this project were mailed to all requesting tribes on February 24, 2020. No response was received from Colorado River Indian Tribes (CRIT), Gabrieleno Kizh Nation, or the San Gabriel Band.

Temecula Band of Luiseño Indians (Pechanga), responded in a letter dated March 06, 2020. The cultural report and conditions of approval were provided to the tribe. During a meeting with the tribe on December 18, 2020, no tribal cultural resources were identified. Consultation was also requested by the Soboba Band of Luiseño Indians. The project was discussed on February 26, 2020, September 23, 2020, and October 14, 2020. Soboba was provided with the cultural report and the conditions of approval. Soboba agreed with the conditions of approval and consultation was concluded on January 20, 2021.

Neither of the tribes identified any tribal cultural resources however they did express concern that the project area is sensitive for cultural resources and there is the possibility that previously unidentified resources might be found during ground disturbing activities. As such, the project has been conditioned for a Tribal Monitor from the consulting Tribe(s) to be present during grading activities so that any Tribal Cultural Resources found during project construction activities will be handled in a culturally appropriate manner. (COA-TCR-1)

COA-TCR-1 Native American Monitoring

Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for a Native American Monitor.

In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all construction personnel. In addition, the Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.

The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition.
This agreement shall not modify any condition of approval or mitigation measure.

The project will also be required to adhere to State Health and Safety Code Section 7050.5 in the event that human remains are encountered and by ensuring that no further disturbance occur until the County Coroner has made the necessary findings as to origin of the remains. Furthermore, pursuant to Public Resources Code Section 5097.98 (b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. (See MM CUL-2 in the Cultural Resources section V.V of this document).

CEQA requires the Lead Agency to address any unanticipated cultural resources discoveries during Project construction. A condition of approval that dictates the procedures to be followed should any unanticipated cultural resources be identified during ground disturbing activities has been placed on the Proposed Project. Implementation would ensure that any potential impacts are reduced to less-than significant levels. Therefore, with the inclusion of these Conditions of Approval, impacts to any previously unidentified Tribal Cultural Resources would be less than significant and no mitigation measures would be required.

Mitigation Measures: No mitigation is required.

Monitoring: Native American Monitoring will be conducted by a representative from the consulting tribe(s) as a part of conditions of approval, as detailed in the project-specific Mitigation Monitoring and Reporting Plan (Appendix M).

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

UTILITIES AND SERVICE SYSTEMS

UTILITIES AND SERVICE SYSTEMS Would the project:				
40. Water a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage systems, whereby the construction or relocation would cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

Source(s): Project Application Materials, *Will Serve Letters* (Appendix L), Riverside Highland Water Company and City of Riverside, April 2019, and October 2020, 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan

Findings of Fact:

a. Less Than Significant Impact. As discussed in Section V.X., the Proposed Project would be served by the Riverside Highland Water Company (RHWC) and City of Riverside for water and sewer services, respectively. Existing water infrastructure is located within Mt Vernon Avenue and Center Street. The Proposed Project would connect to the existing sewer line within Center Street. Runoff would be collected via onsite curb and gutters directed into vegetated swales that drain into the bioretention system which would filter and treat water collected and allow for natural infiltration. Only overflow from the bioretention system would be collected in onsite storm drains that would connect to the existing municipally maintained 42-inch storm drain infrastructure located within Center Street. Therefore, potential impacts associated with the relocation or construction of new or expanded water, wastewater, or storm water systems would be less than significant and no mitigation is required.

b. Less Than Significant Impact. Riverside County incorporates four major watershed areas in which river systems, numerous lakes and reservoirs, and natural drainage areas are located. Management of the amount of water available (local and imported) and its quality, is an important response to the gap between supply and demand in Riverside County. The economy of the developed portions of western Riverside County is sustained primarily by water imported from Northern California via the State Water Project and the allocations from the Colorado River. Local groundwater production provides a secondary water supply.

The City of Riverside currently provides water to the western Highgrove urban core and to residential customers as far east as Walker Avenue. The remaining current residential uses south of Spring Street and east of Michigan Avenue, which would include the Project Site, have potable water service through the Riverside Highland Water Company, a mutual water company headquartered in Colton. Riverside Highland has historically served the area for irrigation water to the groves and has expanded its domestic service system to cover most of the tract home development that has occurred in Highgrove since the 1970s. The Riverside Highland Water Company is a part of those agencies listed under the 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (UWMP), which provides a detailed analysis of anticipated supply and demands for the area under years 2020 to 2045.

RHWC extracts potable water from the San Bernardino Basin (SBB, including the Bunker Hill Basin and Lytle Basin) and the Riverside Arlington Basin (including the Riverside North Basin and Riverside South Basin). However, the Proposed Project does not include direct extraction of groundwater from basins

and would be served by the Riverside Highland Water Company through existing entitlements. RHWC currently has 13 wells capable of producing water. Two of these wells, RN-21 and RN-22 are dedicated to providing irrigation water due to high nitrate concentrations. Three wells, FW-2, FW-5, and FW-18 are being used for the groundwater reduction program in the Bunker Hill Basin. These three wells can be converted to domestic water production if required. RHWC recently constructed a new well in the Riverside North Basin, RN-26, which went online in 2021. RHWC actively monitors water consumption in its service area, in part to prepare required monthly reports for the State Water Resources Control Board. RHWC has been providing water to nearly all of the lands in its service area for over a century, with a large portion of the water service utilized for irrigation of citrus groves. Trends in development result in a large number of citrus groves taken out of production and the trees removed for land development projects for housing, commercial and industrial uses. The water entitlements used for irrigation are being converted to domestic supply, not requiring additional water rights to meet demands.

The UWMP details that RHWC calculated 2020 gallons per capita per day (GPCD) of 191.7[18]. The total proposed residential units would account for a projected population of between 231 to 238, as detailed in Section V.XV(b.-c.). For the purposes of this calculation, the higher figure of 238 residents is used, yielding approximately 45,625 gallons (0.14-acre-feet (AF)) per day. Under current conditions of the Project Site (i.e., existing General Plan Designation of MDR), the most intensive demand would be between 26,646 (5.0 du/ac) gallons (0.08 AF) per day. This would result in the Proposed Project increasing water consumption by approximately (0.06 AF) per day. According to the UWMP, the RHWC's five-year drought risk assessment shows RHWC would have a surplus of over 700 AF each year, beginning 2021 through 2025. The RHWC does not anticipate any routine or single large water sale to other agencies in the future and has provided a will serve letter and accompanying stock certificate under Appendix L for the Project Site. The 0.06 AF demand increase in water supplies from the Proposed Project is negligible. Therefore, potential impacts associated with sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

[18] 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan, (June 2021) https://www.sbvmwd.com/home/showpublisheddocument/9246/637614377683630000 Accessed September 15, 2021

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
41. Sewer a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?	☐	☐	☒	☐
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source(s): Department of Environmental Health Review, Project Application Materials, *Project Specific Water Quality Management Plan,* Woodard Group, January 2024 (Appendix H), *Will Serve Letters* (Appendix L)

Findings of Fact:

a. - b. Less Than Significant Impact. For many years, the Highgrove rural uses at low density have been satisfactorily served by septic tanks. As the area transitions to a predominantly suburban residential community, much of the existing community would rather connect to a public sewer system than replace or rehabilitate aging septic systems. The City of Riverside's official policy is to provide sewer service only to customers within its corporate boundaries. Riverside Highland's Board of Directors has approved sewer service extension as an addition to the range of services provided by the company. The Proposed Project would be served by the City of Riverside for sewer, as indicated in the Appendix L. The Proposed Project would connect to the existing sewer line within Center Street. Runoff would be collected via onsite curb and gutters directed into vegetated swales that drain into the bioretention system which would filter and treat water collected and allow for natural infiltration. Only overflow from the bioretention system would be collected in onsite storm drains that would connect to the existing municipally maintained 42-inch storm drain infrastructure located within Center Street. According to the Water Quality Management Plan (Attachment H), the volume and concentration of storm water runoff for the post-development condition is not significantly different from existing site condition for a two year return frequency storm, with flow calculated to be 12.4% (cubic feet per second) less and volume (cubic feet) to be 35.3% less than existing conditions. Therefore, potential impacts associated with the relocation or construction of new or expanded sewer, wastewater, or septic systems would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
42. Solid Waste a) Generate solid waste in excess of State or Local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
b) Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?	☐	☐	☒	☐

Source(s): Riverside County General Plan, Riverside County Integrated Waste Management Plan, CalRecycle Solid Waste Information System, Riverside County Annual Report Summary (2018)

Findings of Fact:

a. – b. Less Than Significant Impact. The Proposed Project would involve the construction of 72 residential units on the Project Site with an estimated 231 to 238 residents. Using CalRecycle's 2014 generation rate of 5.2 pounds per resident per day, the Proposed Project would generate approximately 1,201 to 1,238 pounds per day of solid waste. The maximum 1,238 pounds per day of solid waste generated by the Proposed Project is nominal compared to Badlands Landfill's maximum permitted throughput of 4,500 tons per day. Therefore, the Proposed Project would not be served by a landfill with insufficient permitted capacity to accommodate solid waste disposal needs.

The Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). AB 939 redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the state. AB 939 was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources.

AB 939 requires each of the cities and unincorporated portions of counties throughout the state to divert a minimum of 25% by 1995 and 50% of the solid waste landfilled by the year 2000. To attain these goals for reductions in disposal, AB 939 established a planning hierarchy utilizing new integrated solid waste management practices.

The CIWMP, in its entirety, is comprised of the Countywide Summary Plan; the Countywide Siting Element; and the Source Reduction and Recycling Elements (SRRE's), Household Hazardous Waste Elements (HHWE's), and Nondisposal Facility Elements (NDFE's) for Unincorporated Riverside County and each of the cities in Riverside County. According to the most recent Riverside County Annual Report Summary (2018), the County has over 15 years of current and future disposal available. Therefore, potential impacts associated with solid waste disposal would be less than significant and no mitigation would be required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
43. Utilities Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities, whereby the construction or relocation would cause significant environmental effects?				
a) Electricity?	☐	☐	☒	☐
b) Natural gas?	☐	☐	☒	☐
c) Communications systems?	☐	☐	☒	☐
d) Street lighting?	☐	☐	☒	☐
e) Maintenance of public facilities, including roads?	☐	☐	☒	☐
f) Other governmental services?	☐	☐	☒	☐

Source(s): Project Application Materials, Utility Companies

Findings of Fact:

a. – f. Less Than Significant Impact. The project is conditioned to install requisite electrical power, natural gas, telephone, communication, street lighting, and cable television utilities underground in accordance with County Ordinance 460 and 461, or as approved by the County Transportation Department.

The project proponent must coordinate with each utility company to ensure relocation of utilities occurs according to standard construction and operation procedures administered by the California Public Utilities Commission. Written verification of initiation of design and/or application of relocation from each affected utility must be provided to the County Transportation Department. Each of the utility systems is available at the Project Site frontage, and excavation would be required to extend these lines and interconnect to the Project Site. Since the footprint of proposed utility relocations is encompassed by the Project Site, impacts associated with such relocations have been addressed throughout this Initial Study and mitigated as applicable. Any proposed street lighting that is a part of the Proposed Project would be subject to Ordinance 655 which regulates light pollution within the County. The Proposed Project would not involve the construction of new public roads, nor would it involve the expansion of existing circulation infrastructure. The proposed residential portion of the project would include five private residential roadways that would retain gated access. Impacts associated with the construction of the private roads are detailed in various sections throughout this checklist, including Section V.III, V.VII, V.VIII, V.X, and V.XVIII. Potential impacts associated with the Proposed Project and government services are discussed in Section V.XVI, which include discussion and analysis of fire, police, schools, health, and library facilities. For details regarding these impacts, please refer to the applicable section.

Therefore, potential impacts associated with utilities, including electricity, natural gas, communication systems, street lighting, maintenance of public facilities, and other governmental services, would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

WILDFIRE

WILDFIRE If located in or near a State Responsibility Area ("SRA"), lands classified as very high fire hazard severity zone, or other hazardous fire areas that may be designated by the Fire Chief, would the project:				
44. Wildfire Impacts a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐
e) Expose people or structures either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

Source(s): Riverside County General Plan Figure S-11 "Wildfire Susceptibility", GIS database, Project Application Materials, CalFire, General Plan Safety Element, Emergency Operations Plan Riverside County Operational Area (EOP) (August 2019), Figure C-1 – "Circulation Plan", Figure 12 – *Conceptual Fire Access Plan*

Findings of Fact:

a. Less Than Significant Impact. The Proposed Project would involve construction of 72 single family residential units with nine (9) community maintained lettered lots.

The Proposed Project would be subject to hazardous material handling protocols, required to ensure safe storage, handling, transport, use, and disposal of all hazard materials during the construction phase of the Proposed Project. Construction would also be required to adhere to any local standards set forth by the County, as well as state and federal health and safety requirements that are intended to minimize hazardous materials risks, including that of wildfire to the public, such as California OSHA requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code.

Wildfires in Riverside County often result in death, injury, and economic and natural asset losses. In long-term, the losses in vegetation can also lead to possible soil erosion and flooding. Figure S-11 – "Wildfire Susceptibility" maps the Federal, State and Local Responsibility Areas (Fire Hazard and Very High Fire Hazard Severity Zones) for the County and shows the Project Site is not located within a fire hazard severity zone. The Proposed Project would be subject to the building plan check process, which entails fire departmental review to ensure the project meets requirements set forth in Chapter 8.32 of the Code of Ordinances. Ordinance 787 requires a minimum fire access road with of 24-feet and fire sprinklers for all one-family dwellings. The Proposed Project would not involve modification to any

existing roadways as shown on Figure C-1 – "Circulation Plan" which are designated as evacuation routes per the General Plan Safety Element. Internally, the residential portion of the Proposed Project would include two means of ingress and egress, one located at the corner of Elena Street and Teresa Street, and one located at Center Street. Internal street widths of 32-feet would be included for circulation within the residential development. Therefore, potential impacts associated with the impairment of an adopted emergency response plan or evacuation plan would be less than significant and no mitigation is required.

b. Less Than Significant Impact. The Project Site is currently vacant, generally flat, and surrounded by urban development. The topography of the existing site, as well as the proposed topography of the Project Site, would not result in the proposed development's exposure to terrain conducive to fire hazards. The Project Site is not within a fire hazard severity zone; however, the Proposed Project would be subject to Ordinance 695 - Vegetation Management Plan and Abatement of Hazardous Vegetation, which aids in reducing fire risks from nonnative and overgrown vegetation.

Potential other factors include hazardous or potentially hazardous materials, which would be routinely handled, stored, and dispensed on the commercial portion of the Project Site, such as gasoline. The Proposed Project involves the construction and operation of a service station, which would include the installation and maintenance of underground storage tanks (UST) for the storage of gasoline on-site. Service stations are subject to routine inspection by federal, state, and local regulatory agencies with jurisdiction over fuel dispensing facilities. The proposed service station's storage and delivery of the hazardous materials would comply with all applicable federal, state, and local regulation in order to functionally operate, including but not limited to Section 2540.7 – Gasoline Dispensing and Service Stations, of the California Occupational Safety and Health Regulations (Cal OSHA); Chapter 38 – Liquefied Petroleum Gases, of the California Fire Code (CFC); the Resource Conservation and Recovery Act (RCRA); and the Riverside County Fire Department standards (RCFD). These regulatory requirements minimize the potential for wildfire associated with fuel service stations. The Proposed Project would be subject to cumulative routine inspections, regulation, and required compliance with applicable federal, state, and local laws surrounding service station operation, delivery, storage, and fuel dispensing. Therefore, potential impacts associated with the exposure of project occupants to pollutant concentrations from wildfire due to slope, prevailing winds or other factors would be less than significant, and no mitigation is required.

c. Less Than Significant Impact. The Proposed Project would involve the installation of eight (8) internal streets within the residential portion of the project (streets 'A' – 'I') and internal circulation areas for the proposed commercial portion of the project. Utilities for the Proposed Project would consist of new water retention basins for stormwater drainage purposes and sewer lines, which would connect to existing infrastructure within Center Street. The Project Site is located in an urbanized area, surrounded by existing development. Installation of internal roadways, circulation areas, and utilities for the Proposed Project would be subject to the standards of the County's Code of Ordinances, which include health and safety reviews via the building plan check process. Figure 11 – *Conceptual Fire Access Plan* shows the proposed streets would comply with widths and turning radii required to allow for fire department vehicle access. Therefore, potential impacts associated with installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment would be less than significant and no mitigation is required.

d. Less Than Significant Impact. Risks associated with the Proposed Project pertaining to downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be reduced by the requirements outlined in the County's Code of Ordinance related to grading and building (Title 16 and Title 15). The Proposed Project would include drainage facilities on site, including two bioretention basins, which would connect to storm drain lines varying in

size from 8- to 24-inches and connect to existing infrastructure within Center Street. These retention basins would ensure stormwater for the site is retained and drained in accordance with County and State standards, thereby reducing flooding, run-off, and drainage impacts. The Project Site would be graded to maintain a relatively flat topography. Therefore, potential impacts associated with downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes would be less than significant and no mitigation is required.

e. Less Than Significant Impact. As described in Section V.XXI(b), the Project Site is not located with a fire hazard severity zone. The Project Site is a vacant lot surrounded by existing urban development. However, the Project Site is located approximately 1,900-feet directly west and southwest of both a state responsibility area for very high fire hazard severity zone and local responsibility area for very high fire hazard severity zone, respectively. Intervening topography and development of residential properties exists between these zone boundaries and the Project Site, including the implementation of fire breaks at the border of the existing residential development to the east. In addition to the Project Site's location, the proposed service station's storage and delivery of the hazardous materials would comply with all applicable federal, state, and local regulation in order to functionally operate, including but not limited to Section 2540.7 – Gasoline Dispensing and Service Stations, of the California Occupational Safety and Health Regulations (Cal OSHA); Chapter 38 – Liquefied Petroleum Gases, of the California Fire Code (CFC); the Resource Conservation and Recovery Act (RCRA); and the Riverside County Fire Department standards (RCFD). These regulatory requirements minimize the potential for wildfire associated with fuel service stations. Therefore, potential impacts associated with the exposure of people or structures involving wildland fires would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

MANDATORY FINDINGS OF SIGNIFICANCE

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

Source(s): Appendix B, Appendix C, Staff Review, Project Application Materials

Findings of Fact:

Less than Significant with Mitigation Incorporated. The Project Site is a vacant lot surrounded by residential development to the north, west, and east. The Project Site is a corner lot, with Mt Vernon Avenue and Center Street directly adjacent to the west and south. The Project Site is not adjacent to any designated open space. There is no existing body of water on the Project Site that would support any native resident or migratory fish or wildlife species. The Project Site has no capacity to support any species of plants or wildlife that would be 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.

Development activities have the potential to encounter undiscovered archaeological resources and the project would be subject to compliance with **MM-CUL-1** and **MM-CUL-2**, which provides direction in the event cultural resources are unearthed during project subsurface activities. Adherence to local and state regulations for paleontological and tribal cultural resources would ensure any potential impacts would be less than significant. Therefore, with implementation of **MM-CUL-1** and **MM-CUL-2**, and adherence to state and local regulations, impacts associated with the important examples of the major periods of California history or prehistory direct or indirect destruction of a unique paleontological resource or site, or unique geological feature would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
46. Have impacts which are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, other current projects and probable future projects)?	☐	☐	☒	☐

Source(s): Appendix A, Appendix A.1, Appendix J, Staff Review, Project Application Materials

Findings of Fact:

Less Than Significant Impact. The project TIA evaluated cumulative projects (see response to Checklist Section 37(a)) and the associated analysis determined the project would not generate significant amounts of cumulative traffic. The Proposed Project would not result in potentially significant project-specific impacts to Noise. Air pollutant and greenhouse gas emissions would be correspondingly less than significant, as described in Appendix A and Appendix A.1, and no mitigation measures are required. There are no other projects whose impacts would comingle with the Proposed Project resulting in a cumulatively significant impact over and above those previously identified in this Initial Study. The project's design features and related construction elements were determined to be consistent with the County policy documents, and therefore impacts from GHG emissions were determined to be less than significant. Therefore, cumulative impacts from development of the Proposed Project would be less than significant.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
47. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Source(s): Appendix I, Appendix I.1, Staff Review, Project Application Materials

Findings of Fact:

Less Than Significant with Mitigation Incorporated. Operational related noise from roadway vehicles would impact the exterior private backyards for residences adjacent to Mt Vernon Avenue. According to Appendix I.1, Building Numbers 15, 62, 65, 68, and 71 would have backyard noise levels that exceed the County's 65 dBA Ldn noise standard without construction of any sound walls and would be considered a significant impact. Project Design Feature NOI 4 would require the applicant to construct a 6-foot-high concrete masonry unit wall along Mt. Vernon Avenue. Through application of the proposed sound wall specified in **PDF NOI-4**, the noise levels at the proposed home's backyard area would be reduced to within the County's exterior residential noise standard. Therefore, potential substantial adverse effects on human beings, either directly or indirectly, would be less than significant.

VI. EARLIER ANALYSES

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 as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: None

Location Where Earlier Analyses, if used, are available for review:

Location: County of Riverside Planning Department
4080 Lemon Street 12th Floor
Riverside, CA 92501

Revised: 6/12/2024 11:09 AM
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