CITY OF RIVERSIDE

COMMUNITY & ECONOMIC DEVELOPMENT DEPARTMENT **PLANNING DIVISION**

REVISED DRAFT MITIGATED NEGATIVE DECLARATION

WARD: 4

1. **Case Number:** PR-2022-001293 (Project Number), Grading Exception (GE), Tentative Parcel Map (TPM)
2. **Project Title:** Alpine Meadows Estates, TPM 38174 (Tentative Parcel Map)
3. **Hearing Date:** TBD
4. **Lead Agency:** City of Riverside
   Community & Economic Development Department
   Planning Division
   3900 Main Street, 3rd Floor
   Riverside, CA 92522
5. **Contact Person:** Candice Assadzadeh, City of Riverside, Senior Planner
6. **Phone Number:** 951-826-5667
7. **Project Location:** The 5.74-acre project site is situated east of Harbart Drive, west of Kingdom Drive, north of Horizon View Drive, and south of Alpine Meadows Lane. The project site is located in the neighborhood of Alessandro Heights in the City of Riverside, California. The project site consists of Assessor Parcel Number (APN) 243-230-027. The project site is located in Section 13, Township 3 South, Range 5 West, San Bernardino Baseline and Meridian on the US Geological Survey Riverside East, California 7.5-minute topographic quadrangle. Refer to Figure 1 - Regional Vicinity, Figure - 2, Project Site Map, and Figure 3 – Topographic Map.
8. **Project Applicant/Project Sponsor's Name and Address:**
   Jerardo Reyes and Ryan Williams
   785 Woodcrest Court, Bloomington, CA 92316
9. **General Plan Designation:** VLDR – Very Low Density Residential
10. **Zoning:** R-1-1/2 Acre – Single Family Residential Zone
11. **Existing Setting:** The project site consists of a single parcel situated within the Alessandro Heights area of the City of Riverside, California. The hills slope to the southwest and water runoff enters unnamed mapped ephemeral bluelines that join behind Prado Dam. The site currently contains an inhabited residence and associated outbuilding/garage. Alpine Meadows Lane is a residential collector street that serves the project site. The project site is largely within the mapped extent of the Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F, and is therefore subject to the requirements of the Hillside/Arroyo Grading Ordinance. The Prenda Arroyo contains Prenda Creek, an ephemeral drainage that is a blueline stream on U.S. Geological Survey (USGS) maps. Prenda Creek is located about 150 feet south of the parcel, at its closest point. An ephemeral drainage that is tributary to Prenda Creek crosses the southeast portion of the project site from east to west.

12. **Description of Project:** The proposed project includes the following entitlement applications: Tentative Parcel Map and Grading Exception The project includes subdividing the existing single 5.74-acre parcel into 4 lots (Tentative Parcel Map No. 38174) and develop 3 new single family residential units on lots 2-4. The existing residence will remain and placed in its own lot ("Lot 1"). A Grading Exception is needed to allow grading within the extent of the mapped Prenda Arroyo (as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F). An area east of Lot 4 will not be developed and will remain as natural open space. The lot sizes will be approximately 1 acre each (~1.07 net acres or ~1.14 gross acres or ~46, 480 square feet each). The proposed project involves grading of pads, construction of 3 new single-family residential units, and associated utility connections. An Open Space Easement will be recorded for the portions of Lots 2-4 located outside of the grading limits.

Single Family Residences

The proposed single-family residences will be one story in height and consist of two primary floor plans. As shown on the table below, the residences floor area would average in size; 3,340 square feet (SF) living area, 882 SF garage area (3-car garage), 282 SF covered patio #1 area, 75 SF covered patio #2 area, for a total footprint area of 4,579 SF. Additionally, each of the residences would include a driveway, backyard, and 610 SF uncovered courtyard area.

Table 1: Floor Plan Characteristics

	Total Footprint Area	Living Area	Garage	Covered Patio #1 Area	Covered Patio #2 Area	Bedrooms	Baths
Residences 1, 2, & 3	4,579 SF	3,340 SF	882 SF	282 SF	75 SF	4	3

Drainage

Stormwater and non-stormwater drainage from the residential pads are designed to flow to self-retaining landscaped areas in the northwest corners of each lot, with any overflow, discharging to Alpine Meadows Lane. Stormwater runoff from the undeveloped portions of the site will continue to drain via sheet flow in a southwest direction to the existing ephemeral drainage that crosses the southeast portion of the project site from east to west and is tributary to Prenda Creek, located offsite and to the south of the project.

Grading

The grading (earthwork cut and fill quantities) is expected to balance, with no need to import or export earthen material.

Construction and Operation

Construction is anticipated to occur over an approximate 12 to 18-month period. The first approximate 3 months of construction would include site preparation and grading. The following approximate 9-15 months of construction would include building construction, roadway paving, architectural coatings/painting, and landscaping. Construction is anticipated to start as early as 2023 and be completed in 2024.

13. **Surrounding land uses and setting: Briefly describe the project's surroundings:**

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Single Family Residential	VLDR – Very Low Density Residential	R-1-1/2 acre – Single Family Residential Zone
North	Single Family Residential	HR – Hillside Residential	RC – Residential Conservation Zone
East	Vacant and Single Family Residential	HR – Hillside Residential	RC – Residential Conservation Zone
South	Vacant and Single Family Residential	VLDR – Very Low Density Residential and OS – Open Space/Natural Resources	R-1-1/2 acre – Single Family Residential Zone
West	Single Family Residential	VLDR – Very Low Density Residential and OS – Open Space/Natural Resources	R-1-1/2 acre – Single Family Residential Zone

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

    a. California State Water Resources Control Board – to obtain coverage under the General Construction Storm Water Permit (Water Quality Order 2009-0009-DWQ) regulating storm water runoff from construction sites one (1) acre in size and greater.

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

    Per AB 52, Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such project. On May 19, 2022 the City of Riverside sent the required notices to the relative tribes though certified mail. The following Native American Tribes were notified: Morongo Band of Mission Indians, San Gabriel Band of Mission Indians, Gabrieleno Band of Mission Indians – Kizh Nation, Pechanga Band of Luiseño Mission Indians, Soboba Band of Luiseño Indian, Rincon Band of Luiseño Indians, Morongo Band of Mission Indians, Cahuilla Band of Indians, San Manuel Band of Mission Indians, Agua Caliente Band of Cahuilla Indians. As a result of AB 52 consultation with interested tribes, mitigation measures (MM Cul-1 through MM Cul-4) will be applied to the project.

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

    a. City of Riverside, General Plan 2025
    b. City of Riverside, General Plan 2025 Final Program Environmental Impact Report (GP 2025 FPEIR)
    c. Riverside Municipal Code (RMC), Title 17 Grading Code, Title 18 Subdivision Code, Title 19 Zoning Code, Title 20, Cultural Resources

17. **List of Appendices:**
    a) Appendix A: Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey, Prepared by L&L Environmental, Inc., September 2021, revised May 2022, July 2022, August 2022, October 2022
    b) Appendix B: Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis, Prepared by L&L Environmental, Inc., September 2021, revised August 2022, October 2022, March 2023, May 2023
    c) Appendix C: Jurisdictional Delineation, Prepared by L&L Environmental, Inc., July 2022
    d) Appendix D: Phase I Cultural Resources Assessment, Prepared by L&L Environmental, Inc., December 2021, revised April 2023, June 2023.
    e) Appendix E: Fire Protection Plan, Prepared by Firewise 2000 LLC, February 2023; Revised April 2023; January 2024.
    f) Appendix F: Preliminary Project Specific Water Quality Management Plan, Prepared by Ackerman Associates 2000 Inc., March 2022

18. **Acronyms**

AICUZ -	Air Installation Compatible Use Zone Study
AQMP -	Air Quality Management Plan
AUSD -	Alvord Unified School District
CEQA -	California Environmental Quality Act
CMU -	Concrete Masonry Unit
CMP -	Congestion Management Plan
EIR -	Environmental Impact Report
EMWD -	Eastern Municipal Water District
EOP -	Emergency Operations Plan
FEMA -	Federal Emergency Management Agency
FPEIR -	GP 2025 Final Programmatic Environmental Impact Report
GIS -	Geographic Information System
GhG -	Green House Gas
GP 2025 -	General Plan 2025
IS -	Initial Study
kBTU	Kilo British Thermal Units
LHMP -	Local Hazard Mitigation Plan
MARB/MIP -	March Air Reserve Base/March Inland Port
MJPA-JLUS -	March Joint Powers Authority - Joint Land Use Study
MSHCP -	Multiple-Species Habitat Conservation Plan
MVUSD -	Moreno Valley Unified School District
NCCP -	Natural Communities Conservation Plan
OEM -	Office of Emergency Services
OPR -	Office of Planning & Research, State
PEIR -	Program Environmental Impact Report
PRD -	Planned Residential Development
PW -	Public Works, Riverside
RCALUC -	Riverside County Airport Land Use Commission
RCALUCP -	Riverside County Airport Land Use Compatibility Plan
RCP -	Regional Comprehensive Plan
RCTC -	Riverside County Transportation Commission
RMC -	Riverside Municipal Code
RPD -	Riverside Police Department
RPU -	Riverside Public Utilities
RTIP -	Regional Transportation Improvement Plan
RTP -	Regional Transportation Plan
RUSD -	Riverside Unified School District

SCAG -	Southern California Association of Governments
SCAQMD -	South Coast Air Quality Management District
SCH -	State Clearinghouse
SKR HCP -	Stephens' Kangaroo Rat Habitat Conservation Plan
SWPPP -	Storm Water Pollution Prevention Plan
USGS -	United States Geologic Survey
WMWD -	Western Municipal Water District
WQMP -	Water Quality Management Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: (To be completed by the Lead Agency)

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

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

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

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

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

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

Signature _____ Date _____

Printed Name & Title Candice Assadzadeh, Senior Planner For City of Riverside

ALPINE MEADOWS

RVA

Regional Vicinity

Figure 1

ALPINE MEADOWS

RVA

Project Site Map

Figure 2

ALPINE MEADOWS

RVA

Site Vicinity

Figure 3

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

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

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

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

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

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

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

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

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

8) The explanation of each issue should identify:

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

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

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

1a. Response: (*Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards and Parkways, Table 5.1-A – Scenic and Special Boulevards, and Table 5.1-B – Scenic Parkways)*

Less than Significant Impact. According to the City's General Plan 2025 Open Space and Conservation Element, scenic resources enhance the visual character of Riverside and provide distinguishing characteristics. Furthermore, the hillsides and ridgelines above Riverside offer scenic benefits. The City's General Plan 2025 policies aim at balancing development interests with broader community preservation objectives. The General Plan provides examples of scenic viewpoints such as the peaks of Box Springs Mountain, Mt. Rubidoux, Arlington Mountain, Alessandro Heights and the La Sierra/Norco Hills. The project site is not identified as a scenic vista in the City General Plan 2025 and there is no scenic vista in the project site's immediate vicinity. The closest scenic boulevard/parkway is Overlook Parkway approximately 0.6-mile north but is not visible from the project site. The proposed project will not result in development on a scenic hillside or ridgeline. Accordingly, the proposed project will neither block the view of a scenic vista nor alter a scenic vista. The Citywide Design and Sign Guidelines limit impacts to aesthetic resources by first defining, then reducing interruptions of scenic vistas, maintaining, and enhancing scenic resources and visual character, and reducing light and glare. The Citywide Design and Sign Guidelines encourage high-quality design, and implementation of the Guidelines will reduce any potential impacts to less than significant. Through compliance with the Zoning Code's building height, setback, and landscaping requirements - direct, indirect, and cumulative impacts to scenic vistas are **less than significant impact**.

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

1b. Response: (*Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 FPEIR Figure 5.1-1 – Scenic and Special Boulevards, Parkways, Table 5.1-A – Scenic and Special Boulevards, Table 5.1-B – Scenic Parkways, the City's Urban Forest Tree Policy Manual, Title 20 – Cultural Resources and, Title 19 – Article V – Chapter 19.100 – Residential Zones - RC Zone)*

Less than Significant Impact. There are no scenic highways within the City that could potentially be impacted. The nearest eligible scenic highway is Interstate Highway 15 (13 miles from project site), which is outside the City of Riverside's jurisdiction. The City's General Plan 2025 designates Scenic Boulevards and Parkways to protect scenic resources and enhance the visual character of Riverside. The closest designated scenic boulevard is Overland Parkway, but it is not visible from the project site. The site does contain a small area of rock outcropping in the northeast corner of the site. As stated above, the site is not visible from the closest designated scenic boulevard, Overland Parkway, and further, this portion of the site will not be graded or otherwise impacted and will have an Open Space Easement recorded on it. The project site is surrounded by existing single-family residential development and some scattered undeveloped/vacant lots. The Citywide Design and Sign Guidelines limit impacts to aesthetic resources by first defining, then reducing interruptions of scenic vistas, maintaining, and enhancing scenic resources and visual character, and reducing light and glare. The Citywide Design and Sign Guidelines encourage high-quality design, and implementation of the Guidelines will reduce any potential impacts to less than significant. The southern portion of the project site which contains an ephemeral drainage that is tributary to Prenda Creek will be avoided and remain in place. Further, there are no trees or historic buildings within the project development footprint, which could be potentially impacted because of this project. Through compliance with the Zoning Code's building height, setback, and landscaping requirements - direct, indirect, and cumulative impacts to scenic resources are **less than significant impact**.

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

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
with applicable zoning and other regulations governing scenic quality?				

1c. Response: ***(Source: General Plan 2025)***

Less than Significant Impact. The project site is located within an urbanized area, as there is existing residential development to the north, east, south and west. The proposed project will not conflict with the existing zoning, R-1-1/2 Acre – Single Family Residential Zone. The proposed project will comply with all pertinent design requirements of the Zoning Code and the Citywide Design Guidelines to assure quality site design and building architecture that is of high quality. This includes installation of landscaping. Direct, indirect, and cumulative impacts on the visual character and quality of the site are **less than significant.**

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

1d. Response: (Source: General Plan 2025, Title 19 – Article VIII – Chapter 19.556 – Lighting, Citywide Design and Sign Guidelines)

Less than Significant Impact. The proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Although the development of three new residential buildings will include outdoor lighting, all lighting will be required and designed to comply with the development standards contained in the City's Zoning Code (Title 19). Chapter 19.590 (Performance Standards) requires that on-site lighting be arranged as to reflect away from adjoining property or any public streets. Light shall not be directed skyward or in a manner that interferes with aircraft operation. As shown in the City's General Plan EIR Figure 5.1-2, Mt. Palomar Nighttime Lighting Policy Area, the site is not within the Mount Palomar Lighting Area. The area surrounding the project site is developed with residential units. Compliance with Zoning Code and California Building and Green Code standards will reduce potential impacts to day- or night-time views in the area to **less than significant** levels, directly, indirectly, and cumulatively.

2. AGRICULTURE AND FOREST RESOURCES:				

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information complied by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and the forest carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board. Would the project:

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

2a. Response: ***(Source: General Plan 2025 – Figure OS-2 – Agricultural Suitability & General Plan 2025 FPEIR – 5.2 Agricultural Resources)***

No Impact. The project site is located within a rural residential area. A review of Figure OS-2 – Agriculture Sustainability of the General Plan 2025 reveals that the project site is identified and designated as Other Land. The project site is also not designated as any land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the map prepared by the California Department of Conservation. Therefore, the project will have **no impact**, directly, or cumulatively.

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

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

2b. Response: ***(Source: General Plan 2025 – Figure OS-3 - Williamson Act Preserves, General Plan 2025 FPEIR – Figure 5.2-4 – Proposed Zones Permitting Agricultural Uses, and Title 19)***

No Impacts. A review of Figure 5.2-2 – Williamson Act Preserves of the General Plan 2025 FPEIR reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Moreover, the project site is zoned Single Family Residential Zone (R-1 ½ acre). The proposed project does not conflict with existing zoning or a Williamson Act contract and therefore, the project will have **no impacts** directly, indirectly, or cumulatively.

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

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

No Impacts. The City of Riverside has no forest land or timberland. The project site is zoned Single Family Residential Zone (R-1 ½ acre). The project site is not zoned for forest land or timberland uses. Therefore, **no impacts** will occur from this project directly, indirectly, or cumulatively.

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

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

No Impacts. The City of Riverside has no forest land or timberland; therefore, **no impacts** will occur from this project directly, indirectly, or cumulatively.

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

2e. Response: (Source: General Plan – Figure OS-2 – ***Agricultural Suitability, Figure OS-3 – Williamson Act Preserves*****)**

No Impacts. The project is in a generally developed area of the City. Additionally, the site is identified as Other Land by the California Department of Conservation and does not support agricultural resources or operations. The project will not result in the conversion of designated farmland to non-agricultural uses. In addition, there are no agricultural resources or operations, including farmlands within proximity of the subject site. Therefore, **no impacts** will occur from this project directly, indirectly, or cumulatively to conversion of Farmland, to non-agricultural use or to the loss of forest land.

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

3a. Response: ***(Source: South Coast Air Quality Management District's 2016 Air Quality Management Plan (AQMP))***

No Impact. The proposed project is consistent with the General Plan 2025 Program "Typical Growth Scenario" in all aspects. The 2016 Air Quality Management Plan (AQMP) for the South Coast Air Basin (SCAB) sets forth a comprehensive program that will lead the SCAB into compliance with all Federal and State air quality standards. The City of Riverside is located

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

within the Riverside County sub region of the SCAB projections. The General Plan 2025 FPEIR determined that implementation of the General Plan 2025 would generally meet attainment forecasts and attainment of the standards of the AQMP. Because the proposed project is consistent with the General Plan 2025 and thus also the 2016 AQMP, the proposed project will not conflict or obstruct implementation of the applicable air quality plan – AQMP and therefore this project will have **no impact** directly, indirectly, or cumulatively to the implementation of an 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?	☐	☐	☒	☐

3b. Response: (*Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds, South Coast Air Quality Management District's 2016 Air Quality Management Plan)*

Less than Significant Impact. Per the GP 2025 FPEIR, AQMP thresholds indicate future construction activities under the General Plan are projected to result in significant levels of NOx and ROG, both ozone precursors, PM-10, PM-2.5 and CO. Although long-term emissions are expected to decrease by 2025, all criteria pollutants remain above the SCAQMD thresholds.

The portion of the Basin within which the City is located is designated as a non-attainment area for ozone, PM-10 and PM-2.5 under State standards, and as a non-attainment area for ozone, carbon monoxide, PM-10, and PM-2.5 under Federal standards.

Because the proposed project is consistent with the General Plan 2025, cumulative impacts related to criteria pollutants of the project were previously evaluated as part of the cumulative analysis of build out anticipated under the General Plan 2025 Program. As a result, the proposed project does not result in any new significant impacts that were not previously evaluated and for which a statement of overriding considerations was adopted as part of the General Plan 2025 FPEIR. Therefore, cumulative air quality emissions impacts are **less than significant**.

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

c. Response: (*Source: General Plan 2025 FPEIR Table 5.3-B SCAQMD CEQA Regional Significance Thresholds, South Coast Air Quality Management District's 2016 Air Quality Management Plan, Revised Biological Resources Assessment and Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022)*

Less than Significant Impact. Construction is anticipated to occur over an approximate 12 to 18-month period. The first approximate 3 months of construction would include site preparation and grading. The following approximate 9-15 months of construction would include building construction, roadway paving, architectural coatings/painting and landscaping. The project is anticipated to be constructed and operational sometime between late 2021 and early 2022.Construction is anticipated to start as early as 2023 and be completed in 2024.

Short-term impacts associated with construction from General Plan 2025 typical build out will result in increased air emissions from grading, earthmoving, and construction activities. Mitigation Measures of the General Plan 2025 FPEIR requires individual development to employ construction approaches that minimize pollutant emissions (General Plan 2025 FPEIR MM AIR 1- MM AIR 5, e.g., watering for dust control, tuning equipment, limiting truck idling times).

The closest sensitive receptors are the adjacent residences surrounding the project site and sensitive wildlife. The existing residence in Lot 1 is approximately 25-30 feet from the property line with Lot 2 and the closest existing residence to the north is approximately75-80 feet from the property line with Lot 2. The Biological Resources Assessment indicated a few special status wildlife species were observed in or around the site, including Cooper's hawk in the southwest corner of the site in a tree adjacent to the existing residence in Lot 1, and a Nuttall's woodpecker heard vocalizing just offsite in Prenda Creek. In conformance with the General Plan 2025 FPEIR MM AIR 1 and MM AIR 7, and the fact that the project is small in scale, it is not anticipated that the proposed project would exceed SCAQMD thresholds for short-term construction and long-term operational impacts.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Therefore, the project will not expose sensitive receptors to substantial pollutant concentrations and a **less than significant impact** will occur directly, indirectly or cumulatively for this project.				
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3d. Response: (*Source: General Plan 2025 FPEIR, Section 5.3 – Air Quality, page 5.3-50)*

Less than Significant Impact. While exact quantification of objectionable odors cannot be determined due to the subjective nature of what is considered "objectionable," the nature of the proposed residential development project and associated infrastructure improvements present a potential for the generation of objectionable odors associated with short-term construction activities. Single family residences are not typically associated with the generation of objectionable odors. However, the construction activities associated with the expected build out of the project site will generate airborne odors like diesel exhaust emissions and architectural coating applications. However, said emissions would occur only during daylight hours, be short-term in duration, and would be isolated to the immediate vicinity of the construction site. Therefore, they would not expose a substantial number of people to objectionable odors on a permanent basis. Therefore, the project will not cause objectionable odors affecting a substantial number of people and a **less than significant impact** directly, indirectly, and cumulatively will occur.

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

4a. Response: (*Source: General Plan 2025 – Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas, General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 - MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area, Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A)*

Less than Significant with Mitigation Incorporated. The project site is located within an urban built-up area and is largely surrounded by existing development. The site has been subject to historical and ongoing anthropogenic disturbance associated with an existing residence, and much of the site consists of the residence, associated structures, disturbed areas, and ornamental plantings. There is one native vegetation community on the site, brittlebush scrub (a type of coastal scrub). There is no riparian, Riversidean alluvial fan sage scrub, or other sensitive vegetation community present on the site. Further discussion on the vegetation communities and habitat at the project site can be found in Appendix A.

Special Status Plants

No federal or state-listed or special status plant species were observed on the site during surveys. Payson's jewelflower has a low to moderate potential to occur and most of the potential habitat for this species would be avoided by the project. There are no focused survey or conservation requirements for this species under the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). As most of the potential habitat for this species will be avoided, and with compliance with the MSHCP and payment of the MSHCP mitigation fee, the project would result in less than significant impacts to Payson's jewelflower.

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

Special Status Wildlife

There is suitable habitat for nesting birds, including raptors, on and adjacent to the site. The Migratory Bird Treaty Act (MBTA) prohibits the taking of migratory birds and their nests and eggs and the California Fish and Game Code Section 3503 and 3513 prohibit take, possession and destruction of bird nests or eggs, or take or possession of birds of prey (raptors) or their eggs, respectively. If construction is initiated during the bird nesting season (February 1 to September 15), a pre-construction survey is required per Mitigation Measure BIO-1 to ensure that no nests protected by the MBTA are impacted. If an active nest is present, construction would be temporarily restricted in the immediate vicinity of the nest until nesting is complete.

Three special status wildlife species were observed during the 2021 surveys:

- Cooper's hawk (*Accipiter cooperii)*- CDFW Watch List species
- Nuttall's woodpecker (*Picoides nutallii*) - USFWS Bird of Conservation Concern
- San Diego desert woodrat (*Neotoma lepida intermedia)* - CDFW Species of Special Concern.

A Cooper's hawk was observed on two occasions perching in a tree adjacent to the existing residence near the southwest corner of the site. This species is covered under the MSHCP and considered adequately conserved. With implementation of Mitigation Measures MM BIO-1 and MM BIO-2, the project would result in less than significant impacts to Cooper's hawk.

Four San Diego desert woodrat middens (stick nests) were observed in the northeast corner of the site in piles of rocks and concrete debris during the 2021 surveys (middens were not noted during the 2006 survey). In coastal scrub habitat, the home range of this species is 0.1 to 0.5 acre. Based on the locations of the middens, the home ranges of the occupants (if present) would likely be confined to the open space easement of Lot 4and will not be graded or developed a part of the project, thus, potential impacts to this species is expected to be avoided. However, this species is covered under the MSHCP and considered adequately conserved. With implementation of Mitigation Measure MM BIO-1, any potential direct or indirect impacts from the project would be less than significant.

Special status wildlife species with a potential to occur include:

- Crotch bumble bee (*Bombus crotchii*) - candidate for State listing as endangered[1]
- Southern California legless lizard (*Anniella stebbinsi*) - CDFW Species of Special Concern
- Orange-throated whiptail (*Aspidoscelis hyperythra*) – CDFW Watch List species
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*) – CDFW Species of Special Concern
- Coast horned lizard (*Phrynosoma blainvillii*) – CDFW Species of Special Concern
- Southern California rufus-crowned sparrow (*Aimophila ruficeps canescens*) – CDFW Watch List species
- Bell's sage sparrow (*Artemisiospiza belli belli*) – CDFW Watch List species
- California horned lark (*Eremophila alpestris actia*) – CDFW Watch List species
- Loggerhead shrike (*Lanius ludovicianus*) – CDFW Species of Special Concern
- Coastal California gnatcatcher (*Polioptila californica californica*) – federally listed as threatened, CDFW Species of Special Concern
- Allen's hummingbird (*Selasphorus sasin*) – USFWS Bird of Conservation Concern
- Pallid bat (*Antrozous pallidus*) – CDFW Species of Special Concern
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*) – CDFW Species of Special Concern
- Western mastiff bat (*Eumops perotis californicus*) – CDFW Species of Special Concern

[2] Based on California Department of Fish and Wildlife (CDFW) information, crotch bumble bee is a candidate for state listing, but the Sacramento Superior Court ruled that insects are not eligible for listing under the California Endangered Species Act, *Almond Alliance of California v. California Department of Fish and Wildlife*, Court No. 34-2019-80003216 (Nov. 13, 2020). The California Fish and Game Commission filed an intent to appeal this decision in February 2021. The status of this species may be affected by subsequent litigation or changes to regulations.

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

None of these species were observed during surveys in 2006 or 2021. These species are covered under the MSHCP and considered adequately conserved, without additional focused survey or conservation requirements, with the exception of Crotch bumble bee, southern California legless lizard, Allen's hummingbird, pallid bat and the western mastiff bat, which are not covered under the MSHCP. Potential impacts to MSHCP covered species with the potential to occur on site are reduced to less than significant with compliance with the Plan and payment of the required mitigation fee, as outlined in Mitigation Measure MM BIO-1.

One state candidate species, the Crotch bumble bee (*Bombus crotchii*), candidate for State listing as endangered[2], has a low to moderate potential for occurrence on the site, mainly within the avoided area. Potentially suitable habitat and food plant species are present. However, the suitable habitat is outside the project development footprint and will be largely avoided. During the 2021 survey no evidence of bumble bee colonies was observed, but a focused survey for invertebrate species was not conducted. The status of listing the Crotch bumble bee under the California Endangered Species Act is currently in litigation. If the litigation is resolved in favor of listing this species prior to the start of construction, a focused survey is recommended. If the species is listed and is found to be present on the site and would be impacted, an Incidental Take Permit from CDFW would be required. The ITP would outline CDFW required onsite and/or offsite mitigation to offset potential impacts from the project to less than significant levels. With implementation of Mitigation Measure MM BIO-3, the project would result in less than significant impacts to Crotch bumble bee.

Southern California legless lizard has a moderate potential for occurrence on the site, mainly within the avoided area and particularly along the streambed. Impacts to this species, if present in the Project's disturbance area, would be minimal and not be expected to substantially affect regional populations. Potential impacts to southern California legless lizard from the project are considered less than significant as the onsite habitat that could support them is largely being avoided and left in place.

Allen's hummingbird has a high potential to forage on the site, but the site is outside the species' breeding range. Adult birds will typically flee from disturbance and injury/mortality from a project would be limited to nests, eggs, and chicks in areas where they breed. Since this species does not nest/breed in the area, there would be no potential for injury/mortality and potential impacts from this project are less than significant.

Both pallid bat and western mastiff bat have a moderate potential to forage on the site, but a low potential to roost there. No evidence of bat roosting was observed but the interior of onsite structures was not included in the survey. The existing residential buildings were well maintained, and no obvious gaps or holes were noted where bats could access the structures. Potential impacts to pallid bat and western mastiff bat from the project are considered less than significant as the onsite habitat that could provide foraging habitat for them is largely being avoided and left in place and it is unlikely that they are roosting in the existing residential structures.

As there is no suitable habitat for the federally and state listed least Bell's vireo, southwestern willow flycatcher, or western yellow billed cuckoo within the project site or immediately adjacent to the project site, and the grading limits are over 300-feet away from potentially suitable habitat in Prenda Creek to the south of the site, the project is not anticipated to result in direct or indirect impacts to these species and are considered less than significant. However, if the grading plans are revised and will encroach within a 300-foot buffer of the riparian habitat in Prenda Creek to the south of the project site, implementation of Mitigation Measure MM BIO-4 is required to reduce potential indirect impacts to these species to less than significant levels.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is protected under the federal Migratory Bird Treaty Act and California Fish and Game Code and is a CDFW Species of Special Concern. No burrowing owls, owl sign (pellets, scat, feathers, tracks, etc.), or occupied burrows were observed onsite during the 2006 survey or 2021 protocol breeding season survey. Potentially suitable burrowing owl habitat is present on the site including small mammal burrows. Potentially suitable habitat is also present within the 150-meter buffer area, but no owls, owl sign, or occupied burrows were observed in the buffer. Because suitable habitat is present, the MSHCP requires a

[2] Based on California Department of Fish and Wildlife (CDFW) information, crotch bumble bee is a candidate for state listing, but the Sacramento Superior Court ruled that insects are not eligible for listing under the California Endangered Species Act, *Almond Alliance of California v. California Department of Fish and Wildlife*, Court No. 34-2019-80003216 (Nov. 13, 2020). The California Fish and Game Commission filed an intent to appeal this decision in February 2021. The status of this species may be affected by subsequent litigation or changes to regulations.

preconstruction clearance survey for burrowing owl within 30 days prior to the start of site disturbance, as outlined in more detail in Mitigation Measure MM BIO-2. With implementation of Mitigation Measures MM BIO-1 and MM BIO-2, potential impacts to burrowing owl are reduced to less than significant.

Substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service **would be less than significant with mitigation**.

Mitigation Measures

MM BIO-1: In order to avoid impacts on nesting birds and raptors (common or special status) clearing, grubbing and grading activities should be scheduled during the non-breeding season (generally between July 1 and February 28/29 for nesting birds and between July 1 and January 31 for nesting raptors), to the extent practicable. If project timing requires that these construction activities be conducted during breeding season (generally between March 1 and June 30 for birds; between February 1 and June 30 for raptors), a pre-construction survey or multiple surveys shall be conducted by a qualified biologist no more than 72 hours prior to disturbance to confirm the absence of active nests. If no active nests are found, no further measures would be necessary. However, if the biologist finds an active nest of a bird protected under the MBTA or the California Fish and Game Code and determines that the nest may be impacted by clearing, grubbing or grading activities, the biologist shall identify an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activities. The active nest site shall be protected until the nesting activity has ended to ensure compliance with the MBTA and California Fish and Game Code. Construction and/or encroachment into the buffer area around a known nest shall only be allowed if the biologist determines that the proposed activity would not disturb the nest occupants.

MM BIO-2: In accordance with the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan, a 30-day pre-construction survey for burrowing owls shall be required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging) to ensure that no burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey shall be completed again to ensure that burrowing owl have not colonized the site since it was last disturbed. If burrowing owl are found, the same coordination described above will be necessary.

If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent shall immediately inform the Regional Conservation Authority (RCA). A burrowing owl relocation plan shall be prepared and submitted to the RCA and CDFW for review and approval prior to commencement of ground disturbance activities. The burrowing owl relocation plan shall outline methods to relocate any burrowing owls occurring on the project site and ensure compliance with the MSHCP, MBTA, and California Fish and Game Code. If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and be provided with a protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer will depend on the time of year and level of disturbance.

MM BIO-3: The status of listing the Crotch bumble bee under the California Endangered Species Act is currently in litigation. If the litigation is resolved in favor of listing this species prior to the start of construction, a focused survey would be completed. If the species is listed and is found to be present on the site and would be impacted, an Incidental Take Permit from CDFW would be required. The ITP would outline CDFW required onsite and/or offsite mitigation to offset potential impacts from the project to less than significant levels.

MM BIO-4: If the project grading plans are revised such that grading is extended to the south and within a 300-feet buffer from riparian habitat in Prenda Creek to the south, then either construction shall avoid the period of April 10 to July 31, or if it will occur during this period, a habitat assessment for riparian birds in that area shall be completed. If this area is deemed to be suitable for least Bell's vireo, southwestern willow flycatcher or the western yellow-billed cuckoo, then a focused survey shall be conducted to determine presence or absence. If present, additional avoidance and minimization measures shall be implemented as identified by the qualified biologist permitted to conduct the focused surveys for these species.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

4b. Response: ***(Source: General Plan 2025 – Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas, General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 - MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area, MSHCP Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool, Google Maps, Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A)***

Less than Significant Impact. The project site is composed of disturbed/developed/ornamental areas and brittlebush scrub. There are no riparian, Riversidean alluvial fan sage scrub, or other sensitive vegetation communities present. There is no riparian vegetation on the project site, apart from the partial canopy of one willow tree. The trunk of this willow is offsite, but its canopy overhangs the eastern site boundary, which is in Lot 4 that will not be developed and remain as is. The willow tree would not be impacted by project grading.

Therefore, **less than significant impacts** to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service from the proposed project will occur directly, indirectly and cumulatively.

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

4c. Response: ***(Source: City of Riverside GIS/CADME USGS Quad Map Layer, Google Maps, Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A))***

Less than Significant Impact.

Wetlands, MSHCP Riparian/Riverine Areas and Vernal Pools

A jurisdictional delineation was conducted in September 2021 and found no federal wetlands or vernal pools on site. Prenda Creek is an ephemeral blueline stream located about 150 feet south of the project site, at its closest point. An ephemeral drainage that is tributary to Prenda Creek crosses the southeast portion of the project site from east to west. The jurisdictional delineation found that the streambed within the project site includes 0.46 acre of CDFW streambed/ MSHCP riverine habitat on site, and no riparian habitat. Of this area, 0.088-acre is also federal Waters of the US. Based on the current site plan, the project will avoid the jurisdictional streambed/waters of the US/ MSHCP riverine habitat.

City of Riverside Arroyos

The site is largely within the mapped extent of the Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F, and is therefore subject to the requirements of the Hillside/Arroyo Grading Ordinance. As described in the Open Space and Conservation Element of the City of Riverside General Plan 2025, arroyos are naturally occurring ephemeral drainages created over thousands of years as seasonal rains eroded the hills. The arroyos support wildlife species and plant communities. The arroyos also provide corridors which wildlife use to migrate between habitat areas.

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

The provisions for hillside/arroyo grading as defined in Section 17.28.020 of the Municipal Code apply to all excavation and grading of any land within or adjacent to the boundaries of Prenda Arroyo. Section 17.28.020 states in part, "No development or grading of any kind shall be permitted within 50 feet of the limits of the Mockingbird Canyon, Woodcrest, Prenda, Alessandro, Tequesquite, or Springbrook Arroyos and associated tributaries as shown on Exhibits A-F. The Community & Economic Development Director shall have the authority to administratively allow grading within designated arroyo tributaries depending on the sensitivity of the area. Sensitivity shall be determined by such factors as the presence of riparian vegetation, habitat for rare or endangered species, significant rock outcroppings or other unique topographic features on the property proposed to be graded or in nearby segments of the same tributary."

The project site does not include riparian habitat or other sensitive vegetation communities and none would be impacted by project grading. Based on the current site plan and review of aerial images, the grading areas on the Project site (plus a 20-foot buffer) are approximately 300 feet away from the native riparian habitat in Prenda Creek. The rock piles on the site do not appear to be unique or significant topographic features and would not be impacted by the project. The only native habitat on the site is brittlebush scrub, a type of coastal scrub, which is uncommon but not rare and is not considered a sensitive vegetation community. Project grading would impact 19 percent of the brittlebush scrub on the site and avoid 81 percent. All of the brittlebush scrub within the grading area is disturbed and all of the relatively undisturbed brittlebush scrub would be avoided.

A Grading Exception is needed to allow grading within the extent of the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F. The arroyos in RMC, Title 17 Grading, Exhibits A-F were mapped using aerial photography, rather than site specific assessments. A Biological Resources Study was prepared for the project, which included a detailed site assessment and associated mapping of the actual boundaries of the Prenda Arroyo and the 50-foot setback, by means of a site walk and review of available literature and data. The project biologist determined that the boundaries of the Prenda Arroyo and the 50-foot setback are smaller than what is mapped in Tile 17 – Grading Code of the RMC. Based on watercourse, topography, and vegetation the actual boundaries of the Prenda Arroyo is located within the southeast portion of the subject parcel, from east to west, as shown in Figures12a and 12b of the project's Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. – Appendix A. The 50-foot setback from the actual boundaries of the Prenda Arroyo does not extend into the proposed graded pad area. There would be no impact to the Prenda Arroyo. However, as the project is located within the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F, a Grading Exception is required, and Grading Exception Findings were prepared for the project.

The project would not have a substantial adverse effect on state or federally-protected wetlands or the Prenda Arroyo, through direct removal, filling, hydrological interruption, or other means. Therefore, the proposed project would have **a less than significant impact** to state or federally protected wetlands as defined by Section 404 of the Clean Water Act or the Prenda Arroyo, directly, indirectly and cumulatively.

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

4d. Response: (*Source: MSHCP, General Plan 2025 –Figure OS-7 – MSHCP Cores and Linkage, Google Maps, Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A)*

Less than Significant Impact. The project site is surrounded by existing residential development. Prenda Creek is immediately south of the site and drainages often serve as wildlife corridors and travel routes. Prenda Creek is in a largely natural state in the project vicinity and may function as a wildlife corridor for limited local travel between currently undeveloped (but not conserved) areas to the east and west. An ephemeral drainage that is tributary to Prenda Creek and crosses the southeast portion of the project site from east to west may contribute to this limited movement through the area. The proposed project will avoid this drainage. The project will result in **less than significant impact** directly, indirectly and cumulatively to 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.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

4e. Response: (*Source: MSHCP, Title 16 Section 16.72.040 – Establishing the Western Riverside County MSHCP Mitigation Fee, Title 16 Section 16.40.040 – Establishing a Threatened and Endangered Species Fees, City of Riverside Urban Forest Tree Policy Manual)*

Less than Significant Impact. Implementation of the proposed Project is subject to all applicable Federal, State, and local policies and regulations related to the protection of biological resources and tree preservation. In addition, the project is required to comply with Riverside Municipal Code Section 16.72.040 establishing the MSHCP mitigation fee and Section 16.40.040 establishing the Threatened and Endangered Species Fees.

Any project within the City of Riverside's boundaries that proposes planting a street tree within a City right-of-way must follow the Urban Forest Tree Policy Manual. The Manual documents guidelines for the planting, pruning, preservation, and removal of all trees in City rights-of-way. The specifications in the Manual are based on national standards for tree care established by the International Society of Arboriculture, the National Arborists Association, and the American National Standards Institute. The proposed project and any future project will be in compliance with the Tree Policy Manual when planting a tree within a City right-of-way. Therefore, the proposed project would have a **less than significant impact** related to local policies or ordinances protecting biological resources and specifically City tree preservation policies, directly, indirectly and cumulatively.

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

4f. Response: ***(Source: MSHCP, General Plan 2025 – Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Stephens' Kangaroo Rat Habitat Conservation Plan, Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A)***

Less than Significant Impact.

MSHCP

The project site is within the MSHCP but not within any Criteria Cells or Cell Group and reserve assembly analysis is not required. Public/Quasi-Public (PQP) Conserved Lands identified as Alessandro Arroyo Big Bend are one mile to the east of the site. There are no other PQP or MSHCP Conserved Lands within a mile of the site. The site is not within or near any MSHCP Core Areas or Linkages.

Section 6.1.4 of the MSHCP outlines the *Protection of Species Associated with Riparian/ Riverine Areas and Vernal Pools*. An ephemeral drainage runs from east to west through the southeastern portion of the site. The jurisdictional delineation found 0.46 acre of MSHCP riverine habitat and no MSHCP riparian habitat in this drainage. The project will avoid impacts to the drainage and riverine habitat. No vernal pools or ponding areas were observed and there is no habitat for fairy shrimp on the site. As outlined above in response to 4a., there is no habitat for riparian birds on the site, but potentially suitable habitat is present in adjacent areas of Prenda Creek offsite. As the project is not anticipated to result in direct or indirect impacts to these species and are considered less than significant. However, if the grading plans are revised and will encroach within a 300-foot buffer of the riparian habitat in Prenda Creek to the south of the project site, implementation of Mitigation Measure MM BIO-4 is required to reduce potential indirect impacts to these species to less than significant levels.

Section 6.1.3 of the MSHCP outlines the *Protection of Species Narrow Endemic Plant Species*. The project site is not within a Narrow Endemic Plant Species Survey Area and no surveys or conservation are required for narrow endemic plants species.

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

Section 6.3.2 of the MSHCP outlines the *Additional Survey Needs and Procedures*. The project site is not within a mapped survey area for Criteria Area Plant Species, Amphibian, or Mammal Species and no additional surveys or conservation are required for these species. The project site is within the mapped survey area for burrowing owl. A focused burrow survey and focused burrowing owl survey was conducted in June – July 2021 in accordance with MSHCP survey protocol. No burrowing owls, owl sign (pellets, scat, feathers, tracks, etc.), or occupied burrows were observed during the 2021 protocol breeding season survey, or in prior 2006 survey of the site. As the project site does not support burrowing owl no onsite conservation is required. Since potentially suitable habitat is present, the MSHCP requires a preconstruction clearance survey for burrowing owl within the 30 days prior to initial ground and/or vegetation disturbance, outlined and required as Mitigation Measure MM BIO-3.

Section 6.1.4 of the MSHCP outlines the *Guidelines Pertaining to the Urban/Wildlands Interface*, which are intended to address indirect effects associated with development near MSHCP Conserved Areas. PQP Conserved Lands identified as Alessandro Arroyo Big Bend are one mile to the east of the project site. The project site is not within or near any MSHCP Core Areas or Linkages. Development of the proposed project would not affect any PQP or MSHCP Conserved Lands and an Urban/ Wildlands Analysis is not required.

As outlined above, the project is consistent with applicable sections and policies of the MSHCP and will not conflict with this HCP.

SKR HCP

The project site is within the boundaries of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) area and the project is required to pay the SKR HCP mitigation fee. As the project site is not located within a Core Reserve of the SKR HCP, no additional surveys or conservation are required. With payment of the mitigation fee, which will be a standard condition of approval, the project is consistent with the SKR HCP.

Therefore, the project will have **a less than significant impact with mitigation incorporated** related to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

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

5a. Response: ***(Source: GP 2025 FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas and Appendix D, Title 20 of the Riverside Municipal Code, AB 52 Consultation, Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021, revised April 2023 and June 2023 – Appendix D)***

Less than Significant with Mitigation Incorporated. The Phase I Cultural Resources Assessment documents efforts to identify historical resources, as defined in Public Resources Code, and complies with provisions of CEQA to assess a project's potential to impact historical resources during project construction, operation, and/or maintenance. These efforts include a cultural resources records search, background research, coordination with the Native American Heritage Commission and local Native American tribes and organizations, a geoarchaeological assessment, and an intensive pedestrian survey of the entire project site. As a result of these efforts, four (4) potential historic resources were identified within the Project area during the current study. These include bedrock milling site 33-015434, historical isolated artifacts ISO-01H, the single-family residence at 841 Alpine Meadows Lane (Lot 1), and a concrete well once associated with a windmill (QUIN-001H) that was removed between 2013 and 2014. Of these, only historic isolated artifacts ISO-01H was evaluated further. Based on the current site plan the bedrock milling site, single family residence at 841 Alpine Meadows Lane (Lot 1), and concrete well will be avoided with the proposed project and left in place.

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

One (1) newly encountered historic resource (ISO-001H), consisting of historic isolated artifacts, was noted near the southwest portion of the Project area along the west boundary. ISO-001H consists of a church-key opened, Age Dated Beer can measuring 4¾ inches tall by 2 5/8 inches in diameter and a crushed, sanitary opened, approximately 6 inch tall, Knott's Berry Farm Boysenberry syrup can of indeterminate age. Isolated artifact ISO-001H is not considered "historical resources" or "unique archaeological resources" under CEQA because it lacks association with important persons and events (Criteria 1 and 2), does not possess any distinctive characteristics of a type, period, region, or method of construction, represent the work of an important creative individual, or possess high artistic value (Criterion 3), and does not, on its own, possess the quantity or quality of data to address important research questions (Criterion 4). ISO-001H is not eligible for the California Register of Historic Resources (CRHR) and requires no further consideration under CEQA.

The bedrock milling site (33-015434) was originally recorded in 2006 as a single slick on a low-lying granitic boulder in the middle of a drainage. The slick is oval-shaped measuring 36 cm by 27 cm and exhibits a high degree of polish but is eroding along its margins. No artifacts or other Native American features were observed on the surface. The site is associated with Native American land use activities. It is unlikely that significant subsurface deposits (e.g., buried midden, features, artifacts) would be found in association with the site; however, a formal Phase II evaluation of site significance against all four CRHR criteria would be required if this site would be impacted by the project.

The single-family residence at 841 Alpine Meadows Lane consists of a single-family residence with at least one (1) ancillary building constructed in 1947. The built-environment resource was not formally recorded during the current study, as currently proposed the project would avoid it. Additional technical studies are required to evaluate the significance of the built-environment resource against CRHR criteria, if it were to be impacted. Significance evaluations are necessary to determine whether a cultural resource qualifies as a historical resource under CEQA. The studies must include preparation of DPR 523 forms, an architectural assessment, and archival research to determine historical association, if any, to persons or events of local, state, or national significance.

The concrete well (QUIN-001H) consists of a hexagonal-shaped formed concrete well embossed with the year 1934 on its east facing wall and was once associated with the windmill remains. According to Google Earth aerial images, the windmill was removed sometime between November 2013 and April 2014. The built-environment resource was not formally recorded during the current study, as currently proposed the project would avoid it. Additional technical studies are required to evaluate the significance of the built-environment resource against the CRHR criteria, if it were to be impacted. Significance evaluations are necessary to determine whether a cultural resource qualifies as a historical resource under CEQA. The studies must include preparation of DPR 523 forms, an architectural assessment, and archival research to determine historical association, if any, to persons or events of local, state, or national significance.

With the proposed project's avoidance of onsite historic resources that are potentially significant, and with implementation of Mitigation Measures CUL-1 through CUL-5, it would result in **less than significant impacts with mitigation incorporated** directly, indirectly and cumulatively to historical resources pursuant to § 15064.5 of the CEQA Guidelines.

Mitigation Measures

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

MM CUL-2: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

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

1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:
    a. Project grading and development scheduling;
    b. The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists;
    c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;
    d. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and
    e. The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-4.

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

1. **Consulting Tribes Notified**: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.
2. **Temporary Curation and Storage**: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and
3. **Treatment and Final Disposition**: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:
    a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.
    b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the necessary fees for permanent curation;
    c. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default; and
    d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native American Tribal Monitors within 60 days of completion of grading. This report shall document the type of cultural resources recovered and the disposition of such resources. This report shall be submitted to the City of Riverside, Eastern Information Center, and interested tribes.

MM CUL-4: Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

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

MM CUL-5: Prior to issuance of a grading permit, the City shall confirm that the final grading plan avoids impacts to the prehistoric bedrock milling site (33-015434), single-family residence (841 Alpine Meadows Lane), and/or concrete well (QUIN-001H). If the Project development footprint is modified to include direct and/or indirect impacts to the prehistoric bedrock milling site (33-015434), single-family residence (841 Alpine Meadows Lane), and/or concrete well (QUIN-001H), additional technical studies (i.e., archaeological evaluation report and historical resources evaluation report) shall be required to evaluate the significance of these resources against CRHR criteria. The archaeological evaluation will include, at a minimum, preparation of a Phase II evaluation plan, limited subsurface testing, development of a Native American cultural landscape context to evaluate historical association under Criterion 1, consultation with local Native American tribes and organizations, and preparation of an archaeological evaluation report. The historical resources evaluation will include, at a minimum, preparation of DPR 523 forms, architectural assessments, archival research to determine historical association, if any, to persons or events of local, state, or national significance, and preparation of a Historical Resources Evaluation Report. Final reports shall be submitted to the City, Project Proponent, consulting tribes, and Eastern Information Center located on the campus of the University of California, Riverside.

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

5b. Response: ***(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity, Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021 revised April 2023 and June 2023 – Appendix D)***

Less than Significant with Mitigation Incorporated. As mentioned in response 5a above, the Phase I Cultural Resources Assessment documents efforts to identify historical and archeological resources, as defined in Public Resources Code, and complies with provisions of CEQA to assess a project's potential to impact historical resources during project construction, operation, and/or maintenance. These efforts include a cultural resources records search, background research, coordination with the Native American Heritage Commission and local Native American tribes and organizations, a geoarchaeological assessment, and an intensive pedestrian survey of the entire project site. Based on the current site plan the bedrock milling site, single family residence at 841 Alpine Meadows Lane (Lot 1), and concrete well will be avoided with the proposed project and left in place.

The bedrock milling site (33-015434) was originally recorded in 2006 as a single slick on a low-lying granitic boulder in the middle of a drainage. The slick is oval-shaped measuring 36 cm by 27 cm and exhibits a high degree of polish but is eroding along its margins. No artifacts or other Native American features were observed on the surface. The site is associated with Native American land use activities. It is unlikely that significant subsurface deposits (e.g., buried midden, features, artifacts) would be found in association with the site; however, a formal Phase II evaluation of site significance against all four CRHR criteria would be required if this site would be impacted by the project.

With the proposed project's avoidance of onsite historic resources that are potentially significant, and with implementation of Mitigation Measures MM CUL-1 through CUL-5, it would result in **less than significant impacts with mitigation incorporated** directly, indirectly and cumulatively to archeological resources pursuant to § 15064.5 of the CEQA Guidelines.

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

5c. Response: ***(Source: GP 2025 FPEIR Figure 5.5-1 - Archaeological Sensitivity and Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity, AB 52 Consultation, Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021 revised April 2023 and June 2023 – Appendix D)***

Less than Significant with Mitigation Incorporated. The proposed Project is located within a High Archeological Sensitivity Zone and High Prehistoric Cultural Resources Sensitivity Zone, as outlined in GP FPEIR Figures 5.5-1 and 5.5-2. Where construction is proposed in undeveloped areas, disturbance on vacant lands could have the potential to disturb or destroy unknown buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. However, as outlined in the Phase I Cultural Resources Assessment, the project site is disturbed and contains only one bedrock

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

milling site. The proposed project is not likely to disturb or destroy buried Native American human remains or other human remains. In the event that Native American human remains or other human remains are inadvertently discovered during project-related construction activities, the steps and procedures specified in Health and Safety Code Section 7050.5, State CEQA Guidelines 15064.5€, and Public Resources Code 5097.98 shall be implemented and would reduce impacts to human remains, including those interred outside of formal cemeteries to a **less than significant with mitigation incorporated** level.

6. ENERGY

Would the project:

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

6a. Response: ***(Source: City of Riverside, California, Five Year Integrated Resource Plan 2018)***

Less than Significant Impact. Construction activities for the proposed project would consume energy through the operation of heavy off-road equipment, trucks, and worker traffic, primarily in the form of equipment fuel consumption. Construction is anticipated to take approximately 12-18 months. As the proposed project is small, the construction of 3 new single-family residences, it would not require an extensive fleet of construction equipment or workers. In addition, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with local, state, and federal regulations limiting engine idling times and requiring recycling of construction debris would further reduce the amount of transportation fuel demand during the project's construction. Due to the small construction site, small construction crew, and reductions in transportation fuel use, the proposed project would not result in wasteful and inefficient use of energy resources during construction and impacts would be **less than significant**.

The proposed Project would result in a long-term minor increase in demand for electricity and natural gas. However, the Project would be designed according to the most recent Title 24 standards of the California Code of Regulations. Part 6 of Title 24 specifically establishes energy efficiency standards for residential and non-residential buildings constructed in the State of California to reduce energy demand and consumption. Part 6 is updated periodically to incorporate and consider new energy efficiency technologies and methodologies. The most recent amendments, referred to as the 2019 California Building Codes, which include the California Green Building Standards Code (Title 24, Part 11) and the California Energy Code (Title 24 Part 6), which went into effect for all applications submitted on or after January 1, 2019. The proposed project would meet current Title 24 requirements. These measures would reduce inefficient, wasteful, and unnecessary use of electricity or natural gas during operation of the Project and impacts would be **less than significant**.

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

6b. Response: (*Source: City of Riverside, California, Five Year Integrated Resource Plan 2018)*

Less than Significant Impact. The City of Riverside has a Five-Year Integrated Resource Plan (2018), which includes renewable energy and energy efficiency plans and programs. The project would not obstruct the ability of the City to continue to contract with renewable energy purchase agreements pursuant to this plan or their recent planned portfolio. Compliance with the Integrated Resource Plan regulations will ensure that impacts related to renewable energy and energy efficiency would **less than significant** directly, indirectly, and cumulatively.

7. GEOLOGY AND SOILS.

Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning	☐	☐	☐	☒

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				

7i. Response: (*Source: General Plan 2025 Figure PS-1 – Regional Fault Zones & General Plan 2025 FPEIR Appendix E – Geotechnical Report)*

No Impact. Seismic activity is to be expected in Southern California. In the City of Riverside, there are no Alquist-Priolo zones. The project site does not contain any known fault lines and the potential for fault rupture or seismic shaking is low. Compliance with the California Building Code regulations will ensure that **no impacts** related to strong seismic ground will occur directly, indirectly, and cumulatively.

ii. Strong seismic ground shaking?	☐	☐	☒	☐

7ii. Response: (*Source: General Plan 2025 FPEIR Appendix E – Geotechnical Report, Riverside General Plan 2025, Figure PS-1 Regional Fault Zones)*

Less than Significant Impact. The San Jacinto Fault Zone located outside of the northeastern portion of the City, and or the Elsinore Fault Zone, located in the southern portion outside of the City's Sphere of Influence, have the potential to cause moderate to large earthquakes that would cause intense ground shaking. The San Jacinto Fault runs more than 125 miles, from northwest of El Centro in Imperial County to northwest of San Bernardino, passing through the intersection of Interstates 10 and 215, the city of Loma Linda and the Box Springs Mountains. This fault has the capability of producing up to a 7.0 magnitude earthquake. The Elsinore Fault Zone runs parallel of the eastside of the Cleveland National Forest from Chino Hills to San Diego, the closest point from the project site is approximately 12 miles west near Corona. Moreover, as seen in (Figure PS-1 Regional Fault Zones) in the Riverside General Plan, all regional fault zones are outside of the City of Riverside boundary and proposed sphere of influence. Because the proposed project is required to and would comply with California Building Code regulations, and the project site does not contain any known fault zones, impacts associated with strong seismic ground shaking will have **a less than significant impact** directly, indirectly, and cumulatively.

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

7iii. Response: (*Source: General Plan 2025 Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones, General Plan 2025 FPEIR Figure PS-3 – Soils with High Shrink-Swell Potential, and Appendix E – Geotechnical Report)*

Less than Significant Impact. The project site is partially located in an area with high liquefaction zone, as depicted in the (General Plan 2025 Liquefaction Zones Map – Figure PS-2). Compliance with the California Building Code regulations will ensure that impacts related to seismic-related ground failure, including liquefaction would be **less than significant** directly, indirectly, and cumulatively.

iv. Landslides?	☐	☐	☐	☒

7iv. Response: (*Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Appendix E – Geotechnical Report, Title 18 – Subdivision Code, Title 17 – Grading Code, and for projects over 1 acre: Storm Water Pollution Prevention Plan SWPPP)*

No Impact. The project site and its surroundings have generally low relief topography with slopes of 0-10% per Figure 5.6-1 of the General Plan 2025 Program Final PEIR, and thus, is not located in an area prone to landslides. Therefore, there will be **no impact** related to landslides directly, indirectly, and cumulatively.

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

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

7b. Response: (*Source: General Plan 2025 FPEIR Figure 5.6-1 – Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, RMC Title 18 – Subdivision Code, RMC Title 17 – Grading Code, and for projects over 1 acre: SWPPP)*

Less than Significant Impact. Erosion and loss of topsoil could occur because of the project and as a result of grading activities. However, State and Federal requirements call for the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) establishing erosion and sediment controls for construction activities. The project must also comply with the National Pollutant Discharge Elimination System (NPDES) regulations. In addition, all development activity must comply with Titles 17 and 18 of the RMC, which also requires the implementation of measures designed to minimize soil erosion. Compliance with State and Federal requirements as well as with Titles 17 and 18 of the RMC will ensure that soil erosion or loss of topsoil will be **less than significant impact** directly, indirectly, and cumulatively.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

7c. Response: (*Source: General Plan 2025 Figure PS-1 – Regional Fault Zones, Figure PS-2 – Liquefaction Zones, General Plan 2025 FPEIR Figure PS-3 – Soils with High Shrink-Swell Potential, Figure 5.6-1 - Areas Underlain by Steep Slope, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, and Appendix E – Geotechnical Report)*

Less than Significant Impact. The general topography of the subject site is slightly hilly with mild rolling hill slopes of generally 0-10%. The project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and thus on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse is not anticipated. Compliance with the City's existing codes and the policies contained in the General Plan 2025 help to ensure that impacts related to geologic conditions are reduced to a **less than significant** level, directly, indirectly, and cumulatively.

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

7d. Response: (*Source: General Plan 2025 FPEIR Figure 5.6-4 – Soils, Figure 5.6-4 – Soils, Table 5.6-B – Soil Types, Figure 5.6-5 – Soils with High Shrink-Swell Potential, Appendix E – Geotechnical Report, and California Building Code as adopted by the City of Riverside and set out in Title 16 of the Riverside Municipal Code)*

Less than Significant Impact. Expansive soils are soils with a significant amount of clay particles that have the ability to give up water (shrink) or take on water (swell). Fine-grained soils, such as silts and clays, may contain variable amounts of expansive clay minerals. When these soils swell, the change in volume exerts significant pressures on loads that are placed on them. This shrink/swell movement can adversely affect building foundations, often causing them to crack or shift, with resulting damage to the buildings they support. The project site is not located in an area of soils with high shrink-swell potential, as identified in GP 2025 FPEIR Figure 5.6-5 Soils with High Shrink-Swell Potential. Thus, the project would have **less than significant impacts,** directly, indirectly, or cumulatively related to creating substantial risk to life or property from expansive soils.

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

7e. Response: (*Source: General Plan 2025 FPEIR Figure 5.6-4 – Soils, Table 5.6-B – Soil Types)*

No Impact. The proposed project will be served by municipal sewer system infrastructure. Therefore, the project will have **no impact,** directly, indirectly, or cumulatively related to use of septic tanks.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

7f. Response: ***(Source: General Plan 2025 Policy HP-1.3)***

Less than Significant Impact. The project site is located within an urban built-up area and is largely surrounded by existing development. The site has been subject to historical and ongoing anthropogenic disturbance associated with an existing residence, and much of the site consists of the residence, associated structures, and disturbed areas. Activities including construction-related and earth-disturbing actions, could damage or destroy fossils in rock units if they were to occur on the site. The site does contain a small area of rock outcropping in the northeast corner of the site. However, this portion of the site will not be graded or otherwise impacted and will have an Open Space Easement recorded on it. As the project site where grading activities and the three new houses will be constructed is disturbed and cleared, and does not have rock outcrops or other unique geologic feature, the project is not anticipated to destroy a unique paleontological or geologic feature and impacts are **less than significant impact,** directly, indirectly and cumulatively.

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

8a. Response: (*Source: General Plan 2025 Air Quality Element and FPEIR Section 5.3 Air Quality)*

Less than Significant Impact. The proposed project includes construction of three (3) new single-family residences in an area already developed with one (1) single-family residence and designated in the General Plan as VLDR - Very Low Density Residential. Projects that are consistent with the projections of employment and population forecasts identified by the Southern California Association of Governments (SCAG) are considered consistent with the AQMP growth projections, since these forecast numbers were used by SCAG's modeling section to forecast travel demand and air quality for planning activities such as the Regional Transportation Plan (RTP), the SCAQMD's AQMP, Regional Transportation Improvement Program (RTIP), and the Regional Housing Plan. This project is consistent with the projections of employment and population forecasts identified by the SCAG that are consistent with the General Plan 2025 "Typical Growth Scenario." Due to the size and scope of the proposed project, it is anticipated that the project related construction and operations would have a **less than significant** direct, indirect, or cumulative impact on GHG emissions in the environment.

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

8b. Response: (*Source: General Plan 2025 Air Quality Element and FPEIR Section 5.3 Air Quality)*

Less than Significant Impact. The SCAQMD supports State, Federal and international policies to reduce levels of ozone depleting gases through its Global Warming Policy and rules and has established an interim Greenhouse Gas (GHG) threshold. As indicated in Question A, above, the project would comply with the City's General Plan policies and State Building Code provisions designed to reduce GHG emissions. In addition, the project would comply with all SCAQMD applicable rules and regulations during construction of the three (3) residential units and will not interfere with the State's goals of reducing GHG emission to 1990 levels by the year 2020 as stated in AB 32 and an 80 percent reduction in GHG emissions below 1990 levels by 2050 as stated in Executive Order S-3-05. Thus, a **less than significant impact** will occur directly, indirectly, and cumulatively in this regard.

9. HAZARDS & HAZARDOUS MATERIALS. Would the project:				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

9a. Response: (*Source: General Plan 2025 Public Safety Element, GP 2025 FPEIR, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code, Riverside Fire Department EOP, 2002 and Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1, and OEM's Strategic Plan)*

Less than Significant Impact. The construction facilitated by this project has the potential to create a hazard to the public or environment through the routine transportation, use and disposal of construction related hazardous materials as the project would include the delivery and disposal of hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical of materials delivered to construction sites. The California State Department of Toxic Substances Control operates programs for proper hazardous waste disposal and transport and takes enforcement actions against those who mishandle or dispose of hazardous wastes improperly. The Riverside County Department of Environmental Health also requires licensed hazardous waste haulers to collect and transport hazardous wastes. Compliance with the requirements of the California State Department of Toxic Substances Control and the Riverside County Department of Environmental Health would reduce the impact to less than significant levels. Compliance with the requirements of the California DTSC and Riverside County of Environmental Health is not considered unique mitigation pursuant to CEQA. The future use of the site as three single-family residences could include the storage and use of hazardous materials such as fuels, oils, solvents, pesticides, electronic waste, pool supplies, mediations, and other materials. As future residents are expected to generally comply with Federal, State, and local agencies applicable regulations related to the handling, storage, and disposal of hazardous materials the proposed project is expected to have a **less than significant** impact directly, indirectly, and cumulatively.

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?	☐	☐	☒	☐

9b. Response: (*Source: General Plan 2025 Public Safety Element, GP 2025 FPEIR Tables 5.7 A – D, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code, City of Riverside's EOP, 2002 and Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1, OEM's Strategic Plan, DTSC EnviroStor Database Listed Sites).*

Less than Significant Impact. The project site does not contain any hazardous materials sites as documented in the California Department of Toxic Substances Control's (DTSC) *EnviroStor* online database. Therefore, construction activities would not be expected to result in the release of any onsite hazardous materials. Also, compliance with all applicable Federal, State, and local laws related to the transportation, use and storage of hazardous materials would reduce the likelihood and severity of accidents during transit, use and storage to a **less than significant impact** directly, indirectly, and cumulatively.

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

9c. Response: (*Source: General Plan 2025 Public Safety and Education Elements, GP 2025 FPEIR Table 5.7-D - CalARP RMP Facilities in the Project Area, Figure 5.13-2 – RUSD Boundaries, Table 5.13-D RUSD Schools, Figure 5.13-3 AUSD Boundaries, Table 5.13-E AUSD Schools, Figure 5.13-4 – Other School District Boundaries, California Health and Safety Code, Title 49 of the Code of Federal Regulations, California Building Code, Google Maps.)*

Less than Significant Impact. The project site is not located within a one-quarter mile radius of a school. The nearest school is Washington Elementary which is approximately 2 miles northwest from the project site. Potential hazardous materials, such as fuel, paint products, lubricants, solvents, cleaning products, and fertilizers may be used and/or stored on site during construction and operation of the project. However, due to the limited quantities of these materials to be used by the project, they are not considered hazardous to the public at large. In accordance with the City's Hazardous Materials Policy, the transport, use, and storage of hazardous materials during the construction and operation of the site would be conducted pursuant to all applicable local, State, and

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
federal laws, including but not limited to Title 49 of the Code of Federal Regulations for the safe transportation of hazardous materials, and in cooperation with the County's Department of Environmental Health. Furthermore, the proposed land use, as residential, would not entail the manufacturing or disposal of hazardous materials. Compliance with all applicable local, State and federal laws would ensure a less than significant impact from routine transport, use, or disposal of hazardous materials. Compliance with all applicable Federal, State, and local regulations would reduce potential exposure of schools to hazardous materials from the project to a **less than significant impact.**				
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
9d. Response: (*Source: General Plan 2025 Figure PS-5 – Hazardous Waste Sites, GP 2025 FPEIR Tables 5.7-A – CERCLIS Facility Information, Figure 5.7-B – Regulated Facilities in TRI Information and 5.7-C – DTSC EnviroStor Database Listed Sites)* **No Impact.** A review of the DTSC's EnviroStor database, the project is not located on a site identified as a hazardous material cleanup site. Therefore, the project would have **no impact** to creating any significant hazard to public or environment, directly, indirectly, or cumulatively.				
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
9e. Response: (*Source: General Plan 2025 Figure PS-6A – Airport Safety Zones and Influence Areas, RCALUCP and March Air Reserve Base/March Inland Port Comprehensive Land Use Plan (1999), Air Installation Compatible Use Zone Study for March Air Reserve Base (August 2005))* **No Impact.** The project site is within the Zone D (Flight Corridor Buffer) of the Riverside County Airport Land Use Compatibility Plan for March Air Reserve Base/Inland Port Airport. The project site is approximately 5 miles from Riverside Municipal Airport and approximately 7 miles from the March Air Reserve Base. The project site is located far from airports that create cumulative noise concerns, however, since the project is located within the Flight Corridor Buffer, it is more susceptible to noise from the occasional overflight. The noise impacts are anticipated to be low due to the occasional overflight. Furthermore, there is no residential density limits within the Flight Corridor Buffer. Therefore, the project will have **no impact** resulting in a safety hazard for people residing or working in the project area directly, indirectly, or cumulatively.				
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
9f. Response: (*Source: GP 2025 FPEIR Chapter 7.5.7 – Hazards and Hazardous Materials, City of Riverside's EOP, 2002 and Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1, and OEM's Strategic Plan)* **Less than Significant Impact.** The project will be served by existing, fully improved streets, Alpine Meadows Lane as well as a network of on-site local streets. All streets have been designed to meet the Public Works and Fire Departments' specifications. A temporary street closure is not required as part of the project's construction. Therefore, the project will have a **less than significant impact** directly, indirectly, and cumulatively to an emergency response or evacuation plan.				
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

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

9g. Response: (*Source: General Plan 2025 Figure PS-7 – Fire Hazard Areas, GIS Map Layer VHFSZ 2010, City of Riverside's EOP, 2002, Riverside Operational Area – Multi-Jurisdictional LHMP, 2004 Part 1/Part 2 and OEM's Strategic Plan, Fire Protection Plan prepared by Firewise, LLC in February 2023; Revised April 2023; January 2024 – Appendix E)*

Less than Significant Impact. The proposed project is located within a Very High Fire Severity Zone (VHFSZ). ~~Lots 2 and 3 of the proposed project would comply with the City of Riverside's Fire Department guidelines regarding residential design and providing 100-foot buffer for defensible space. Lot 4 of the proposed project would have less than the required 100-foot buffer to adjacent uncontrolled open space.~~ The proposed project does not meet 100 feet of defensible space as required by the California Fire Code. The proposed project ~~would~~ has however obtained approval from the Fire Department for an Alternate Materials & Methods of Design and Construction which includes the following project design features and City Conditions of Approval: 1) a 6-foot tall ~~concrete~~ masonry wall/barrier on the southern to eastern property line ~~side of the parcel~~ and 2) a 2-hour rated exterior wall assembly for those surfaces facing the reduced Fuel Modification Area.~~, with dual tempered glazing assemblies, for those wall surfaces facing the~~ Assembly to include 2 sheets of tempered glass for windows exposed to open space area ~~with reduced separation~~. As an alternate design the wall provided may be concrete masonry unit (CMU) and tempered glass to allow for a view. In addition, the project has the following Landscaping and Maintenance City Conditions of Approval (as identified in the project's approved Fire Protection Plan):

- Plants in Irrigated Zone 1 shall be fire resistant and shall include any pyrophytes that are high in oils and resins such as pines, eucalyptus, cedar, cypress or juniper species. Thick, succulent or leathery leaf species with high moisture content are the most 'fire resistant.' Refer to Fire Protection Plan Appendix B for examples of acceptable plants.
- Zone 1 shall be cleared of all fire prone and prohibited plant species. Refer to Fire Protection Plan Appendix A.
- Landscape designs using hardscape features such as driveways, swimming pools, concrete, rock, pavers, and similar non-combustible features to break up fuel continuity within Zone 1 are encouraged.
- Fuel Modification area shall be maintained year, as required by the Fire Protection Plan. Inspections and compliance shall be by City of Riverside.
- Shrubs shall be kept trimmed to ensure spacing is maintained.
- Grasses shall be maintained weed whipped to 4 inches.
- The area shall be maintained free of invasive plants and any volunteer native shrubs.
- All plantings should be installed with at maturity growth in mind.

The proposed alternate protection measures have been utilized in other projects within the City and state. The project shall comply with the 2022 California Building Code, Chapter 7A, California Fire Code, Chapter 49 and Public Resources Codes 4290 & 4291. Buildings and structures within the Very-High Fire Hazard Severity Zones of a Local Responsibility Area (LRA) shall maintain defensible space as outlined in the Government Code Chapter 6.8. Very High Fire Hazard Severity Zones [51175 – 51189] and any local ordinance of the City of Riverside, as well as with all requirements and/or permits by the state or federal regulations. With compliance with all City, State and Federal regulations and requirements, a **less than significant impact** regarding wildland fires, either directly, indirectly, or cumulatively from this project will occur.

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

10a.Response: (*Source: GP 2025 FPEIR Table 5.8-A – Beneficial Uses Receiving Water, Preliminary Project Specific Water Quality Management Plan prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

Less than Significant Impact. The project site is currently largely undeveloped with a small percent of impervious surface. Upon construction of the residential lots, the permeable area of the project site will increase. A preliminary WQMP has been submitted and approved by the Public Works Department for this project.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The project incorporates site design and source control BMPs including: all natural vegetation was preserved where practicable, planting areas and surface infiltration were added to take advantage of the site's natural infiltration and storage capacity, the overall coverage of paving is limited, runoff will be directed from impervious areas to adjacent landscaping minimizing directly connecting impervious areas, and runoff will be detained and retained throughout the site where practicable. Drainage is designed to flow to self-retaining landscaped areas, 3,200 SF by 2-inches deep, in the northwest corners of each lot, with any overflow discharging to Alpine Meadows Lane. These BMPs combined with compliance of existing statutes will have a **less than significant impact** directly, indirectly, and cumulatively on to any water quality standards or waste discharge.				
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

10b. Response: (*Source: General Plan 2025 Table PF-1 -- RPU Projected Domestic Water Supply (AC-FT/YR), Table PF-2 – RPU Projected Water Demand, RPU Map of Water Supply Basins, RPU Urban Water Management Plan and Preliminary Project Specific Water Quality Management Plan prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

No Impact. The proposed project is located within the Upper Santa Ana Valley – Riverside – Arlington groundwater basin. This proposed project includes the construction of 3 new residential units. The project is required to connect to the City's water and sewer system and comply with all NPDES and WQMP requirements that will ensure the proposed project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, there will be **no impact** to groundwater supplies and recharge either directly, indirectly, or cumulatively.

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

10ci Response: *(Source: Project Specific Water Quality Management Plan prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

Less than Significant Impact. The project is subject to NPDES requirements; areas of one acre or more of disturbance are subject to preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) for the prevention of runoff during construction. Erosion, siltation, and other possible pollutants associated with long-term implementation of projects are addressed as part of the Water Quality Management Plan (WQMP). Therefore, the project will have a **less than significant impact** directly, indirectly, or cumulatively to existing drainage patterns.

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

10cii Response: (*Source: Preliminary Project Specific Water Quality Management Plan prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

Less than Significant Impact. The project site is not located within a flood hazard area. Underground storm drains and streets are designed to accommodate the 10-year storm flow from curb to curb, while 100-year storms are accommodated within street rights-of-way. As outlined in the WQMP, the design capture volume will be addressed using infiltration only BMPs. Therefore, there will be **less than significant impact** directly, indirectly, or cumulatively in the rate or amount of surface runoff that it will not result in flooding on- or off-site.

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

10ciii Response: (Source: *Preliminary Project Specific Water Quality Management prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

Less than Significant Impact. The project would maintain the site's predevelopment hydrologic and drainage function. The project is over one acre in size and is required to have coverage under the State's General Permit for Construction Activities (SWPPP). As stated in the Permit, during and after construction, best management practices (BMPs) will be implemented to reduce/eliminate adverse water quality impacts resulting from construction activities. The project would incorporate stormwater BMPs including self-retaining landscaped areas that would keep runoff drainage within the developed portions within the northern areas of each lot. The southern areas of each lot would not be developed and would maintain the existing natural drainage patterns that are self-treating. Mild land gradients have been utilized for each site to extend the time of concentration which reduces peak runoff flows and increases the potential for infiltration within each lot. The project would not obstruct flood flows. Furthermore, the City has ensured that the proposed development does not cause adverse water quality impacts, pursuant to its Municipal Separate Storm System (MS4) permit through the project's WQMP. As outlined in the WQMP, the design capture volume will be addressed using infiltration only BMPs. With implementation of the SWPPP and the WQMP, the project will not create runoff water that would exceed drainage system capacity, would not redirect flood flows, or provide substantial additional sources of polluted runoff, and potential impacts are **less than significant.**

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

10civ Response: (Source: *Preliminary Project Specific Water Quality Management prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

Less than Significant Impact. As mentioned in Response 10ciii above, the project would maintain the site's predevelopment hydrologic and drainage function. The project is over one acre in size and is required to have coverage under the State's General Permit for Construction Activities (SWPPP). As stated in the Permit, during and after construction, best management practices (BMPs) will be implemented to reduce/eliminate adverse water quality impacts resulting from construction activities. The project would incorporate stormwater BMPs including self-retaining landscaped areas that would keep runoff drainage within the developed portions within the northern areas of each lot. The southern areas of each lot would not be developed and would maintain the existing natural drainage patterns that are self-treating. Mild land gradients have been utilized for each site to extend the time of concentration which reduces peak runoff flows and increases the potential for infiltration within each lot. The project would not obstruct flood flows. Furthermore, the City has ensured that the proposed development does not cause adverse water quality impacts, pursuant to its Municipal Separate Storm System (MS4) permit through the project's WQMP. As outlined in the WQMP, the design capture volume will be addressed using infiltration only BMPs. With implementation of the SWPPP and the WQMP, the project will not create runoff water that would exceed drainage system capacity, would not redirect flood flows, or provide substantial additional sources of polluted runoff, and potential impacts are **less than significant**.

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

10d. Response: (*Source: General Plan 2025 Figure PS-4 – Flood Hazard Areas, GP 2025 FPEIR Chapter 5.8 – Hydrology and Water Quality)*

Less than Significant Impact. Per GP 2025 Figure PS-4, the project site is not located within the 500-year or 0.2% annual chance of flood area, but it is located partially within/adjacent to the 10-year or 1% annual chance of flood area, which is associated with Prenda Creek to the south of the project site. The three single family residences will be constructed up on the northern and elevated portion of the site and is not expected to be susceptible to flooding.

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

Tsunamis are large waves that occur in coastal areas; therefore, since the City is not located in a coastal area, the project is not susceptible to tsunamis. Seiches are waves that oscillate in lakes, bays, or gulfs as a result of seismic or atmospheric disturbances. The project site is not within proximity to Lake Mathews or Lake Evans and is not susceptible to seiches.

Additionally, the proposed project site is located upland, north and outside of the Prenda Dam inundation area, as identified in the General Plan 2025 Figure PS-4 – Flood Hazard Areas.

Therefore, the proposed project will have a **less than significant impact** either directly, indirectly, or cumulatively related to flood hazards, tsunamis, and seiche zones and release of pollutants due to project inundation.

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

10e. Response: (*Source: General Plan 2025 Table PF-1 -- RPU Projected Domestic Water Supply (AC-FT/YR), Table PF-2 – RPU Projected Water Demand, RPU Map of Water Supply Basins, RPU Urban Water Management Plan and Preliminary Project Specific Water Quality Management Plan prepared by Ackerman Associates 2000, Inc. in March 2022 – Appendix F)*

No Impact. As mentioned in Response 10b above, the proposed project is located within the Upper Santa Ana Valley – Riverside – Arlington groundwater basin. This proposed project includes the construction of 3 new residential units. The project is required to connect to the City's water and sewer system and comply with all NPDES and WQMP requirements that will ensure the proposed project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, there will be no impact to groundwater supplies and recharge either directly, indirectly, or cumulatively.

11. LAND USE AND PLANNING: Would the project:				
a. Physically divide an established community?	☐	☐	☒	☐

11a. Response: (*Source: General Plan 2025 Land Use and Urban Design Element, Project site plan, Google Maps)*

Less than Significant Impact. The proposed project has been designed to be consistent with the fit into the pattern of development of the surrounding area providing adequate access, circulation, and connectivity consistent with the General Plan 2025, and in compliance with the requirements of the Zoning and Subdivision Codes. The parcel is mostly vacant with only one (1) existing residence on the western portion of the parcel. The proposed project will not divide an established community, but rather subdivide one lot into four lots with three new residential homes. Therefore, the project will have a **less than significant impact** directly, indirectly, or cumulatively from physically dividing 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?	☐	☐	☒	☐

11b. Response: (*Source: General Plan 2025, General Plan 2025 Figure LU-10 – Land Use Policy Map, Table LU-5 – Zoning/General Plan Consistency Matrix, Figure LU-7 – Redevelopment Areas, Title 19 – Zoning Code, Title 18 – Subdivision Code, Title 7 – Noise Code, Title 17 – Grading Code, Title 20 – Cultural Resources Code, Title 16 – Buildings and Construction and Citywide Design and Sign Guidelines)*

~~**No**~~ **Less than Significant Impact.** The project site has the land use designation of Very Low Density Residential (VLDR) and is zoned R-1-1/2 Acre – Single – Family Residential Zone. The R-1-1/2 Acre zone is established for large lot single-family residences where the keeping of livestock and other farm animals and agricultural uses are not permitted. The proposed project is consistent with the land use designation of VLDR and will meet the zoning standards for the R-1-1/2 Acre zone. The project is an infill project consistent with the General Plan 2025 and the existing surrounding residential development.

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

The provisions for hillside/arroyo grading as defined in Section 17.28.020 of the Municipal Code apply to all excavation and grading of any land within or adjacent to the boundaries of Prenda Arroyo. Section 17.28.020 states in part, "No development or grading of any kind shall be permitted within 50 feet of the limits of the Mockingbird Canyon, Woodcrest, Prenda, Alessandro, Tequesquite, or Springbrook Arroyos and associated tributaries as shown on Exhibits A-F. The Community & Economic Development Director shall have the authority to administratively allow grading within designated arroyo tributaries depending on the sensitivity of the area. Sensitivity shall be determined by such factors as the presence of riparian vegetation, habitat for rare or endangered species, significant rock outcroppings or other unique topographic features on the property proposed to be graded or in nearby segments of the same tributary.

A Grading Exception is needed to allow grading within the extent of the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F. The arroyos in RMC, Title 17 Grading, Exhibits A-F were mapped using aerial photography, rather than site specific assessments. A Biological Resources Study was prepared for the project, which included a detailed site assessment and associated mapping of the actual boundaries of the Prenda Arroyo and the 50-foot setback, by means of a site walk and review of available literature and data. The project biologist determined that the boundaries of the Prenda Arroyo and the 50-foot setback are smaller than what is mapped in Tile 17 – Grading Code of the RMC. Based on watercourse, topography, and vegetation the actual boundaries of the Prenda Arroyo is located within the southeast portion of the subject parcel, from east to west, as shown in Figures12a and 12b of the project's Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. – Appendix A. The 50-foot setback from the actual boundaries of the Prenda Arroyo does not extend into the proposed graded pad area. There would be no impact to the Prenda Arroyo.

The development footprint, the grading limits, and the fuel modification areas of the proposed project, are located outside the actual arroyo and a 50-foot setback from the arroyo. As such the project will not impact the actual Prenda Arroyo limits. A Grading Exception is needed to allow grading within the extent of the mapped Prenda Arroyo (as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F) and Grading Exception Findings were prepared for the project. An Open Space Easement will be recorded for the portions of Lots 2-4 located outside of the grading limits. Therefore, the project will not conflict with the provisions of RMC Title 17 Grading.

For these reasons, this project will have ~~no~~ **less than significant impact** ~~on~~ related to an applicable land use plan, policy, or regulation for the purpose of avoiding or mitigating an environmental effect, directly, indirectly, or cumulatively.

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

12a. Response: (*Source: General Plan 2025 Figure OS-1 – Mineral Resources)*

Less than Significant Impact. State-classified MRZ-2 and MRZ-3 Mineral Resource Zones are shown in GP 2025 Figure 5.10-1, Mineral Resources of the GP 2025 FPEIR. The proposed project is in MRZ-3. The MRZ-3 generally covers the eastern half of the City of Riverside and indicates that the area contains known or inferred mineral occurrences of undetermined mineral resource significance. Due to the small development size of the project, approximately 3 acres for 3 new residences, the project would not result in a significant loss of availability of land, even if it did have a mineral resource. Therefore, the impacts to known mineral resources are **less than significant** directly, indirectly, and cumulatively.

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

12b. Response: *(Source: General Plan 2025 Figure – OS-1 – Mineral Resources)*

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

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

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

13a. Response: ***(Source: General Plan Figure N-1 – 2003 Roadway Noise, Figure N-5 – 2025 Roadway Noise, Figure N-9 – March ARB Noise Contours, FPEIR Table 5.11-I – Existing and Future Noise Contour Comparison, Table 5.11-E – Interior and Exterior Noise Standards, GP EIR Appendix G – Noise Existing Conditions Report, Title 7 – Noise Code)***

Less than Significant Impact. The project is not expected to generate a substantial or temporary noise increase during construction, as standard construction activities and equipment will be used, or after construction as the project is three new homes within an already developed residential area. The project is expected to meet the City's noise standards as set forth in Title 7 of the Municipal Code and is compliant with the Noise/Land Use Noise Compatibility Criteria Matrix (Figure N-10) of the Noise Element. In compliance with the Municipal Code, construction associated with the project will not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday. Therefore, impacts are **less than significant** on the exposure of persons to or the generation of noise levels in excess of established City standards either directly, indirectly or cumulatively.

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

13b. Response: ***(Source: General Plan Figure N-1 – 2003 Roadway Noise, Figure N-5 – 2025 Roadway Noise, Figure N-9 – March ARB Noise Contours, FPEIR Table 5.11-G – Vibration Source Levels For Construction Equipment, GP EIR Appendix G – Noise Existing Conditions)***

Less than Significant Impact. Construction related activities although short term, are the most common source of groundborne noise and vibration that could affect occupants of neighboring uses. Construction related activities of the project are not expected to cause the generation of excessive groundborne vibration or groundborne noise levels. The project is expected to be in compliance with the City's noise standards and impacts related to groundborne vibration and groundborne noise levels as a result of the project to be **less than significant** directly, indirectly and cumulatively.

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

13c. Response: ***(Source: General Plan 2025 Figure N-8 – Riverside and Flabob Airport Noise Contour, Noise Element, Google Maps)***

No Impact. The proposed project is not located within an airport land use plan or within two miles of a public/private use airport. The closest airport to the project site is the Riverside Municipal Airport, which is approximately 4.5 miles northwest from the project site. The March Air Reserve Base is located approximately 5 miles southeast of the project site. Therefore, the proposed

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
project will not expose people residing or working in the project area to excessive airport related noise levels and there are **no impacts** directly, indirectly, or cumulatively.				
14. POPULATION AND HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
14a. Response: ***(Source: General Plan 2025 Table LU-3 – Land Use Designations, FPEIR Table 5.12-A – SCAG Population and Households Forecast, Table 5.12-B – General Plan Population and Employment Projections–2025, Table 5.12-C – 2025 General Plan and SCAG Comparisons, Table 5.12-D - General Plan Housing Projections 2025, Capital Improvement Program and SCAG's RCP and RTP)***				
Less than Significant Impact. The project includes construction of 3 new single-family residences, which would not substantially induce population growth. The project site has the land use designation of Very Low Density Residential (VLDR) and is zoned R-1-1/2 Acre – Single – Family Residential. The R-1-1/2 Acre zone is established for large lot single-family residences where the keeping of livestock and other farm animals and agricultural uses are not permitted. The proposed project is consistent with the land use designation of VLDR and will meet the zoning standards for the R-1-1/2 Acre zone. The project site is served by existing roadways that contain existing wet and dry utilities. As the project is consistent with the General Plan, this growth was anticipated by the General Plan, and the project would not directly induce substantial unplanned population growth in the area, and impacts would be **less than significant** directly, indirectly, or cumulatively.				
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
14b. Response: ***(Source: CADME Land Use 2003 Layer, Google Maps)***				
No Impact. The proposed project site contains one existing house within the project site which will remain. Therefore, the proposed project would not displace any existing housing, and would not necessitate the construction of housing elsewhere. **No impact** would occur.				
15. PUBLIC SERVICES.				
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?	☐	☐	☒	☐
15a. Response: ***(Source: FPEIR Table 5.13-B – Fire Station Locations, Table 5.13-C – Riverside Fire Department Statistics and Ordinance 5948 § 1, Google Maps)***				
Less than Significant Impact. The project consists of 3 new residential units within a Very High Fire Severity Zone. An increase in residences may require additional fire services but will not require the need for new fire facilities. The project will not impact fire service with regards to acceptable service ratios, response times, or other performance objectives. Adequate fire facilities and				

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

services are provided by Fire Station #10 (Arlington Heights Station) located at 2590 Jefferson Street, Riverside CA 92504, approximately 2.75 miles from the project site.

The proposed project will be constructed pursuant to the 2016 California Fire Code as adopted and amended by the City of Riverside. In addition, with implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Fire Department practices, adequate fire protection will be provided. The proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire stations or other government facilities related to fire protection, and impacts would be **less than significant** directly, indirectly or cumulatively.

b. Police protection?	☐	☐	☒	☐

15b. Response: ***(Source: General Plan 2025 Figure PS-8 – Neighborhood Policing Centers, Google Maps)***

Less than Significant Impact. Adequate police facilities and services to serve this project are provided by the Riverside Police Department Station 10 located at 8181 Lincoln Avenue, Riverside, CA 92504, which is a distance of approximately 3.5 miles from the project site. The development of 3 new single-family homes will not warrant the construction of new police facilities and will not impact police services with regards to acceptable service ratios, response times, or other performance objectives. With implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Police Department practices, there will be **less than significant** impacts on the demand for additional police facilities of services either directly, indirectly or cumulatively.

c. Schools?	☐	☐	☒	☐

15c. Response: ***(Source: FPEIR Figure 5.13-2 – RUSD Boundaries, Table 5.13-D – RUSD, Figure 5.13-3 – AUSD Boundaries, Table 5.13-E – AUSD, Table 5.13-G – Student Generation for RUSD and AUSD By Education Level, and Figure 5.13-4 – Other School District Boundaries)***

Less than Significant Impact. The project site is located in the Riverside Unified School District (RUSD), and would be served by:

- Victoria Elementary School (2910 Arlington Ave.)
- Gage Middle School (6400 Lincoln Ave.)
- Poly High School (5450 Victoria Ave.)

Table 2 depicts the generation factors for RUSD using the three land use densities proposed in the General Plan 2025 (see LU-3). As shown in the table below, it is anticipated that approximately 2 students would be generated from the proposed project. This increase in student population will not create a need for construction of new school facilities and will not impact existing schools with regards to acceptable service ratios or other performance objectives. Adequate school facilities and services are provided by RUSD to serve the project. In addition, implementation of General Plan 2025 policies, compliance with existing codes and standards, and payment of RUSD impact fees will offset the impact of the new homes. Therefore, the proposed project will have a **less than significant impact,** directly, indirectly, or cumulatively related to schools.

Table 2: Student Population Increase Calculation

School	Number of Homes	x Student Generation Rates for Single- Family Units (3)	= Number of Students Generated by Project
Elementary	3	.38	0.76
Middle	3	.11	0.33
High School	3	.21	0.63
Total	**3**		**1.72 rounded to whole number = 2**

d. Parks?	☐	☐	☒	☐

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

15d. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Parks Master Plan 2003, GP 2025 FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Google Maps)***

Less than Significant Impact. According to the General Plan EIR, the City currently maintains 48 developed parks and 11 undeveloped parks that total 2,814 acres of parkland throughout the City. As described by the General Plan EIR, the City's standards for parkland distribution is 3 developed acres per 1,000 population.

The closest City-wide/Special Use park is Arlington Heights Sports Complex at Van Buren and Cleveland (approximately 5 miles to the west). This 34.5-acre park has lighted baseball fields, soccer fields, restrooms, snack bar, basketball courts, on-site parking, children's playground, and group picnic area. Additionally, the non-city owned California Citrus State Historic Park is near the proposed project at 9400 Dufferin Avenue (approximately 4.5 miles to the west). The closest city-owned park will be the future Golden Star Park at Bradley and Washington (approximately 1 mile west). This 19.32-acre site is presently undeveloped but is listed in the City Parks inventory as a future park site. As the population of the city grows, the need for parks and other recreational facilities increases due to the additional need for new park improvements and upkeep and maintenance of existing facilities are required from the City. The City requires all development project to pay its fair share of Park Development Impact Fees before issuing building permits to ensure that adequate park facilities are available for all residents. The funds needed to accommodate additional maintenance and upkeep of parks and other recreational facilities is fulfilled through the payment of these fees. As the development is subject to all applicable Park Development Impact Fees per RMC Chapters 16.60, 16.44 and 16.76, **less than significant** impacts would occur, directly, indirectly, and cumulatively.

e. Other public facilities?	☐	☐	☒	☐

15e. Response: ***(Source: General Plan 2025 Figure LU-8 – Community Facilities, FPEIR Figure 5.13-5 - Library Facilities, Figure 5.13-6 - Community Centers, Table 5.3-F – Riverside Community Centers, Table 5.13-H – Riverside Public Library Service Standards)***

Less than Significant Impact. Adequate public facilities and services, including libraries and community centers, are provided in the Alessandro Heights neighborhood to serve this project. In addition, with implementation of General Plan 2025 policies, compliance with existing codes and standards, and through Park and Recreation and Community Services and Library practices, there will be a **less than significant impact** on the demand for additional public facilities or services either directly, indirectly or cumulatively.

16. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐

16a. Response: ***(Source: General Plan 2025 Figure PR-1 – Parks, Open Spaces and Trails, Table PR-4 – Park and Recreation Facilities, Figure CCM-6 – Master plan of Trails and Bikeways, Parks Master Plan 2003, FPEIR Table 5.14-A – Park and Recreation Facility Types, and Table 5.14-C – Park and Recreation Facilities Funded in the Riverside Renaissance Initiative, Table 5.14-D – Inventory of Existing Community Centers, Riverside Municipal Code Chapter 16.60 - Local Park Development Fees, Bicycle Master Plan May 2007)***

Less than Significant Impact. The City's adopted standard for development park acreage of 3 acres per 1,000 residents will not be adversely affected by the increase of approximately 10 residents (i.e., 3.3 persons per unit). The project site is not located in an area of the City identified to have a parkland shortage. As the population of the city grows, the need for parks and other recreational facilities increases due to the additional need for upkeep and maintenance that is required from the City. The project does not include on-site recreational facilities. The City requires all development project to pay its fair share of Park Development Impact Fees before issuing building permits to ensure that adequate park facilities are available for all residents. The funds needed to

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
accommodate additional maintenance and upkeep of parks and other recreational facilities is fulfilled through the payment of these fees. Therefore, the project will **have less than significant** impact related to increased use of recreational facilities directly, indirectly, or cumulatively.				
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
16b. Response: (*Source: Preliminary Landscape Plan)* **Less than Significant Impact.** The project will develop 3 new residential units and does not include the construction of recreational facilities. The potential impacts to the environment from this project is included within this Initial Study. As outlined in response 16a above, the increase of approximately 10 residents from the project would not require the construction or expansion of recreational facilities. **Less than significant impacts** directly, indirectly, or cumulatively are expected.				
17. TRANSPORTATION Would the project result in:				
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
17a. Response: (*Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, FPEIR Figure 5.15-4 – Volume to Capacity (V/C) Ratio and Level of Service (LOS) (Typical 2025), Table 5.15-D – Existing and Future Trip Generation Estimates, Table 5.15-H – Existing and Typical Density Scenario Intersection Levels of Service)* **No Impact.** The project is consistent with the General Plan 2025. A traffic analysis for this project is not needed as maximum project peak hour traffic contribution at local area intersections would be less than 50 peak hour trips, and below the traffic study guidelines. This project is within the range for the Typical buildout densities analyzed in the General Plan 2025. Therefore, there will be **no impact** directly, indirectly, or cumulatively to the capacity of the existing circulation system.				
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
17b. *(Source: General Plan 2025 Figure CCM-4 – Master Plan of Roadways, General Plan 2025 Figure CCM-5 – Transit Facilities, City of Riverside Draft Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment July 2020)* **Less than Significant Impact.** The City of Riverside Draft Traffic Impact Analysis Guidelines identify activities that generally will not require a Transportation Impact Analysis (TIA) that includes Vehicle Miles Traveled (VMT). This presumption is based on the substantial evidence provided in the Office of Planning and Research (OPR) Technical Advisory supporting SB 743 implementation or is related to projects that are local serving which, by definition, would decrease the number of trips or the distance those trips travel to access the development (and are VMT-reducing projects). These activities include local serving schools, parks, day care centers, gas stations, banks, hotels, student housing projects, etc. but also projects generating less than 110 daily vehicle trips, which generally corresponds to "typical" development potentials including 11 single family housing units (or less). As the proposed project includes only 3 new single family housing units, it does not require a VMT analysis. Potential impacts are **less than significant,** directly, indirectly, and cumulatively, related to VMT.				
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☒	☐

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

17c. Response: (Source: General Plan 2025 Figure PS-6B – Airport Safety Zones and Influence Areas, Riverside County Airport Land Use Compatibility Plan, 2004. http://www.rcaluc.org/Plans/New-Compatibility-Plan, Google Maps)

Less than Significant Impact. The project site is within the Flight Corridor Buffer of the Riverside County Airport Land Use Compatibility Plan for March Air Reserve Base/Inland Port Airport. The project site is approximately 5 miles from Riverside Municipal Airport and approximately 7 miles from the March Air Reserve Base. The proposed project, which will develop 3 single story, single family residential structures, will not cause a change in air traffic patterns, and impacts related to safety risks related to a change in air traffic patterns will be **less than significant** from implementation of the proposed project.

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

17d. Response: (*Source: Project Site Plans, Google Maps)*

Less than Significant Impact. The proposed project is compatible with adjacent existing residential subdivision pattern. It has been designed so as not to cause any incompatible use or additional or any hazards to the surrounding area or public. Alpine Meadows Lane is an existing, improved residential collector street that serves the project site. The project does not include any modifications to this street. This project will have a **less than significant impact** on increasing hazards through design or incompatible uses either directly, indirectly, or cumulatively.

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

17e. Response: (*Source: California Department of Transportation Highway Design Manual, Municipal Code, and Fire Code and Project Site Plans)*

No Impact. The project will be developed in compliance with Title 18, Section 18.210.030, and the City's Fire Code Section 503 (California Fire Code 2007). Such requirements include building and emergency access, adequate emergency notification, and means of egress for emergency vehicles. Alpine Meadows Lane is an existing, improved residential collector street that serves the project site. The project does not include any modifications to this street and does not require temporary closure for construction. Prior to Project approval, Riverside Fire Department would formally review all project plans to ensure compliance with applicable fire safety requirements, ensuring that emergency access is adequate. Therefore, there will be **no impact** directly, indirectly or cumulatively to emergency access.

18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐

18a. Response: (*Source: AB52 Consultation, Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021 revised April 2023 and June 2023 – Appendix D)*

Less than Significant Impact with Mitigation Incorporated. As of July 2015, California Assembly Bill 52 (AB 52) was enacted and expands CEQA by defining a new resource category, "Tribal Cultural Resources." AB 52 requires Lead Agencies evaluate a project's potential to impact tribal cultural resources. Such resources include "[s]ites, features, cultural landscapes, sacred places,

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

and objects with cultural value to a California Native American Tribe and is 1) listed or eligible for listing in the California Register of Historical Resources or included in a local register of historical resources. AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource". As discussed in Threshold 5a above, as part of the Cultural Resources Assessment prepared, archaeologists did not record any historic or archaeological resources within the grading and development footprint of the 3 new houses. A milling slick is located within the property boundary; however it is located outside the grading and development footprint and will be avoided and left in place.

Per AB 52, Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such project. On May 19, 2022 the City of Riverside sent the required notices though certified mail to the following Native American Tribes:

- Morongo Band of Mission Indians,
- San Gabriel Band of Mission Indians,
- Gabrieleno Band of Mission Indians – Kizh Nation,
- Pechanga Band of Luiseño Mission Indians,
- Soboba Band of Luiseño Indians,
- Rincon Band of Luiseño Indians,
- Morongo Band of Mission Indians,
- Cahuilla Band of Indians,
- San Manuel Band of Mission Indians, and the
- Agua Caliente Band of Cahuilla Indians.

As a result of AB 52 notices to interested tribes, the following tribes requested consultation with the City:

- Pechanga Band of Luiseño Mission Indians,
- Cahuilla Band of Indians,
- Morongo Band of Mission Indians,

The Mitigation Measures MM CUL-1 through MM CUL-5 in Section 5, Cultural Resources above were agreed to during City and Tribal consultation and will be applied to the project.

Through implementation of appropriate mitigation measures (MM CUL-1 through MM CUL-5), impacts to tribal cultural resources directly, indirectly and cumulatively as a result of the project are reduced to a **less than significant level**.

b.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

18b. Response: (*Source: AB52 Consultation, Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021 revised April 2023 and June 2023 – Appendix D)*

Less than Significant Impact with Mitigation Incorporated. Please see response to 18a. No Tribal Cultural Resources or known eligible or listed archeological/historical resources have been identified on the project site. Impacts to unknown resources would be **less than significant** with the implementation of mitigation measures MM CUL-1 through MM CUL-5.

19. UTILITIES AND SYSTEM SERVICES. Would the project:				

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

19a. Response: (*Source: FPEIR Figure 5.16-3 – Water Service Areas, Figure 5.16-4 – Water Facilities, Table 5.16-E – RPU Projected Domestic Water Supply (AC-FT/YR, Table 5.16-F – Projected Water Demand, Table 5.16-G – General Plan Projected Water Demand for RPU including Water Reliability for 2025.)*

Less than Significant Impact. The project would not result in the relocation or construction of any new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. The project is an infill project and water and sewer lines currently exist in the adjacent roadways.

The City of Public Works Department provides for the collection, treatment, and disposal of nearly all wastewater generated within the City of Riverside, through its Riverside Regional Water Quality Treatment Plan and complies with State and Federal requirements governing the treatment and discharge of wastewater. The proposed project would connect to an existing sewer pipeline in Alpine Meadows Lane. The proposed project will connect to other utilities, including gas, electric, and telecommunication also located in Alpine Meadows Lane. No relocation or construction of expanded utilities are needed for the project. Therefore, this project was found to have a **less than significant impact** on these utilities either directly, indirectly, or cumulatively.

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

19b. Response: (*Source: FPEIR Figure 5.16-3 – Water Service Areas, Figure 5.16-4 – Water Facilities, Table 5.16-E – RPU Projected Domestic Water Supply (AC-FT/YR, Table 5.16-F – Projected Water Demand, Table 5.16-G – General Plan Projected Water Demand for RPU including Water Reliability for 2025)*

Less than Significant Impact. The City's Urban Water Management Plan must be updated every five years to include the most recent population trends. As the proposed project includes less than 500 dwelling units it does not require a Water Supply Assessment pursuant to AB 610. As noted in Table 5.16-E of the Utilities section of the General Plan 2025 Final PEIR, RPU's 2025 water supply would include up to 32,138 acre-feet of supply from planned sources. These sources include additional groundwater pumping and treatment, additional exchange with the Gage Canal Company, additional potable water made available through increased recycled water use, additional supply made available through the Seven Oaks Dam Conservation storage project and increased imported water from WMWD. The proposed project would connect to existing potable water supply infrastructure in Alpine Meadows Lane. The project will not exceed expected water supplies. Therefore, the project will have **a less than significant impact** resulting in the insufficient water supplies either directly, indirectly, or cumulatively.

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

19c. Response: (*Source: FPEIR Figure 5.16-3 – Water Service Areas, Figure 5.16-4 – Water Facilities, Table 5.16-E – RPU Projected Domestic Water Supply (AC-FT/YR, Table 5.16-F – Projected Water Demand, Table 5.16-G – General Plan Projected Water Demand for RPU including Water Reliability for 2025*)

Less than Significant Impact. Refer to 19a response above. The project is consistent with the General Plan 2025 Typical Growth Scenario where future wastewater generation was determined to be adequate (see Table 5.16-K of the General Plan 2025 FPEIR). The current Wastewater Treatment Master Plan anticipates and provides for this type of project. Therefore, **a less than significant impact** to wastewater treatment directly, indirectly, or cumulatively will occur.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

19d. Response: (*Source: FPEIR Table 5.16-A – Existing Landfills and Table 5.16-M – Estimated Future Solid Waste Generation from the Planning Area)*

Less than Significant Impact. The project is consistent with the General Plan 2025 Typical Growth Scenario where landfill capacity was determined to be adequate (see Tables 5.16-A and 5.16-M of the General Plan 2025 FPEIR). Therefore, the project would result in a **less than significant impact** to landfill capacity will occur directly, indirectly, or cumulatively.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

19e. Response: (*Source: California Integrated Waste Management Board 2002 Landfill Facility Compliance Study)*

No Impact. The California Integrated Waste Management Act under the Public Resource Code requires that local jurisdictions divert at least 50% of all solid waste generated by January 1, 2000. The City is currently achieving a 60% diversion rate, well above State requirements. In addition, the California Green Building Code requires all developments to divert 50% of non-hazardous construction and demolition debris for all projects and 100% of excavated soil and land clearing debris for all non-residential projects beginning January 1, 2011. The proposed project must comply with the City's waste disposal requirements as well as the California Green Building Code and as such would not conflict with any Federal, State, or local regulations related to solid waste. Therefore, **no impacts** related to conflict with solid waste statutes will occur directly, indirectly, or cumulatively.

20. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

20a. Response: (*Source:* California Department of Forestry and Fire Protection, Fire and Resource Assessment Program – CAL Fire, Fire Hazard Severity Zones, https://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/riverside/Riverside.pdf)

Less than Significant Impact. The project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). Construction of the proposed project would not substantially impair an adopted emergency response or evacuation plan as it does not include any modifications to the existing roadway network or require any temporary closures during construction. The project will be developed in accordance with all applicable Federal, State and City requirements related to emergency response planning and emergency evacuation planning. The proposed project will be reviewed by the City Fire Department and conditions of approval will be applied to help ensure the safety of the residents and structures. These conditions will address the location of fire hydrants, construction materials, length and grade of the driveways, gated entries, and turning radius. Given the small size of the project, no impact to emergency response times or overall impacts on City Fire Department Facilities would be anticipated to occur. Therefore, **less than significant** impacts directly, indirectly, or cumulatively related to impairing an adopted emergency response plan or emergency evacuation plan are anticipated from the proposed project.

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?	☐	☐	☒	☐

20b. Response: (*Source:* California Department of Forestry and Fire Protection, Fire and Resource Assessment Program – CAL Fire, Fire Hazard Severity Zones, *Fire Protection Plan prepared by Firewise, LLC in February 2023; Revised April 2023; January 2024 – Appendix E)*

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

Less than Significant Impact. The project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). ~~Lots 2 and 3 of the proposed project would comply with the City of Riverside's Fire Department guidelines regarding residential design and providing 100 foot buffer for defensible space. Lot 4 of the proposed project would have less than the required 100 foot buffer to adjacent uncontrolled open space.~~ The proposed project does not meet 100 feet of defensible space as required by the California Fire Code. The proposed project ~~would~~ has however obtained approval from the Fire Department for an Alternate Materials & Methods of Design and Construction ~~for~~ which includes the following project design features and City Conditions of Approval: 1) a 6-foot tall ~~concrete~~ masonry wall/barrier on the southern to eastern property line ~~side of the parcel~~ and 2) a 2-hour rated exterior wall assembly for those surfaces facing the reduced Fuel Modification Area. ~~, with dual tempered glazing assemblies, for those wall surfaces facing the~~ Assembly to include 2 sheets of tempered glass for windows exposed to open space area ~~with reduced separation~~. As an alternate design the wall provided may be concrete masonry unit (CMU) and tempered glass to allow for a view. In addition, the project has the following Landscaping and Maintenance City Conditions of Approval (as identified in the project's approved Fire Protection Plan):

- Plants in Irrigated Zone 1 shall be fire resistant and shall include any pyrophytes that are high in oils and resins such as pines, eucalyptus, cedar, cypress or juniper species. Thick, succulent or leathery leaf species with high moisture content are the most 'fire resistant.' Refer to Fire Protection Plan Appendix B for examples of acceptable plants.
- Zone 1 shall be cleared of all fire prone and prohibited plant species. Refer to Fire Protection Plan Appendix A.
- Landscape designs using hardscape features such as driveways, swimming pools, concrete, rock, pavers, and similar non-combustible features to break up fuel continuity within Zone 1 are encouraged.
- Fuel Modification area shall be maintained year, as required by the Fire Protection Plan. Inspections and compliance shall be by City of Riverside.
- Shrubs shall be kept trimmed to ensure spacing is maintained.
- Grasses shall be maintained weed whipped to 4 inches.
- The area shall be maintained free of invasive plants and any volunteer native shrubs.
- All plantings should be installed with at maturity growth in mind.

The proposed alternate protection measures have been utilized in other projects within the City and state. The proposed project would not exacerbate wildfire risks due to slope, prevailing winds or other factors. Slopes proposed onsite will be graded no steeper than 2H:1V and considered to be stable. Therefore, **less than significant** impacts directly, indirectly, or cumulatively from wildfires are anticipated with the development of the proposed project.

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

20c. Response: (*Source:* California Department of Forestry and Fire Protection, Fire and Resource Assessment Program – CAL Fire, Fire Hazard Severity Zones*)*

Less than Significant Impact. The proposed project does not include installation or maintenance of infrastructure that may exacerbate fire risk as it will be served by underground utilities in the existing, improved Alpine Meadows Lane. Therefore, **less than significant** impacts directly, indirectly, or cumulatively on exacerbating wildfire risks are anticipated with the development of the proposed project.

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

20d. Response: (*Source:* California Department of Forestry and Fire Protection, Fire and Resource Assessment Program – CAL Fire, Fire Hazard Severity Zones*)*

Less than Significant Impact. The project site and its surroundings have generally low relief topography with slopes of 0-10% per Figure 5.6-1 of the General Plan 2025 Program Final PEIR, and thus, is not located in an area prone to downslope or downstream landslides. As outlined in response 10cii above, the project site is not located within a flood hazard area. Underground storm drains

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

and streets are designed to accommodate the 10-year storm flow from curb to curb, while 100-year storms are accommodated within street rights-of-way. As outlined in the WQMP, the design capture volume will be addressed using infiltration only BMPs. And the project would not result in flooding downstream and off-site. The proposed project would comply with all local, state, and federal regulations regarding fire safety. The proposed project would not expose people or structures to significant risks from downstream flooding, landslides, slope instability or drainage changes. Therefore, **less than significant** impacts directly, indirectly, or cumulatively from wildfires are anticipated with the development of the proposed project.

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

21a. Response: ***(Source: General Plan 2025 – Figure OS-6 – Stephen's Kangaroo Rat (SKR) Core Reserve and Other Habitat Conservation Plans (HCP), Figure OS-7 – MSHCP Cores and Linkages, Figure OS-8 – MSHCP Cell Areas, General Plan 2025 FPEIR Figure 5.4-2 – MSHCP Area Plans, Figure 5.4-4 - MSHCP Criteria Cells and Subunit Areas, Figure 5.4-6 – MSHCP Narrow Endemic Plant Species Survey Area, Figure 5.4-7 – MSHCP Criteria Area Species Survey Area, Figure 5.4-8 – MSHCP Burrowing Owl Survey Area, MSHCP Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, FPEIR Table 5.5-A Historical Districts and Neighborhood Conservation Areas, Figure 5.5-1 - Archaeological Sensitivity, Figure 5.5-2 - Prehistoric Cultural Resources Sensitivity, Appendix D, Title 20 of the Riverside Municipal Code, and site specific Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. September 2021, Revised May and July 2022, August 2022, October 2022 – Appendix A, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis prepared by L&L Environmental, Inc. September 2021, revised August 2022, October 2022, March 2023, May 2023 – Appendix A), Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021, revised April and June 2023 revised April 2023 and June 2023 – Appendix D)***

Less than Significant Impact with Mitigation Incorporated. Potential impacts related to habitat of fish or wildlife species were discussed in the Biological Resources Section (4) of this Initial Study and were all found to be **less than significant with mitigation** (see MM BIO-1 through MM BIO-4) directly, indirectly, or cumulatively. Additionally, potential impacts to cultural archaeological and tribal resources related to major periods of California and the City of Riverside's history or prehistory were discussed in the Cultural Resources Section (5) of this Initial Study and were found to **be less than significant with mitigation** (see MM CUL-1 through MM CUL-5) directly, indirectly, or cumulatively.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐

21b. Response: ***(Source: FPEIR Section 6 – Long-Term Effects/ Cumulative Impacts for the General Plan 2025 Program and site specific Phase I Cultural Resources Assessment prepared by L&L Environmental, Inc., December 2021, revised April and June 2023)***

Less than Significant Impact. Because the project is consistent with the General Plan 2025, no new cumulative impacts are anticipated and therefore cumulative impacts of the proposed project beyond those previously considered in the GP 2025 FPEIR are **less than significant**.

ISSUES (AND SUPPORTING INFORMATION SOURCES):	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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

Less than Significant Impact. Effects on human beings were evaluated as part of the aesthetics, air quality, geology & soils, hydrology & water quality, noise, population and housing, hazards and hazardous materials, and transportation sections of this initial study and found to be less than significant for each of the above sections. Based on the analysis and conclusions in this initial study, the project will not cause substantial adverse effects, directly or indirectly to human beings. Therefore, potential direct and indirect impacts on human beings that result from the proposed project are **less than significant**.

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

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
Biological Resources	.			
	MM BIO-1: In order to avoid impacts on nesting birds and raptors (common or special status) clearing, grubbing and grading activities shall be scheduled during the non-breeding season (generally between July 1 and February 28/29 for nesting birds and between July 1 and January 31 for nesting raptors), to the extent practicable. If project timing requires that these construction activities be conducted during breeding season (generally between March 1 and June 30 for birds; between February 1 and June 30 for raptors), a pre-construction survey or multiple surveys shall be conducted by a qualified biologist no more than 72 hours prior to disturbance to confirm the absence of active nests. If no active nests are found, no further measures would be necessary. However, if the biologists finds an active nest of a bird protected under the MBTA or the California Fish and Game Code and determines that the nest may be impacted by clearing, grubbing or grading activities, the biologist shall identify an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activities. The active nest site shall be protected until the nesting activity has ended to ensure compliance with the MBTA and California Fish and Game Code. Construction and/or encroachment into the buffer area around a known nest shall only be allowed if the biologist determines that the proposed activity would not disturb the nest occupants.	If construction activities begin between February 1 and June 30 a pre-construction survey shall be conducted by a qualified biologist within 72 hours of issuance of grading permit.	Grading Contractor Biologist City of Riverside Planning Division	Compliance with Project Conditions of Approval Final report submitted to City Community & Economic Development Department – Planning Division for review/acceptance
	MM BIO-2: In accordance with the Burrowing Owl Survey Instructions for the Western Riverside County Multiple Species Habitat Conservation Plan, a 30-day pre-construction survey for burrowing owls shall be required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, grading, tree removal, site watering, equipment staging) to ensure that no burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities. If ground-disturbing activities occur, but the site is left undisturbed for more than 30 days, a pre-construction survey shall be completed again to ensure that burrowing owl have not colonized the	Prior to issuance of grading permit, and within 30 days of grading.	Biologist Grading Contractor Regional Conservation Authority and California Department of Fish and Wildlife City of Riverside Planning Division	Final report submitted to City Community & Economic Development Department – Planning Division for review/acceptance

[3] All agencies are City of Riverside Departments/Divisions unless otherwise noted.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
	site since it was last disturbed. If burrowing owl are found, the same coordination described above will be necessary. If burrowing owls have colonized the project site prior to the initiation of ground-disturbing activities, the project proponent shall immediately inform the Regional Conservation Authority (RCA). A burrowing owl relocation plan shall be prepared and submitted to the RCA and CDFW for review and approval prior to commencement of ground disturbance activities. The burrowing owl relocation plan shall outline methods to relocate any burrowing owls occurring on the project site and ensure compliance with the MSHCP, MBTA, and California Fish and Game Code. If an active burrow is found during the breeding season (February 1 through August 31) occupied burrows shall not be disturbed and shall be provided with a protective buffer unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer shall depend on the time of year and level of disturbance.			
	MM BIO-3: The status of listing the Crotch bumble bee under the California Endangered Species Act is currently in litigation. If the litigation is resolved in favor of listing this species prior to the start of construction, a focused survey would be completed. If the species is listed and is found to be present on the site and would be impacted, an Incidental Take Permit from CDFW would be required. The ITP would outline CDFW required onsite and/or offsite mitigation to offset potential impacts from the project to less than significant levels.	Prior to issuance of grading permit, if Crotch bumble bee is still considered a candidate or is listed	City Community & Economic Development Department – Planning Division	Focused survey report submitted to City Community & Economic Development Department – Planning Division for review/acceptance. If results are negative grading permit may be issued, if results are positive then Incidental Take Permit from CDFW required and submitted to City for grading permit to be issued
	MM BIO-4: If the project grading plans are revised such that grading is extended to the south and within a 300-feet buffer from riparian habitat in Prenda Creek to the south, then either construction shall avoid the period of April 10 to July 31, or if it will occur during this period, a habitat assessment for riparian birds in that area shall be completed.	Prior to issuance of grading permit, if grading plans are revised to extend to the south and within a	City Community & Economic Development Department – Planning Division	Habitat Assessment report submitted to City Community & Economic Development Department – Planning

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
	If this area is deemed to be suitable for least Bell's vireo, southwestern willow flycatcher or the western yellow-billed cuckoo, then a focused survey shall be conducted to determine presence or absence. If present, additional avoidance and minimization measures shall be implemented as identified by the qualified biologist permitted to conduct the focused surveys for these species.	300 foot buffer from the riparian habitat in the Prenda Creek.		Division for review/acceptance
Cultural Resources	**MM CUL-1:** Prior to grading permit issuance, if there are any changes to the project site design and/or proposed grades, the Applicant and the City shall contact interested tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.	Prior to issuance of grading permit.	City Community & Economic Development Department – Planning Division	Site Plan Review and Issuance of Grading Permits.
	MM CUL-2: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources. 1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include: a. Project grading and development scheduling; b. The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on	30 days prior to issuance of grading permit.	Registered Professional Archaeologist and Paleontologist	Property Owner/Developer to provide a letter to the City from a County certified Archaeologist and Paleontologist stating they are retained and will be on call during all grading and ground-disturbing activities.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
	the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation; d. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and e. The scheduling and timing of the Cultural Sensitivity Training notes in mitigation measure MM CUL-4.			
	MM CUL-3: Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for the proposed Project, the following procedures will be carried out for treatment and disposition of the discoveries: 1. Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation. 2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and 3. Treatment and Final Disposition: The landowner shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The landowner shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same: a. Accommodate the process for on-site reburial of the discovered items with the consulting Native	During construction/ Prior to occupancy permit issuance.	Grading/ Civil Contractor Registered Professional Archaeologist and Paleontologist	Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors prior to issuance of occupancy permit.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
	American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed. b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the necessary fees for permanent curation; c. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Museum of Riverside by default; and d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native American Tribal Monitors within 60 days of completion of grading. This report shall document the type of cultural resources recovered and the disposition of such resources. This report shall be submitted to the City of Riverside, Eastern Information Center, and consulting tribes.			
	MM CUL-4: Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive	Prior to issuance of grading permit	Grading/Construction Contractor Registered Professional Archaeologist	Cultural Sensitivity Training sign-in sheet to be submitted to the City.

Impact Category	Mitigation Measures	Implementation Timing	Responsible Monitoring Party[3]	Monitoring/Reporting Method
	areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.			
	MM CUL-5: Prior to issuance of a grading permit, the City shall confirm that the final grading plan avoids impacts to the prehistoric bedrock milling site (33-015434), single-family residence (841 Alpine Meadows Lane), and/or concrete well (QUIN-001H). If the Project development footprint is modified to include direct and/or indirect impacts to the prehistoric bedrock milling site (33-015434), single-family residence (841 Alpine Meadows Lane), and/or concrete well (QUIN-001H), additional technical studies (i.e., archaeological evaluation report and historical resources evaluation report) shall be required to evaluate the significance of these resources against CRHR criteria. The archaeological evaluation will include, at a minimum, preparation of a Phase II evaluation plan, limited subsurface testing, development of a Native American cultural landscape context to evaluate historical association under Criterion 1, consultation with local Native American tribes and organizations, and preparation of an archaeological evaluation report. The historical resources evaluation will include, at a minimum, preparation of DPR 523 forms, architectural assessments, archival research to determine historical association, if any, to persons or events of local, state, or national significance, and preparation of a Historical Resources Evaluation Report. Final reports shall be submitted to the City, Project Proponent, consulting tribes, and Eastern Information Center located on the campus of the University of California, Riverside.	Prior to issuance of grading permit.	City Community & Economic Development Department – Planning Division	Site Plan Review and Issuance of Grading Permits.

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Engineer Eric Wertman Date 01/24/24

Fire Protection Plan
TTM 38174
APN 243-600-25
Riverside, California

24 February 2023; Revised 25 April 2023;19Jan24

Prepared for:
Ryan Williams
1649 Harrison Lane
Redlands, CA 92374

Certified by: _____
Mel Johnson, Owner
Certified CEQA Wildland Fire Consultant
FIREWISE 2000 LLC
P.O. BOX 339
LOWER LAKE, CA
INFO@FIREWISE2000.COM

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TTM38174
Fire Protection Plan

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Fire Protection Plan
Alpine Meadows
TTM38174
Riverside, California

1.0 GENERAL DESCRIPTION

The proposed Project would split the 5.74-acre parcel APN 243-600-025, into four lots each of an approximate 46476 sf in size. Lot 1 is currently built under a prior permit.
Lot 2, 3 and 4 would construct three (3) new single-family homes.

The subject property is currently vacant with no significant topographic features or vegetation and is characterized as undeveloped land.
The proposed Project is located within a high fire hazard zone in the City of Riverside Figure 1 Very High Fire Hazard Severity Zone (VHFHSZ).

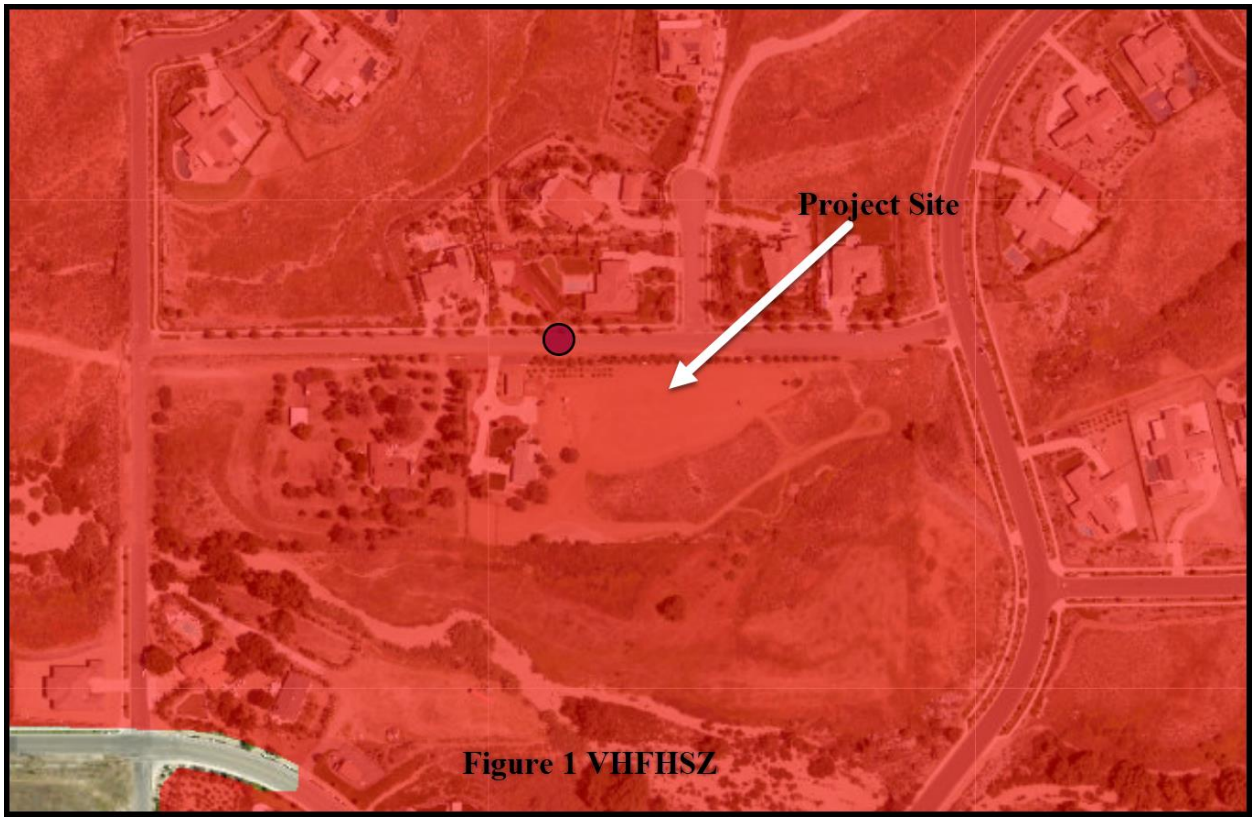

Figure 1 VHFHSZ

The project is bounded by developed properties to the north, east, and west. The area to the south is undeveloped and is believed to be a flood control drainage feature. Access into the drainage is off Kingdom Dr. (Figure 2). Figure 3 Design Site Map.

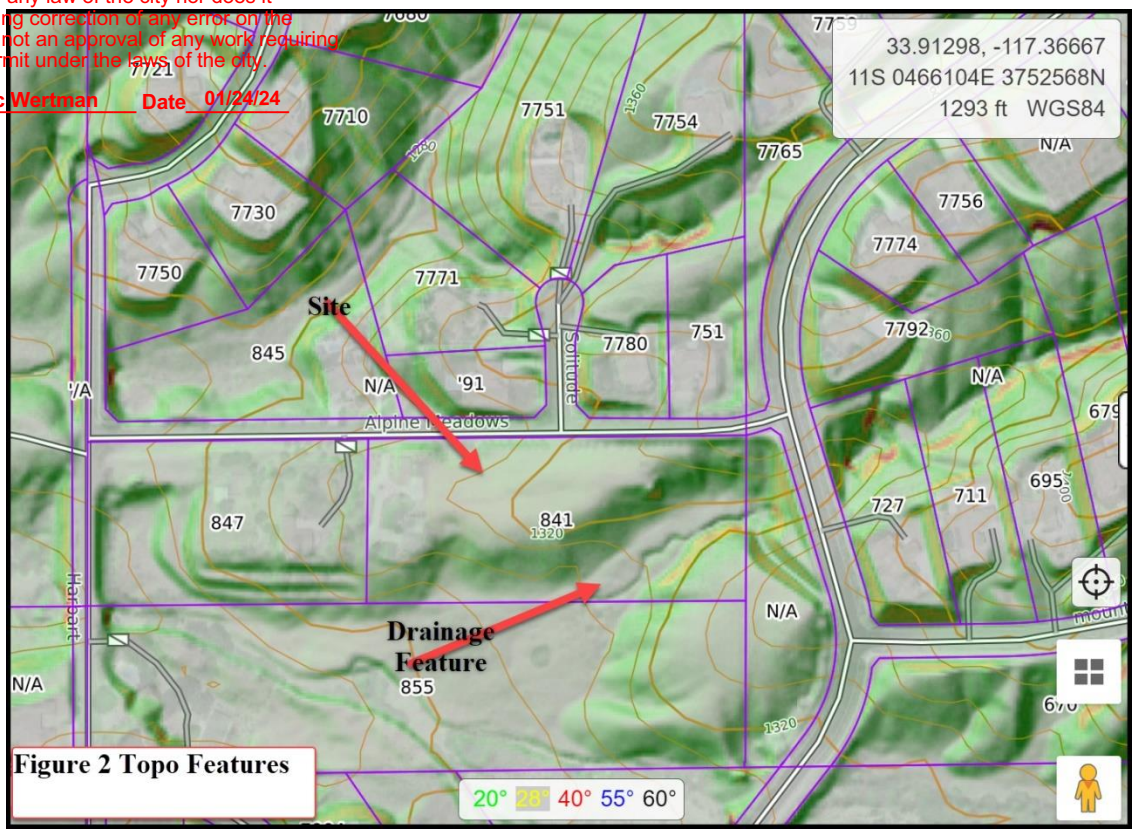

Figure 2 Topo Features

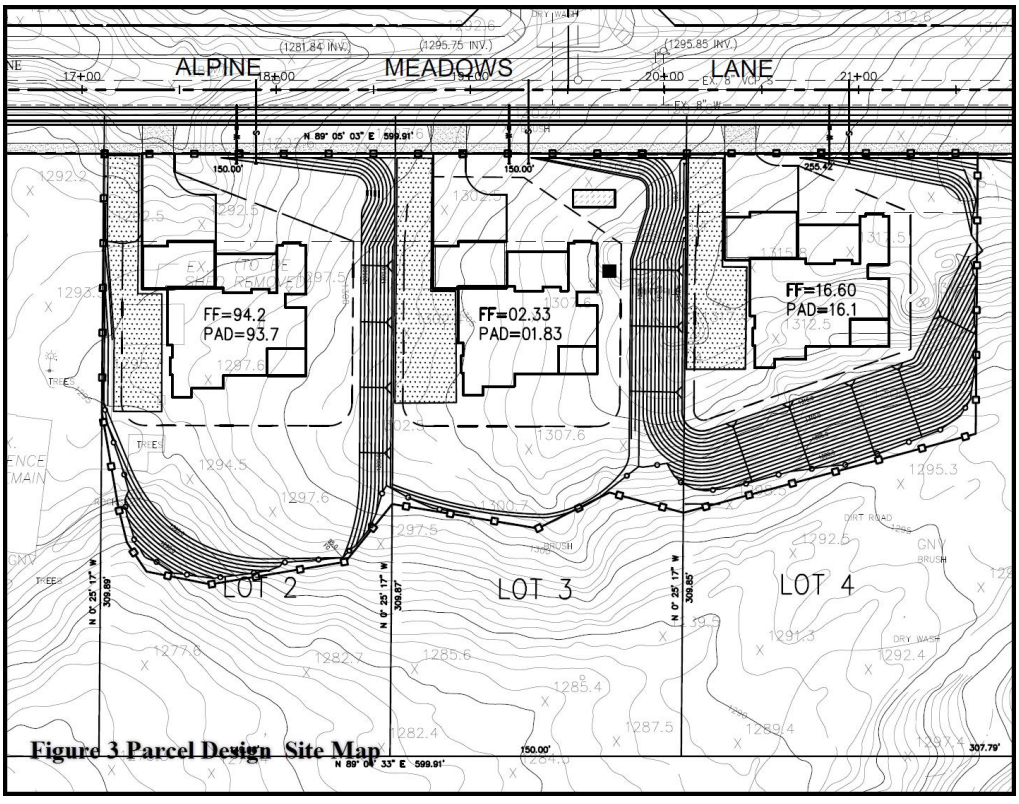

Figure 3 Parcel Design Site Map

Prior to any land development within this proposed project, a Fire Protection Plan (FPP) must be submitted to and approved by the City of Riverside Fire Department (RCFD). The FPP assesses the overall (on-site and off-site) wildland fire hazards and risks that may threaten life and property associated with the proposed residential development. In addition, this FPP establishes both short and long-term fuel modifications to minimize any projected fire hazard and risk and assigns annual maintenance responsibilities for each of the recommended fuel modification actions.

1.1 General Information

Developer/Applicant: Ryan Williams
1649 Harrison Lane
Redlands, CA 92374

Prepared By: **Monty Kalin**
Firewise2000, LLC
Associate Planner

Approving Departments: City of Riverside Planning Department
Fire Authority: City of Riverside Fire Department

The purpose of this FPP is to provide Vegetation Management Zone treatment and construction feature direction for developers, architects, builders, and the individual lot owner. The document will be used in making the structures in the proposed project safe from future wildfires.

Requirements of this FPP are based upon requirements listed in the 2022 California Fire Code, Chapter 49. Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.
Local Amendments as required; Chapter 7A-California Building Code; 2022 California Residential Code sections R337; National Fire Protection Association Standards (NFPA) 13-D, 2019 Edition.
the City of Riverside Weed Abatement, Declaration of Nuisance 6.15.020, and supporting guidelines.

Hazardous vegetation and fuels around all applicable buildings and structures shall be maintained by the following laws and/or regulations:
Public Resources Code, Section 4291. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance for implementation "General Guideline to Create Defensible Space"). California Government Code, Section 51182. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07. Riverside County Ordinances; 787.7 and 460.151.

2.0 WILDLAND FIRE HAZARD AND RISK ASSESSMENT

The proposed site is located within an area classified by the RCFD as a Very High Fire Hazard Area. Wildland fire may impact the project as there are wildland fuels within 100 feet of the project on the south side. The greatest threat comes from the adjacent undeveloped property and drainage south of the proposed development. There is potential for wildfire to enter the project site from a windblown east and south fire event. All the structures within the site would be subject to embers showers.

2.1 Weather Review and Assessment

The typical prevailing summer time wind pattern is out of the west/southwest and normally is of a much lower velocity (5-10 MPH with occasional gusts to 30 MPH) and is associated with relative humidity readings ranging between 20% and occasionally more than 70% due to the sites proximity to the ocean. All other (northwest, southeast and south) wind directions may be

occasionally strong and gusty; however, they are generally associated with cooler moist air and have higher relative humidity (>40%). They are considered a serious wildland fire weather condition when wind speeds reach >20-MPH.

The most critical weather pattern to the project area is a hot, dry offshore wind, typically called a Santa Ana. Such wind conditions are usually associated with strong (>50 MPH), hot, dry winds with very low (<15%) relative humidity. Santa Ana winds originate over the dry desert land and can occur anytime of the year; however, they generally occur in the late fall (September through November). This is also when non-irrigated vegetation is at its lowest moisture content. The following illustrations depict the the worst case weather that ***FIREWISE 2000 LLC*** could verify over the last 10 years. Note that when very low humidity occurs simultaneously with strong winds that fire behavior can be profoundly affected.

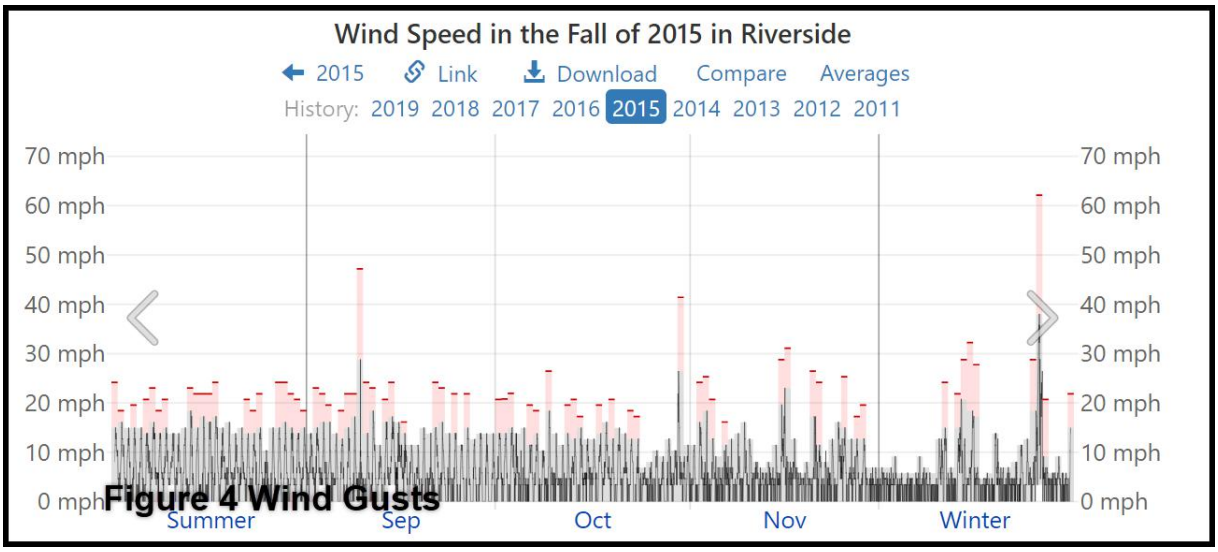

Figure 4 Wind Gusts

Figure 4 Wind Gust highest found over the past several years. Recorded at 65 mph.

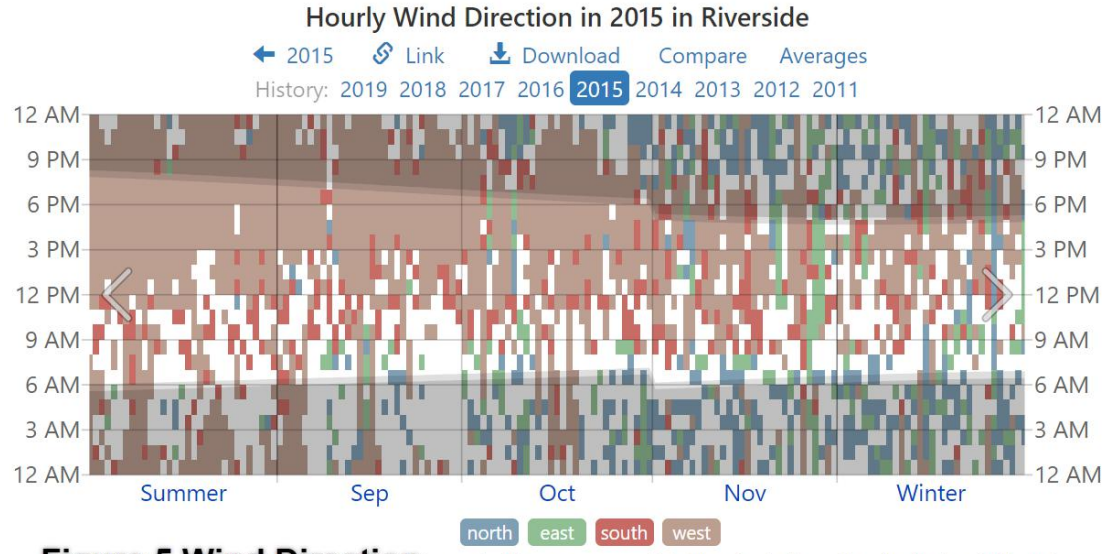

Figure 5 Wind Direction

Hourly speed and direction of wind, color coded by compass point. The shaded overlays indicate night and civil twilight.

Figure 5 note predominate wind out of the west.

2.2 Off-Site Fire Hazard and Risk Assessment

Figure 6 shows areas that potentially put the structures at risk. There is considerable open space fuel to the south and potentially along the east boundary in remaining open space.

The Fire Behavior Analysis was performed to the south and east of the project site.

Historically, wildland fires have burned in the City of Riverside during moderate west to southwest winds. This moderately strong, dry wind condition that occurs during these fires usually develops in the late afternoon or early evening. These winds occur during the normal summer and early fall (June through October) months. These winds may blow from 20-30 MPH. The most significant wind pattern that will impact the project is a Santa Ana wind which typically occurs in September through November and in the range of 50-60 MPH within this portion of Riverside County.

The current vegetative cover best resembles a SCAL 18 additionally portions were noted as more SH2 both BEHAVE Model are provided. Moderate Load, Dry Climate Shrub

The required irrigated fire-resistant/draught tolerant landscape surrounding the structure combined with ignition resistant construction requirements, will be more than sufficient to mitigate any threats from wildfire and embers coming from the east.

The greatest threat will be embers from a wildfire occurring to the east in the undeveloped open space.

2.3 On-site Fire Hazard and Risk Assessment

All the interior fuels will be removed during grading; therefore, there are no wildland fire hazards anticipated within the development once all the fuel modifications are developed as described in

Section 5.0 Fuel Modification Zone Descriptions & Required Treatments.

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Engineer Eric Wertman Date 01/24/24

SITE PHOTOS

1

View off Alpine Meadows Ln, note residential development on north side of road.

2

View across site has been cleared of all vegetation.

3

View inside fence looking west

4

View east side of Kingdom Dr

These open space fuels would create a ember risk to the tract

5

View off corner of Alpine Meadows and Kingdom
Note partial top of slope landscaping prior to open space

6

View south of proposed development open space fuels risk to development

2.4 Fire History

Historical wildland fire activity was also considered in developing this FPP. CalFire and other sources were studied, no large fires have been on or near the site within the last 25 years. This does not include any fire less than 2.5 ac that may have been extinguished by Riverside City Fire. The viewed fuel is typical of the area, it is doubt fuel it will change much in future years.

2.5 Predicting Wildland Fire Behavior

The BEHAVE 5.0.5 Fire Behavior Prediction and Fuel Modeling System developed by USDA–Forest Service research scientists Patricia L. Andrews and Collin D. Bevins at the Intermountain Forest Fire Laboratory, Missoula, Montana, is one of the best systematic methods for predicting wildland fire behavior. The BEHAVE fire behavior computer modeling system is utilized by wildland fire experts and managers nationwide. The program projects the expected spotting distance, rate-of-spread and flame lengths with a reasonable degree of certainty for use in Fire Protection Planning purposes. ***FIRE*WISE 2000, Inc**. used the BEHAVE 5.0.5 Fire Behavior Prediction Model to make the fire behavior assessments discussed below.

2.6 Wildland Fire Behavior Calculations for the Off-Site Hazardous Vegetative Fuels

Wildland fire behavior calculations have been projected for the hazardous vegetative fuels on the undeveloped areas in proximity to the proposed residences. These projections are based on scenarios that are 'worst case' Riverside County fire weather in the vicinity of the project area.

Tables 2.6.1 provides Behave Plus Inputs; fuel moisture values are at critical, and the fuel bed is unsheltered. **All scenario outputs provide the expected Flame Length (expressed in feet), Rate of Fire Spread (expressed in ft/min), and Fireline Intensity (as btu/ft/s), within the Behave run sheets as part of the Scenario**

Fuel Models were selected from project site observations of those areas within 200ft of proposed boundary, scenarios depict slope, aspect, and wind direction.

The two models selected most closely represent the model location, available fuel to burn. Flame Lengths would vary depending on the area being burnt through.

Table 2.6.1
Fire Behavior Modeling Inputs

Variable	Summer Weather (Onshore Flow)	Peak Weather (offshore/Santa Ana Condition)
1h Moisture	3%	2%
1Oh Moisture	5%	3%
1OOh Moisture	7%	5%
Live Herbaceous Moisture	50%	30%
Live Woody Moisture	60%	60%
20-foot Wind Speed (upslope/downslope)	15, 30, mph	65mph gusts
Wind Adjustment Factor	0.5	0.5
Slope Steepness	varies	varies

The following table depicts a fire burning with no-wind up slope within in the sourounding topographic area. Base line results (NON-TREATED) east facing slopes near project boundary east and south side.

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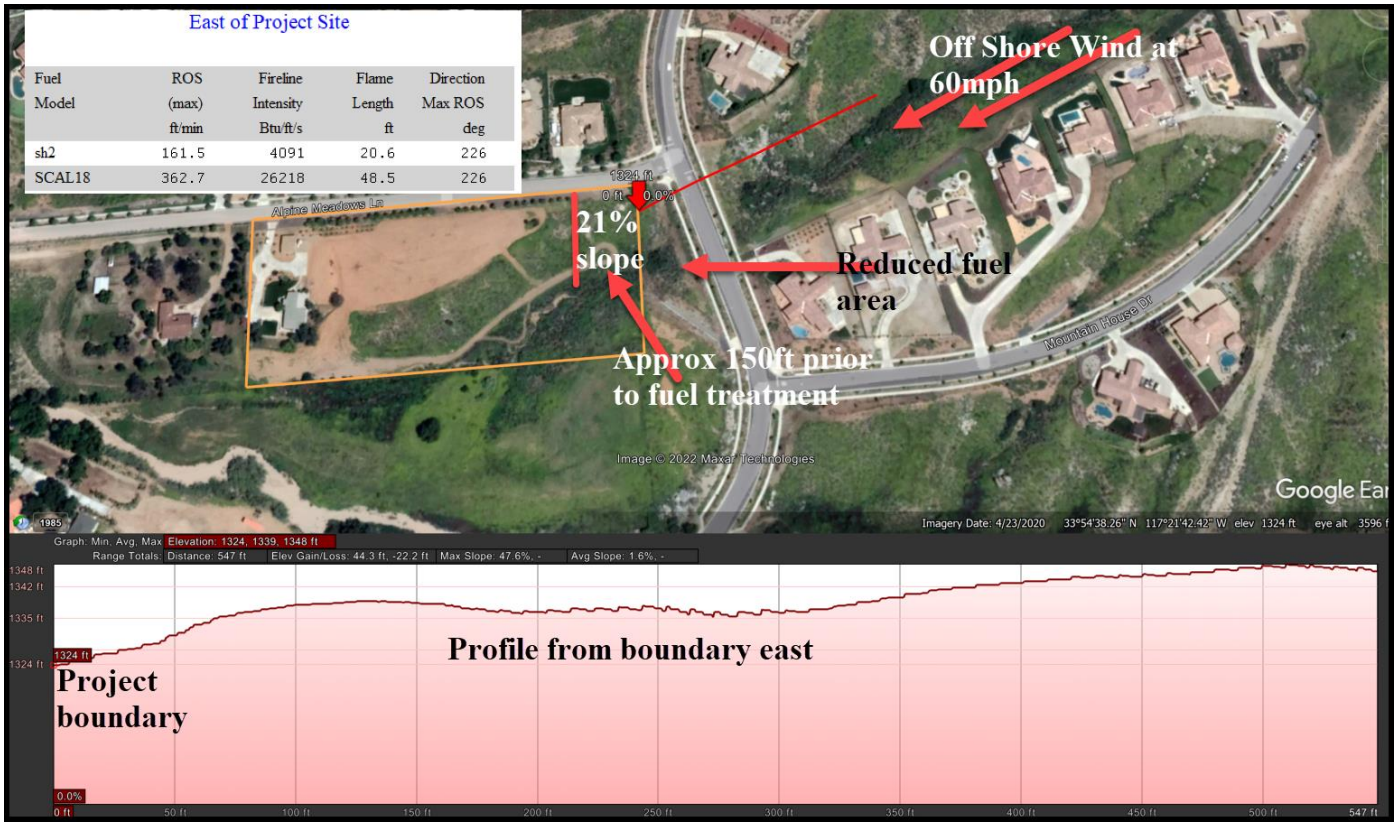
East of Project Site No Wind

Fuel Model	ROS (max)	Fireline Intensity	Flame Length	Direction Max ROS
	ft/min	Btu/ft/s	ft	deg
sh2	2.0	50	2.7	270
SCAL18	6.5	469	7.6	270

Scenario 1 Typical off shore wind event modeled as Sh2 Moderate load, dry climate shrub and SCAL 18 Sage / Buckwheat. The fuel bed lacks continuity flame lengths are probably over predicted. The future view will most likely look the same unless environmental factors change.



Additional data rate of spread, and fireline intensity can be found in the behave run next page.

Behave Results

BehavePlus 5.0.5 (Build 307)

East of Project Site

Input Worksheet

Inputs: SURFACE

Input Variables	Units	Input Value(s)
Fuel/Vegetation, Surface/Understory		
Fuel Model		sh2, SCAL18
Fuel Moisture		
1-h Moisture	%	2
10-h Moisture	%	3
100-h Moisture	%	5
Live Herbaceous Moisture	%	30
Live Woody Moisture	%	60
Weather		
20-ft Wind Speed	mi/h	65
Wind Adjustment Factor		.5
Wind Direction (from north)	deg	45
Terrain		
Slope Steepness	%	31
Aspect	deg	90
Notes		

Run Option Notes

Maximum reliable effective wind speed limit IS imposed [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

Results

Fuel Model	ROS (max)	Fireline Intensity	Flame Length	Direction Max ROS
	ft/min	Btu/ft/s	ft	deg
sh2	161.5	4091	20.6	226
SCAL18	362.7	26218	48.5	226

End

Spread Diagram follows.

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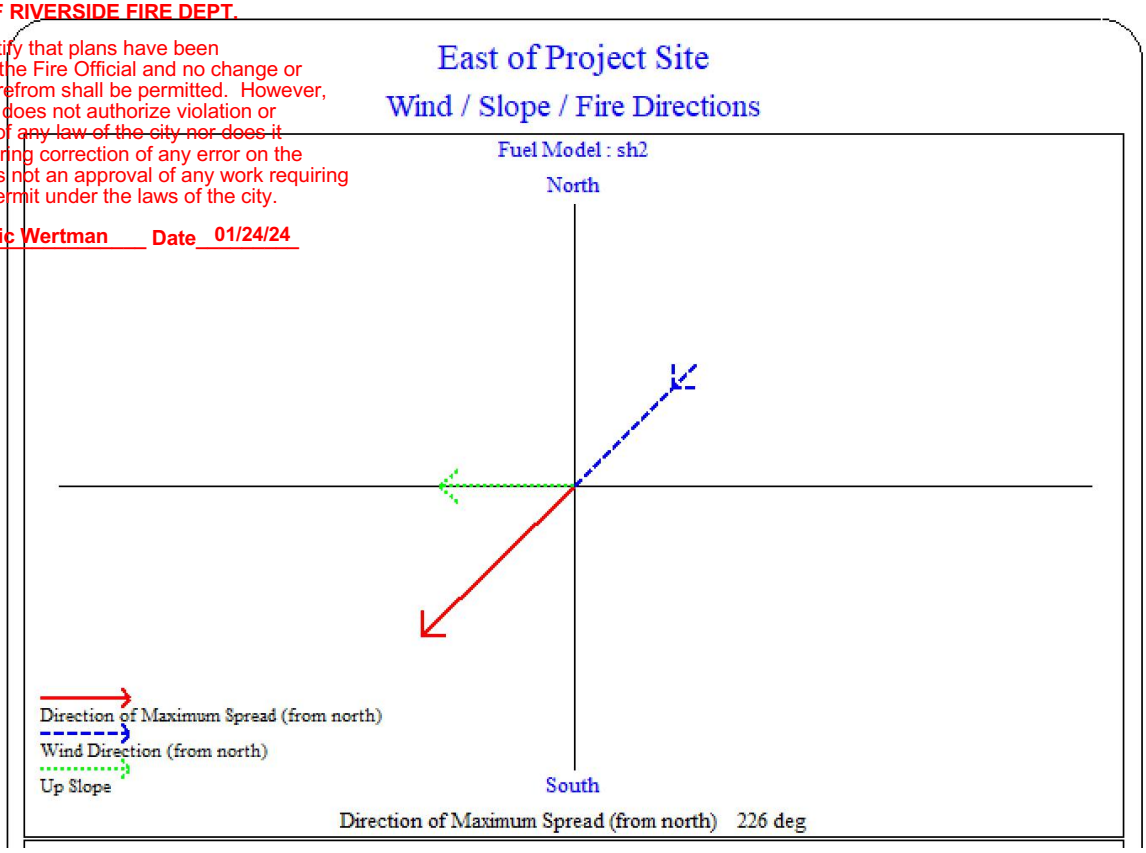
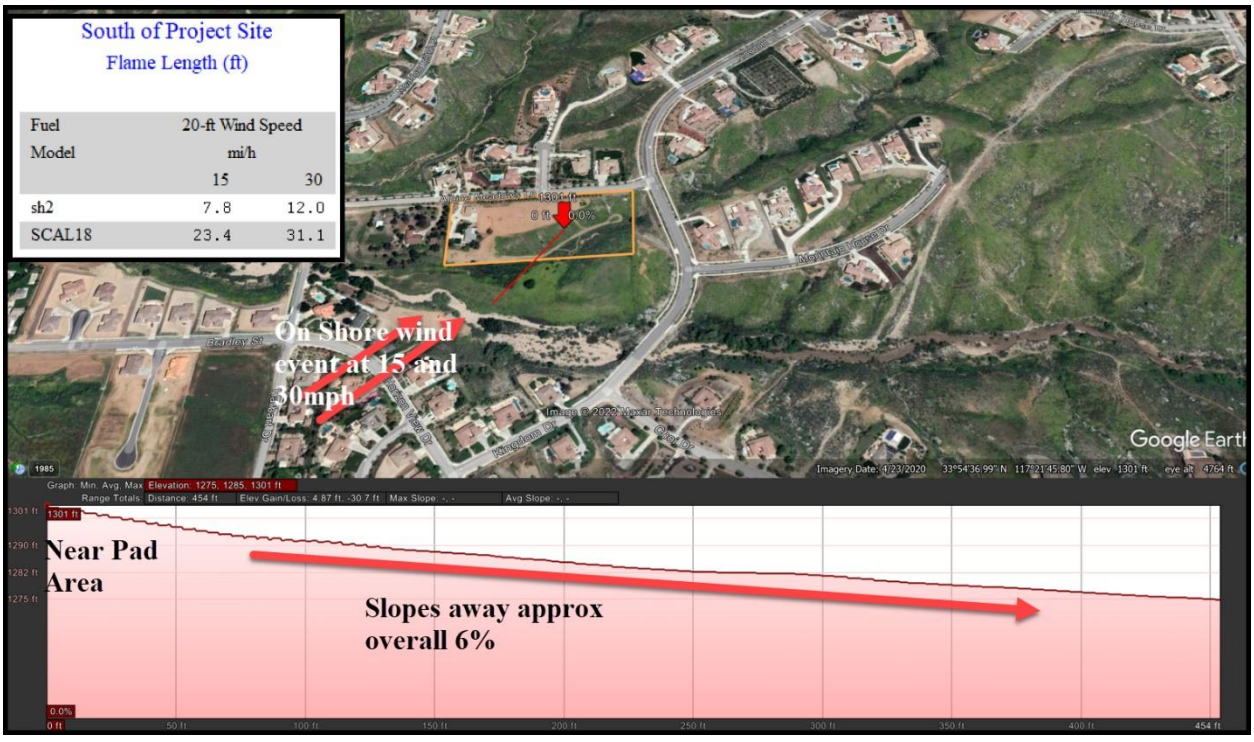


Scenario 2 On shore wind event modeled as Sh2 Moderate load, dry climate shrub and SCAL 18 Sage / Buckwheat. The fuel bed lacks continuity flame lengths are probably over predicted. The future view will most likely look the same unless environmental factors change.



Behave Results

BehavePlus 5.0.5 (Build 307)

South of Project Site

Input Worksheet

Inputs: SURFACE

Input Variables	Units	Input Value(s)
Fuel/Vegetation, Surface/Understory		
Fuel Model		sh2, SCAL18
Fuel Moisture		
1-h Moisture	%	3
10-h Moisture	%	5
100-h Moisture	%	7
Live Herbaceous Moisture	%	50
Live Woody Moisture	%	60
Weather		
20-ft Wind Speed	mi/h	15,30
Wind Adjustment Factor		0.5
Wind Direction (from north)	deg	225
Terrain		
Slope Steepness	%	6
Aspect	deg	180
Notes		

Run Option Notes

Maximum reliable effective wind speed limit IS imposed [SURFACE].

Calculations are only for the direction of maximum spread [SURFACE].

Fireline intensity, flame length, and spread distance are always for the direction of the spread calculations [SURFACE].

Wind and spread directions are degrees clockwise from north [SURFACE].

Wind direction is the direction from which the wind is blowing [SURFACE].

Results for: Surface Rate of Spread (maximum) (ft/min)

Fuel	20-ft Wind Speed	
Model	mi/h	
	15	30
sh2	20.7	52.6
SCAL18	79.8	149.0

Results for: Fireline Intensity (Btu/ft/s)

Fuel	20-ft Wind Speed
Model	mi/h

	15	30
sh2	500	1269
SCAL18	5360	10008

Results for: Flame Length (ft)

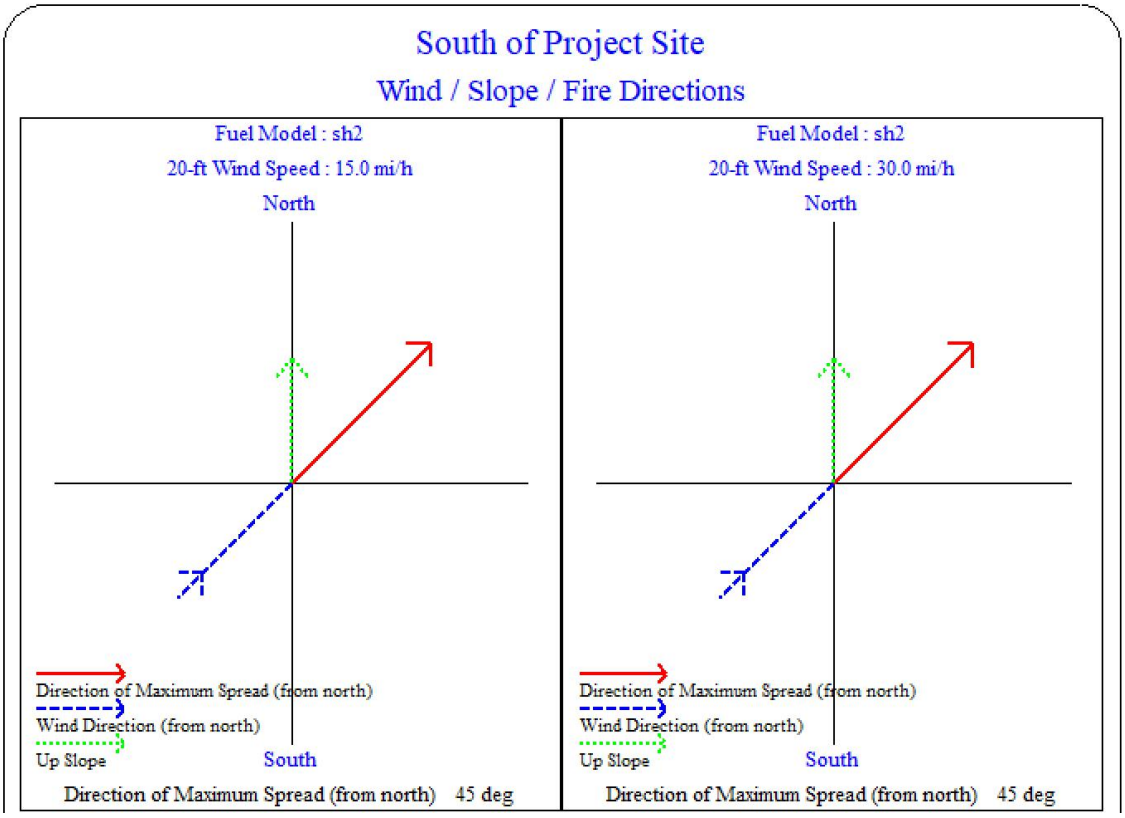
Fuel Model	20-ft Wind Speed mi/h	
	15	30
sh2	7.8	12.0
SCAL18	23.4	31.1

Results for: Direction of Maximum Spread (from north) (deg)

Fuel Model	20-ft Wind Speed mi/h	
	15	30
sh2	45	45
SCAL18	45	45

End

Spread Diagram
3.0 Assessing Structure Ignitions in the Wildland/Urban Interface



Structure ignitions from wildland wildfires basically come from three sources of heat: convective firebrands (flying embers), direct flame impingement, and radiant heat. The Behave Plus Fire Behavior Modeling Program does not address wind blown embers or firebrands from a structure ignition perspective. However, even though ignition resistant exterior building materials will be required in the construction, they are not garnateed to prevent ignition from wind driven embers, these issues are addressed in this FPP.

3.1 Firebrands

Firebrands are pieces of burning materials that detach from a burning fuel due to the strong convection drafts in the flaming zone. Firebrands may also be referred to as embers. Firebrands can be carried a long distance (one mile or more) by fire drafts and strong winds. Severe wildland/urban interface fires can produce heavy showers of firebrands. The chance of these firebrands igniting a structure will depend on the number and size of the firebrands, how long they burn after contact and the type of building materials, building design, and construction features incorporated into the structure. Firebrands landing on combustible roofing and decks are common sources for structure ignition. They can also enter a structure through unscreened or poorly screened vents, chimneys, unprotected skylights, and windows.

Even with non-combustible roofing, firebrands landing on leaves, needles, and other combustibles located on a roof (due to a lack of maintenance) can cause structure ignition. Any open windows, doors, or other types of unscreened openings are sources for embers to enter a structure during a wildland fire. If these maintenance issues are addressed on a regular basis, firebrands should not be a concern.

3.2 Radiant Heat/Direct Flame Impingement

Radiation and convection involve the transfer of heat directly from the flame to any exposed surface. Unlike radiation heat transfer, convection requires that the flames or heat column contact the structure. An ignition from radiation (given an exposed flammable surface) heat transfer depends on two aspects of the flame: 1) the radiant heat flux to a combustible surface and, 2) the duration (length of time) of the radiant flux. The radiant heat flux depends on the flame zone size, flame-structure distance, and how much the combustible material of the structure is exposed to the flame. While the flame from a wildfire may approach 1,800 degrees Fahrenheit, it is the duration of heat that is more critical. For example, a blow torch flame typically approaches 2,100 degrees Fahrenheit, yet a person can easily pass their hand through the flame. Heat duration only becomes critical to a home with a wood exterior surface if the heat is allowed to remain for 30-90 seconds.

Research scientist Jack Cohen of the United States Forest Service has found that a homes or structures characteristics (its exterior materials and design in relation to the immediate area around a home within 100 feet) principally determine the home's ignition potential. He calls the home and its immediate surroundings the 'home ignition zone'. In a study of ignition of wood wallboard, tests by a USDA Forest Service research team described in the Proceedings, 1st International Fire and Materials Conference showed that flame impingement for sufficient length of time (approximately 1 min.) ignites a typical hardboard siding material.

Fire agencies consider fuel treatment as a principal approach to wildland fire hazard reduction. Whenever the flame length is equal to or more than the separation of combustible vegetation from a combustible structure for 1-2 minutes in duration or more, there is a high probability of structure ignition. Contact with a fire's convection heat column also may cause ignition but the temperature of the column's gases is generally not hot enough or long enough in duration to sustain the ignition of the structure.

Comparing the expected wildland fire behavior projections for all boundary areas against the required fuel modification zones, and project design features outlined in Section 5.3.3, demonstrates substantial reductions in the expected flame length in treated fuels. By requiring the structures exposed to the threat of wildfire to

incorporate the following guidelines, those structures will be provided with the most effective treatment for minimizing losses from flame impingement and associated radiant heat intensities.

- The structure is constructed of ignition resistant building materials and processes, see APPENDIX E.
- The area surrounding structure contains an Irrigated Zone (defensible space) and a Thinning Zone (low fuel volume buffer strip) between the Irrigated Zone and the untreated fuels.

The property owner shall be required (see Section 5.0) to maintain the properties to Zone 1 / Zone 2 Fuel Modification standards and shall keep the roof and any rain gutters free of leaves, needles and other combustible debris.
All combustible materials must be properly stored away from each structure so that burning embers falling on or near the structure have no suitable host. By requiring the structures to be constructed of non-combustible roofing, ignition resistant building materials, and the implementation of required fuel modification will be the most effective treatment for minimizing structure losses due to the projected flame lengths and associated radiant heat intensities.

3.3 Fire Resistant Plant Palette

Wildland fire research has shown that some types of plants, including many natives, are more fire resistant than others. These low fuel volume, non-oily, non-resinous plants are commonly refered to as “fire resistant”. This term comes with the proviso that each year these plants are pruned, all dead wood is removed and all grasses or other plant material are removed from beneath the circumference of their canopies. Some native species are not considered “undesirable” from a wildfire risk management perspective provided they are properly maintained year round. Refer to APPENDIX ‘A’ for a list of prohibited plant species and APPENDIX ‘B’ for Defensible Space Landscaping.

4.0 Fire Department Response Times

The project is within the Riverside City Fire Department’s (RCFD) response area. The closest Fire apparatus is RCFD Riverside City Fire Station 4, from 1496 W Linden St (2.8 miles away). Would likely be the first engine to arrive on scene at to the structure.

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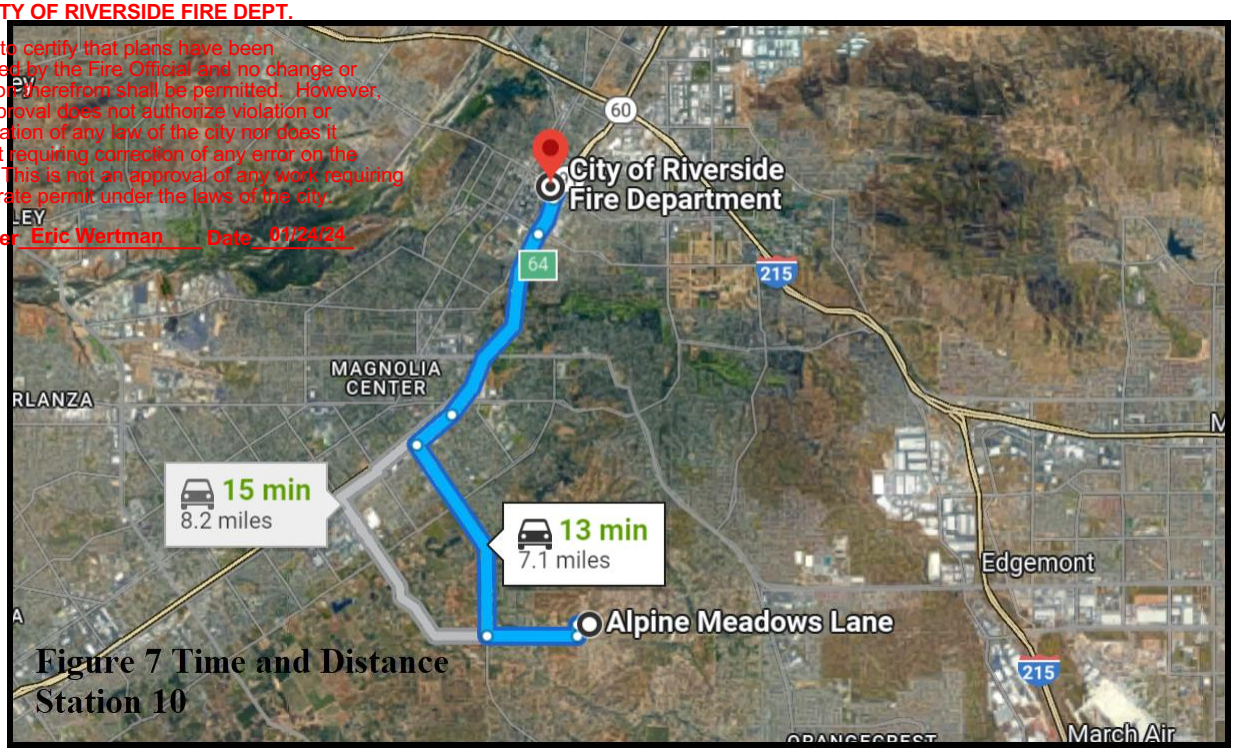

Figure 7 Time and Distance Station 10

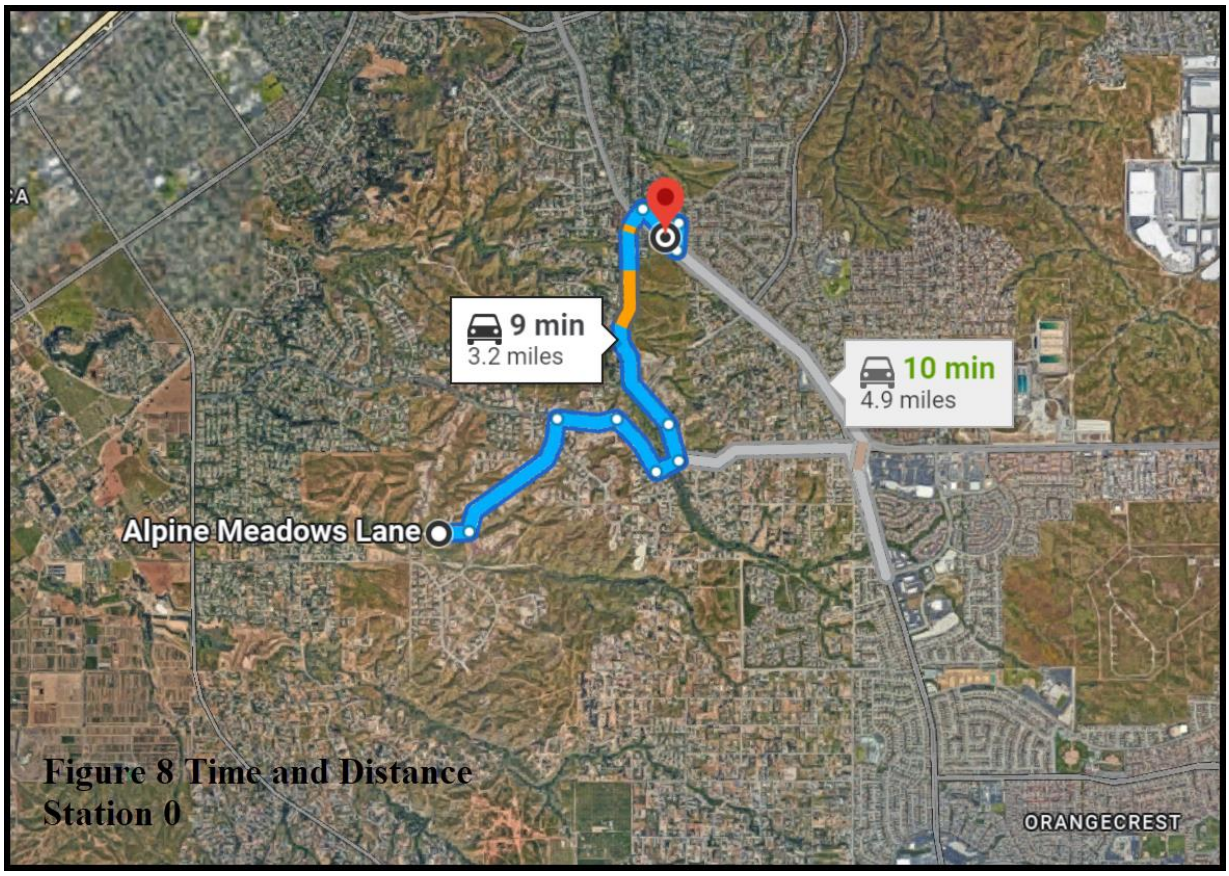

Figure 8 Time and Distance Station 0

Additional agencies such as Riverside County and nearby cities would also likely respond with equipment should all of Riverside City Resources be unavailable.

Although the RCFD Fire Station 9 Engine may be generally 9 minutes away, there is no assurance that any of the engine companies will be in their stations when a wildfire threatens. Engines may respond from other stations located further away or from other incidents. On high/extreme fire danger days there often may be multiple fire starts and engine companies may be already deployed on other incidents.

- This is why planned projects use *"defensible space"*, 'Ignition Resistant' building features, and key fuel treatment strategies that enable residents to substantially increase their ability to survive a wildfire on their own and without the loss of any structure. The goal of this FPP, therefore, is to make the future residences and their owners as safe as possible and able to survive on their own until firefighting equipment arrives and/or the occupants can be safely evacuated.

5.0 VEGETATION MANAGEMENT ZONE DESCRIPTIONS & REQUIRED TREATMENTS

- **Note: Landscaping elements will be coordinated with the Case Planner through "Landscape and Irrigation Design Review".**

Zones 1 and 2 encompass various distances, along with project design features they will ensure no radiant heat will reach the structure. With the exception of Lot 4 where the distance is reduced to the south and 100ft to the east. To the west zones will tie into lot 1 existing. The slope and lack of fuel will offer some buffer from on shore wind related fire events.

Below are the descriptions and required treatments for the Fuel Modification Zones. All distances in this report are measured horizontally from the exterior of each structure. These distances are depicted on the enclosed **Fire Protection Plan Map**. Fuel treatment areas are a mix of irrigate areas and dry thinning areas.

The owner(s) will be responsible for maintaining their respective properties Fuel Modification Zone. In the event of repossession, the person/unit/agency holding title to the project will be responsible for the maintenance.

All highly flammable plant species identified in Appendix A shall be permanently removed from the Irrigated Zone 1 and Thinning Zone 2 due to their susceptibility to wildland fire.

5.1 Irrigated Zone 1 - Vegetation Management Zone 0/1 Irrigated - *HOMEOWNER MAINTAINED TOTAL OF 30 feet.*

Zone 0 Homeowner maintained Irrigated - An area starting at the structure envelope extending 5 feet outward. This zone includes the area under and around all attached decks, and requires the most stringent wildfire fuel reduction. This area shall be kept clear of combustibles, landscaping mulch, and any large shrubs and trees. It may have limited plants that are low growing, nonwoody, properly watered and maintained. **Combustible fencing material shall not be attached to the structure to include vinyl products.**

Defined

Irrigated Zone 1 starting at 5ft from structure and extending an additional 25feet is commonly called the defensible space zone and shall be free of all combustible construction and materials. It includes the entire area around the structure (front, back and side) and that are located within the parcel. It is measured from the exterior wall of each structure or from the most distal point of a combustible projection, an attached accessory structure, or an accessory structure within 10 feet of a structure. It provides the best protection against the high radiant heat produced by wildfire. It also provides a generally open area in which fire suppression forces can operate during wildfire events. This zone includes a level or level-graded area around each structure, primarily used for parking.

Required Landscaping Conditions of Approval

- Plants in this zone shall be fire resistant and shall not include any pyrophytes that are high in oils and resins such as pines, eucalyptus, cedar, cypress or juniper species. Thick, succulent or leathery leaf species with high moisture content are the most 'fire resistant'. Refer to APPENDIX 'B' for an example of accetable plants..
- Zone 1 shall be cleared of all fire prone and prohibited plant species (see APPENDIX 'A').
- Landscape designs using hardscape features such as driveways, swimming pools, concrete, rock, pavers, and similar non-combustible features to break up fuel continuity within Zone 1 are encouraged.

- **All Landscaping will be fire resistive. Landscaping elements will be coordinated with the Case Planner through Landscape and Irrigation Design Review.**

Required Maintenance

- Maintenance shall be year round by the owner as required by this FPP or the RCFD.
- Remove and replace any dead or dying plant material monthly.
- Native annual and perennial grasses will be allowed to grow and produce seed during the winter and spring. As grasses begin to cure (dry out), they shall be cut to four inches or less in height.
- Trees shall be maintained to a minimum of six feet of vertical separation from low growing, irrigated vegetation beneath the canopy of each tree.

  All trees must be maintained to the current ANSI A300 standards [*Tree, Shrub, and Other Woody Plant Maintenance —Standard Best Practices ANSI A300 standards are the generally accepted industry standards for tree care practices. They are voluntary industry consensus standards developed by TCIA (Pruning)]*

5.2 Vegetation Management Non Irrigated – MAINTAINED by OWNER

Defined

THINNING ZONE is an area following Zone 1 and extends outward various distances. The area following Zone 1 may include single or small clusters of trimmed fire resistance native plants up to 36 inches in height where 50% of the vegetation is removed to create a mosaic. Selected native plant

clusters must be separated by at least 1 1/2 times the mature height of the retained plants. The ground cover and grasses shall be weed whipped and maintained to 4" or less in stubble height.

This should take full advantage of rock outroppings and bare soil.

Required Maintenance Conditions of Approval

- Fuel Modification area shall be maintained year, as required by this FPP. Inspections and compliance shall be by Riverside City.
- Shrubs shall be kept trimmed to ensure spacing is maintianed.
- Grasses shall be maintained weed whipped to 4 inches.
- The area shall be maintained free of invasive plants and any volunteer native shrubs.
- **All plantings should be installed with at maturity growth in mind.**

The image below provides a best practice spacing guide for construction and long-term maintenance.

Figure 9 Plant Spacing.

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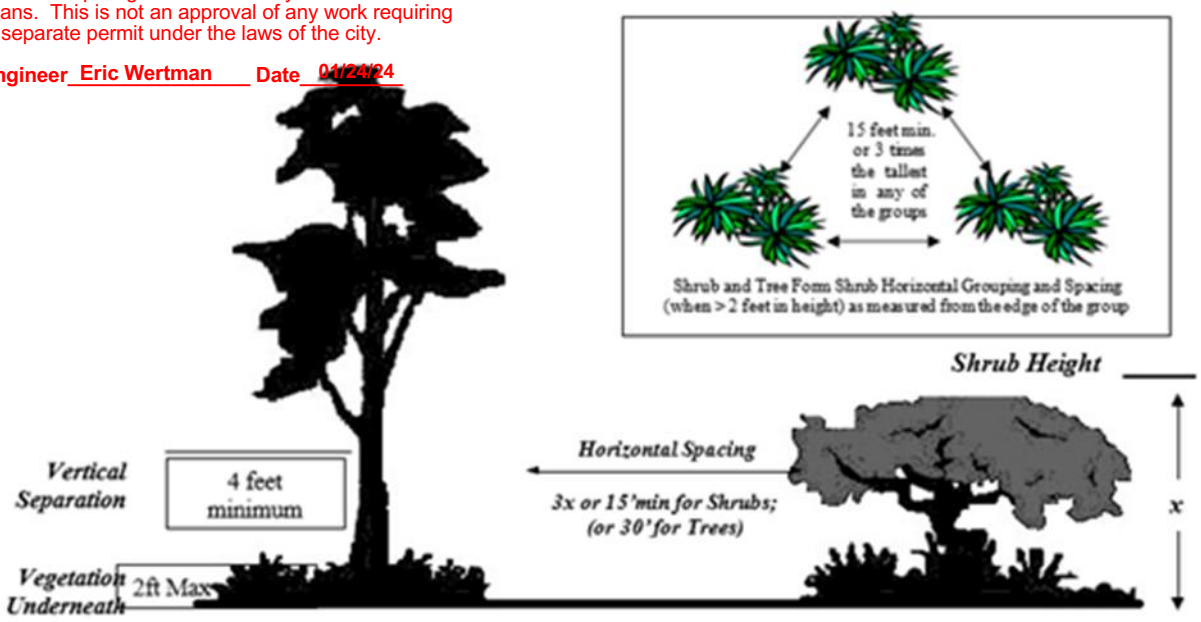
Requirements for Planting Installation in Fuel Modification Zones Spacing and Separation



Horizontal Spacing

Vegetation Less than 2 Feet in height:

- No horizontal spacing or vertical separation is required. Ground cover shall not exceed 2 feet in height, In Zone 1,ground cover may cover the entire ground between groups of shrubs, trees, or grasses and grasses are not considered ground cover. Grasses are acceptable within Zone 1 irrigated, all non-irrigated grasses will be maintained weed whipped or mowed to 4 in.

Shrubs and Trees 2 Feet in Height or Greater:

Shrub and Tree Group Size:

- All Shrubs and Trees can be in groups of 3 specimens or less. No horizontal spacing is required inside the group.

Shrub / Tree-form Shrub Group Spacing:

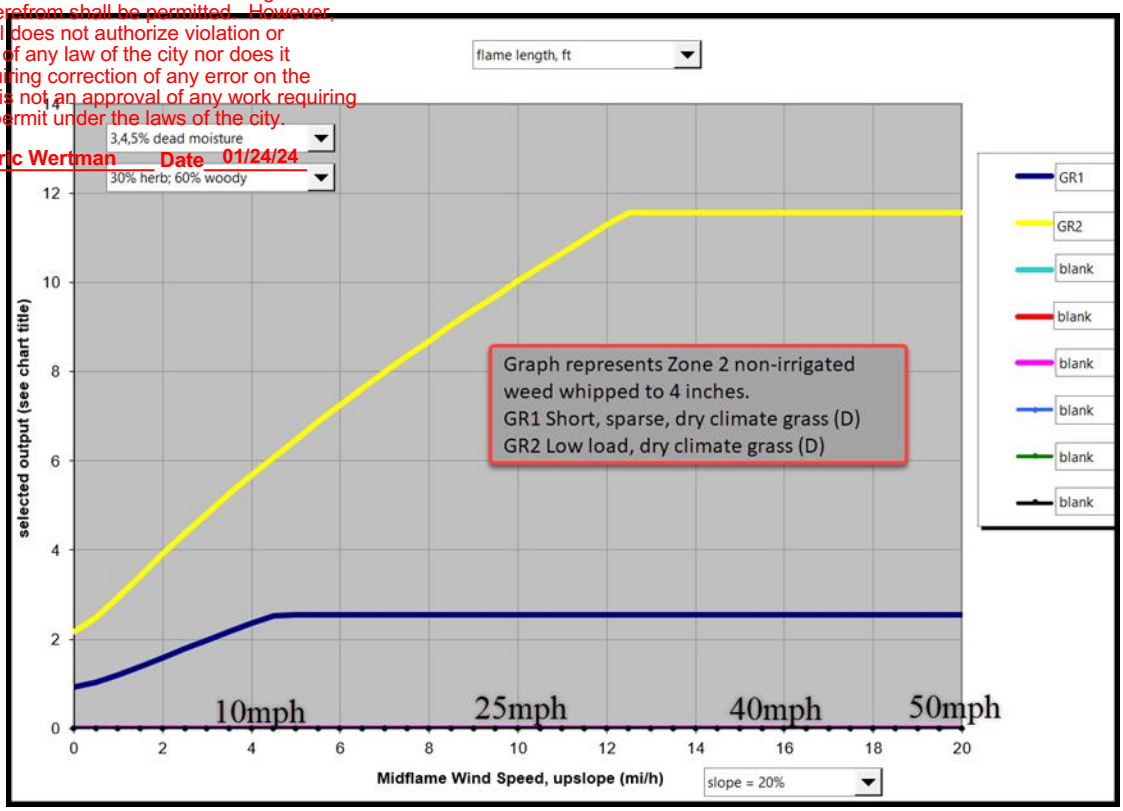
- Groups of shrubs shall be spaced by the greater of the following two measurements: A.. distance of 15 feet minimum (or) 3 times the height of the tallest specimen in any of the groups.
- No vegetation over 2 feet in height is allowed within 15 feet from the edge of tree canopy(s).

Tree Group Spacing:

- Groups of Trees shall be spaced by a distance of 20 feet minimum regardless of height. In Zone 1, full growth tree branches are not allowed within 10 feet of enclosed combustible structures.

Vertical Separation

- **Shrubs and Trees Less than 10 Feet in Height**: When the fuel modification zone is within 30 feet of the structure, a vertical separation of 2ft is required from the vegetation below. (Not required if shrubs are further than 30 feet from structure).
- **Shrubs and Trees 10 Feet in Height or Greater:**
- A vertical separation of 4 feet minimum is required to be maintained from the vegetation below.
- Trees only: All vegetation located underneath trees, shall be a maximum of 2 feet in height.



The following graph represents Zone 2 Non Irrigated Flame Lengths.

5.3 Construction Standards

All lots within the project shall be considered to be within a Very High Fire Hazard Severity Zone (VHFHSZ) and shall be designed and built-in accordance with Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure) of the 2022 California Building Code. To include local code amendments. For a description of the current construction requirements as of the date of this report see APPENDIX 'D'.

- All construction and ignition resistant requirements shall meet the 2022 version of the California Fire Code, including amendments, and related Ordinances. The fire protection features described herein shall be maintained to their equivalent or greater ignition resistance in perpetuity.

Construction or building permits shall not be issued until the fire code official inspects and approves required fire apparatus access and water supply for the construction site.

5.3.1 Conditions to Be Met

Prior to the delivery of combustible building construction materials to the project site the following conditions shall be completed to the satisifaction of the RCFD:

- Water and power utilities shall be installed and approved by the appropriate inspecting department or agency.

- Zone 1 shall be cleared of all vegetation prior to construction and subsequently planted to the requirments stated in Section 6.1 after construction is completed.

5.3.2 Additional Construction Requirements

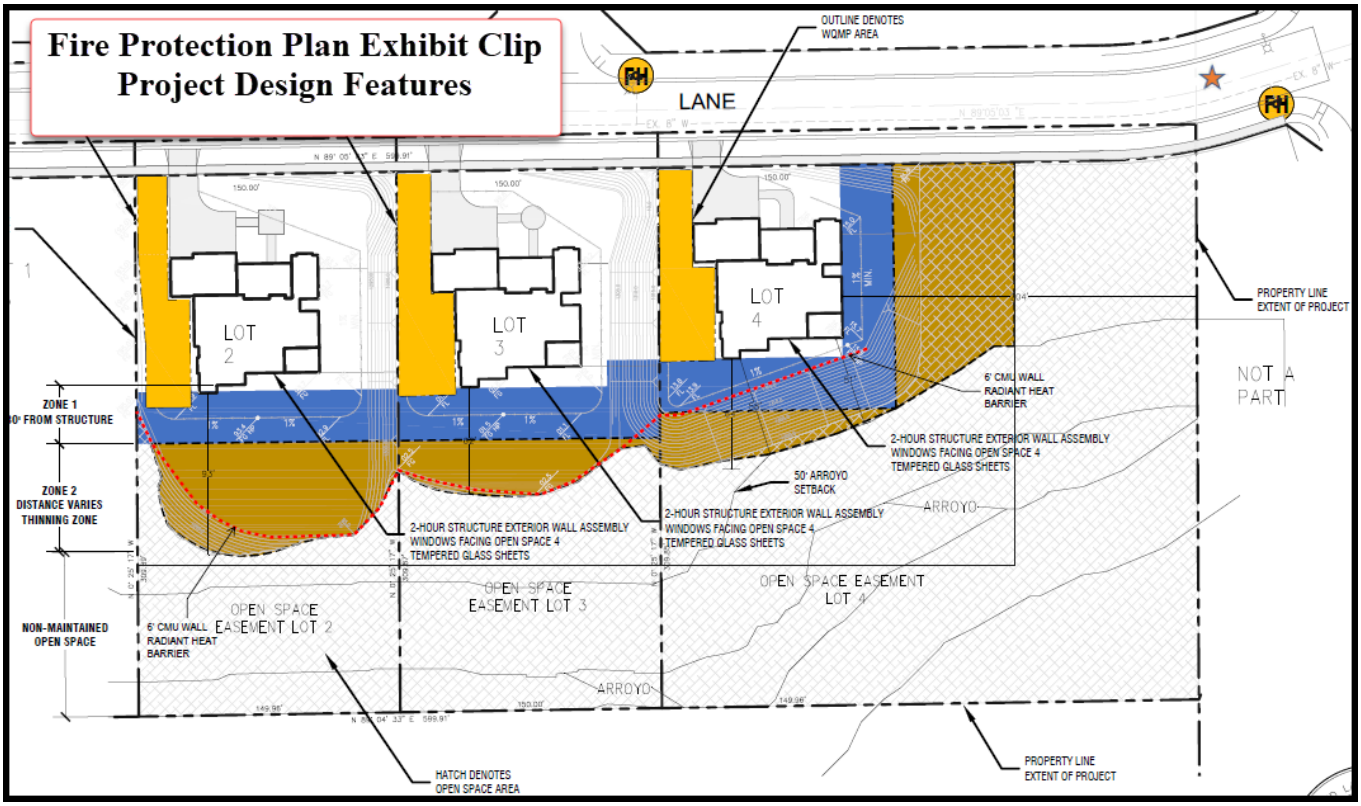
Adequate irrigated space exists to provide a level of safety in regard to radiant heat.

An automatic fire sprinkler system is required by City Ordinance 16.32.080. Under separate cover, submit plans for the automatic fire sprinkler system(s) and obtain approval from the Fire Department prior to installation.

5.3.3 Application for Alternate Materials and Methods. (AMMR) and Proposed project design features and mandatory requirement.

The following project design features are formally captured in the AM&M Application Appendix G.

1) 6-ft tall masonry wall as designated on the attached exhibit along the southern to eastern PL to protect the structures from convected/radiant heat and blowing ground embers. As an alternate design the wall provided may be CMU and Tempered Glass to allow for a view.
2) A 2-hour exterior rated wall assembly for those surfaces facing the reduced Fuel Modification Area, to include window assemblies designed with 2 sheets of tempered glass.



6.0 Infrastructure

Below is a review and discussion of water supply and access roads/driveways and gates that are to be utilized in the development.

6.1 Water Supply

The water supply will be provided by Riverside Public Utilities. An approved permanent water supply capable of supplying the required fire flow will be designed and installed prior to beginning construction.

Water supplies for fire protection and hydrants shall be in accordance with the 2022 California Fire Code as amended by the City of Riverside.
Hydrant installation shall conform to City of Riverside INFORMATION BULLETIN: D-19-005 and the 2019 NFPA 14, Fire hydrants shall be tested, accepted and placed in service prior to the delivery of any combustible materials to the project site.

6.2 Access Roads/Driveways and Gates

Driveways and access roads within the development shall be termed 'Fire Access Roads' within this document. All fire access roads shall meet the requirements of the Riverside City Fire Depaertment, and shall be all weather surface capable of supporting loads of 80,000 lbs gross vehicle weight.
Access to all exterior portions of each structure must be within 150 feet of the available fire department access. The required turning radius of a fire apparatus access road shall be in accordance with Information Bulletin B-19-001, 28 feet inside radius and 48 feet outside radius. in accordance with Information Bulletin B-19-001 unless otherwise approved by the fire code official. Fire lanes shall be marked in accordance with the guidelines in Information Bulletin B-19-003.

Any gates to be installed shall meet RCFD Standards and shall be approved by the RCFD prior to fabrication and installation. A Knox override key switch or similar device must be installed outside the gate in an approved, readily visible, and unobstructed location at or near the gate to provide emergency access. Gates accessing major roadways shall also be equipped with approved emergency traffic control-activating strobe light sensor(s), or other devices approved by the Fire Chief, which will activate the gate on the approach of emergency apparatus with a battery back-up or manual mechanical disconnect in case of power failure. All gates shall always be equipped to allow for automatic egress.

7.0 Owner, Occupant Education

The owner should prepare, this link will provide usefule informaion to plan ahead for an emergency;
https://riversideca.gov/readyriverside/sites/riversideca.gov.readyriverside/files/pdf/Disaster-Ready-Guide-Digital-SelfPrint-Eng.pdf
In the event of a wildland fire, you should always relocate to a safe area well beyond the path of the threatening wildland fire. If relocation is not possible and egress is cut-off by the fire, they should seek shelter within thier structure until the wildland fire passes through their area. The ignition resistant buildings will have a 'defensible space' area around each structure for firefighters

to make their stand in the protection of each structure. In the event firefighting forces are not readily available, the defensible space will substantially increase the probability of 'structure survivability'.

Should relocation be the the chosen option and time is available, they should ensure that all doors and windows are closed to prevent embers from entering their structure. Doors should be unlocked to allow emergency personnel unimpeded access. Both inside and outside lights should be placed on to allow emergency personnel to know that a structure is present when smoke or darkness may otherwise obscure visibility. In addition, combustible materials shall not be stored within 10 feet of any structure.

The owner shall be aware of the herein described fire protection measures by reviewing this FPP of the types of non-combustible construction and plant materials that are allowed within the the designated fuel treatment zones. A copy of this plan shall be provided to a future owner during escrow procedures. Of particular importance are APPENDICES 'A', 'B', 'D' anf 'E'of this plan which provide guidance in the types of plants that allowed to be established in landscaped areas and appropriate construction materials within fuel modification zones. Plant selection is critical as embers often travel over a mile during Santa Ana wind events.

Where this FPP requires specific construction features, these features shall not be changed without the approval of the RFD.

8.0 Fire Protection Plan Map

Attached in a separate file is the Fire Protection Plan Map depicting the location of all proposed fuel treatment locations as well as fire access roads, and development bundaries.

APPENDICES

Undesirable Plant Species	**APPENDIX 'A'**
Acceptable Plant List	**APPENDIX 'B'**
Literature Referenced	**APPENDIX 'C'**
Non-combustible & Fire-Resistant Building Materials	**APPENDIX 'D'**
Ignition Resistant Construction Requirements	**APPENDIX 'E'**
Fire Protection Plan Exhibit	**APPENDIX 'F'**
Approved AM&M Request	**APPENDIX 'G'**

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APPENDIX 'A'

Prohibited Plant List

APPENDIX 'A'

Prohibited (& Fire Prone) Plant Species List For Fuel Modification Zones in High & Very High Hazard Areas

	Botanical Name	Common Name	Plant Form
1.	Acacia species •	Acacia	Shrub/Tree
2.	Adenostema fasciculatum	Chamise	Shrub
3.	Adenostema sparsifolium	Red Shank	Shrub/Tree
4.	Artemisia californica	California Sagebrush	Shrub
5.	Anthemis cotula	Mayweed	Weed
6.	Arundo donax	Giant reed	Grass/weed
7.	Brassica nigra	Black Mustard	Weed
8.	Brassica ropa	Yellow Mustard	Weed
9.	Cedrus species	Cedar	Tree
10.	Cirsim vulgare	Wild Artichoke	Weed
11.	Conyza canadensis	Horseweed	Weed
12.	Cortaderia selloana	Pampas Grass	Tall Grass
13.	Cupressus species	Cypress	Tree
14.	Eriogonum fasciculatum	Common Buckwheat	Shrub
15.	Eucalyptus species	Eucalyptus	Shrub/Tree
16.	Heterotheca grandiflora	Telegraph plant	Weed/shrub
17.	Juniperus species	Junipers	Succulent
18.	Lactuca serriola	Prickly lettuce	Weed
19.	Nicotiana bigelevil	Indian tobacco	Shrub
20.	Nicotiana glauca	Tree tobacco	Shrub
21.	Pennisetum species	Fountain Grass	Ground cover
22.	Pinus species	Pines	Tree
23.	Rosmarinus species	Rosemary	Shrub
24.	Salvia species • •	Sage	Shrub
25.	Silybum marianum	Milk thistle	Weed
26.	Urtica urens	Burning nettle	Weed

- Except:
  Acacia redolens desert carpet (Desert Carpet ground cover)

• • Except:
  Salvia columbariae (chia)
  Salvia sonomensis (Creeping Sage)

Additionally, all of the following plants shall be removed from fuel treatment zones in order to not only reduce fuel loading but also eliminate invasive plants that are identified in the Multiple Species Habitat Conservation Plan for Riverside County (MSHCP).

TABLE 6-2
PLANTS THAT SHOULD BE AVOIDED
ADJACENT TO THE MSHCP CONSERVATION AREA

BOTANICAL NAME	COMMON NAME
Acacia spp. (all species)	acacia
Achillea millefolium	var. *millefolium* common yarrow
Ailanthus altissima	tree of heaven
Aptenia cordifolia	red apple
Arctotheca calendula	cape weed
Arctotis spp. (all species & hybrids)	African daisy
Arundo donax	giant reed or arundo grass
Asphodelus fistulosus	asphodel
Atriplex glauca	white saltbush
Atriplex semibaccata	Australian saltbush
Carex spp. (all species*)	sedge
Carpobrotus chilensis	ice plant
Carpobrotus edulis	sea fig
Centranthus ruber	red valerian
Chrysanthemum coronarium	annual chrysanthemum
Cistus ladanifer	(incl. hybrids/varieties) gum rockrose
Cortaderia jubata [*syn.C. Atacamensis*]	jubata grass, pampas grass
Cortaderia dioica [syn. *C. sellowana*]	pampas grass
Cotoneaster spp. (all species)	cotoneaster
Cynodon dactylon	(incl. hybrids varieties) Bermuda grass
Cyperus spp. (all species*)	nutsedge, umbrella plant
Cytisus spp. (all species)	broom

Delosperma 'Alba'	white trailing ice plant
Dimorphotheca spp. (all species)	African daisy, Cape marigold
Drosanthemum floribundum	rosea ice plant
Drosanthemum hispidum	purple ice plant
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Eucalyptus spp. (all species)	eucalyptus or gum tree
Eupatorium coelestinum [syn. Ageratina sp.]	mist flower
Festuca arundinacea	tall fescue
Festuca rubra	creeping red fescue
Foeniculum vulgare	sweet fennel
Fraxinus uhdei	(and cultivars) evergreen ash, shamel ash
Gaura (spp.) (all species)	gaura
Gazania spp. (all species & hybrids)	gazania
Genista spp. (all species)	broom
Hedera canariensis	Algerian ivy
Hedera helix	English ivy
Hypericum spp. (all species)	St. John's Wort
Ipomoea acuminata	Mexican morning glory
Lampranthus spectabilis	trailing ice plant
Lantana camara	common garden lantana
Lantana montevidensis [syn. *L. sellowiana*]	lantana
Limonium perezii	sea lavender
Linaria bipartita	toadflax
Lolium multiflorum	Italian ryegrass
Lolium perenne	perennial ryegrass
Lonicera japonica	(incl. 'Halliana') Japanese honeysuckle
Lotus corniculatus	birdsfoot trefoil
Lupinus arboreus	yellow bush lupine
Lupinus texanus	Texas blue bonnets

Malephora crocea	ice plant
Malephora luteola	ice plant
Mesembryanthemum nodiflorum	little ice plant
Myoporum laetum	myoporum
Myoporum pacificum	shiny myoproum
Myoporum parvifolium	(incl. 'Prostratum') ground cover myoporum
Oenothera berlandieri	Mexican evening primrose
Olea europea	European olive tree
Opuntia ficus-indica	Indian fig
Osteospermum spp. (all species)	trailing African daisy, African daisy,
Oxalis pes-caprae	Bermuda buttercup
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Plumbago auriculata	cape plumbago
Polygonum spp. (all species)	knotweed
Populus nigra 'italica	' Lombardy poplar
Prosopis spp. (all species*)	mesquite
Ricinus communis	castorbean
Robinia pseudoacacia	black locust
Rubus procerus	Himalayan blackberry
Sapium sebiferum	Chinese tallow tree
Saponaria officinalis	bouncing bet, soapwart
Schinus molle	Peruvian pepper tree, California pepper
Schinus terebinthifolius	Brazilian pepper tree
Spartium junceum	Spanish broom
Tamarix spp. (all species)	tamarisk, salt cedar
Trifolium tragiferum	strawberry clover
Tropaelolum majus	garden nasturtium

Ulex europaeus	prickly broom
Vinca major	periwinkle
Yucca gloriosa	Spanish dagger

An asterisk (*) indicates some native species of the genera exist that may be appropriate.

Sources: California Exotic Pest Plant Council, United States Department of Agriculture-Division
of Plant Health and Pest Prevention Services, California Native Plant Society,
Fremontia Vol. 26 No. 4, October 1998, The Jepson Manual; Higher Plants of California,
and County of San Diego-Department of Agriculture.

CITY OF RIVERSIDE FIRE DEPT.

This is to certify that plans have been approved by the Fire Official and no change or deviation therefrom shall be permitted. However, this approval does not authorize violation or cancellation of any law of the city nor does it prevent requiring correction of any error on the plans. This is not an approval of any work requiring a separate permit under the laws of the city.

Engineer Eric Wertman Date 01/24/24

APPENDIX 'B'

Defensible Space Landscaping

CITY OF RIVERSIDE FIRE DEPT.
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Engineer Eric Wertman Date 01/24/24

Defensible Space Landscaping – Plant Pallet for Fuel Modification in Riverside, Orange and San Diego Counties

	Code	Botanical Name	Common Name	Plant Form
1.	W	Abelia x grandiflora	Glossy Abelia	Shrub
2.	_	Acacia redolens desert carpet	Desert Carpet	Shrub
3.		Acer macrophyllum	Big Leaf Maple	Tree
4.	X	Achillea millefolium	Common Yarrow	Low shrub
5.	W	Achillea tomentosa	Wolly Yarrow	Low shrub
6.	X	Aeonium decorum	Aeonium	Ground cover
7.	X	Aeonium simsii	Aeonium	Ground cover
8.	W	Agaave attenuata	Century Plant	Succulent
9.	W	Agave shawii	Shaw's Century Plant	Succulent
10.	N	Agave victoriae-reginae	Agave	Ground cover
11.	X	Ajuga reptans	Carpet Bugle	Ground cover
12.	W	Alnus cordata	Italian Alder	Tree
13.	_	Alnus rhombifolia	White Alder	Tree
14.	N	Aloe aborescens	Torch Aloe	Shrub
15.	N	Aloe aristata	Dwarf Aloe	Ground cover
16.	N	Aloe brevifolia	Aloe	Ground cover
17.	W	Aloe Vera	Medicinal Aloe	Succulent
18.	W	Alyogyne huegelii	Blue Hibiscus	Shrub
19.	_	Ambrosia chamissonis	Beach Bur-Sage	Perennial
20.	_	Amoroha fruticosa	Western False Indigobush	Shrub
21.	W	Anigozanthus flavidus	Kangaroo Paw	Perennial Accent
22.		Antirrhinum nuttalianum ssp. Nuttatianum	Beard Tongue	Subshrub
23.	X	Aptenia cordifolia x 'Red Apple'	Red Apple Aptenia	Ground cover
24.	W	Arbutus unedo	Strawberry Tree	Tree
25.	W	Arctostaphylos 'Pacific Mist'	Pacific Mist Manzanita	Ground cover
26.	W	Arctostaphyis edmundsil	Little Sur Manzanita	Ground cover
27.	_	Arctostaphylos glandulosa	Eastwood Manzanita	Shrub
28.	W	Arctostaphylos hookeri 'Monterey Carpet'	Monterey Carpet Manzanita	Low shrub
29.	N	Arctostaphylos pungens	Heather	Shrub
30.	N	Arctostaphylos refugioensis	Refugio Manzanita	Shrub
31.	W	Arctostaphylos uva-ursi	Bearberry	Ground cover
32.	W	Arctostaphylos x 'Greensphere'	Greensphere Manzanita	Shrub
33.	N	Atemisia caucasia	Caucasian Artemisia	Ground cover
34.	N	Artemisia pycnocephaia	Beach Sagewort	Perennial
35.	X	Atriplex canescens	Four-Wing Saltbush	Shrub
36.	X	Atriplex lentiformis ssp. Breweri	Brewer Saltbush	Shrub
37.	_	Baccharis emoryi	Emory Baccharis	Shrub
38.	W	Baccharis pilularis ssp. Consanguinea	Chaparral Bloom	Shrub

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	Code	Botanical Name	Common Name	Plant Form
39.	N	Baccharis pilularis var. pilularis 'Twin Peaks #2'	Twin Peaks	Ground cover
40.	_	Baccharis salicifolia	Mulefat	Shrub
41.	N	Baileya Multiradiata	Desert Marigold	Ground cover
42.	N	Beaucarnea recurvata	Bottle Palm	Shrub/Small tree
43.	N	Bougainvillea spectabilis	Bougainvillea	Shrub
44.	N	Brahea armata	Mexican Blue Palm, Blue Hesper Palm	Palm
45.	N	Brahea brandegeei	San Jose Hesper Palm	Palm
46.	N	Brahea edulis	Guadalupe Palm	Palm
47.	_	Brickellia californica	Hoary Nettle	Subshrub
48.	W	Bromus carinatus	California Brome	Grass
49.	_	Camissionia cheiranthifolia	Beach Evening Primrose	Perennial subshrub
50.	N	Carissa macracarpa	Green Carpet Natal Plum	Ground cover/shrub
51.	X	Carpibrotus chilensis	Sea Fig Ice Plant	Ground cover
52.	W	Ceanothus gloriosus 'Point Reyes'	Point Reyes Ceanothus	Shrub
53.	W	Ceanothus griseus 'Louise Edmunds'	Louis Edmunds Ceanothus	Shrub
54.	W	Ceanothus griseus horizontalis	Yankee Point	Ground cover
55.	W	Ceanothus griseus var. horizontalis	Carmel Creeper Ceanothus	Shrub
56.	_	Ceanothus megacarpus	Big Pod Ceanothus	Shrub
57.	W	Ceanothus prostrastus	Squaw Carpet Ceanothus	Shrub
58.	_	Ceanothus spinosus	Green Bark Ceanothus	Shrub
59.	W	Ceanothus verrucosus	Wart-Stem Ceanothus	Shrub
60.	W	Cerastium tomentosum	Snow-in-summer	Ground cover/shrub
61.	W	Ceratonia siliqua	Carob	Tree
62.	W	Cercis occidentalis	Western redbud	Tree/Shrub
63.	X	Chrysanthemum leucanthemum	Oxeye Daisy	Groundcover
64.	W	Cistus hybridus	White Rockrose	Shrub
65.	W	Cistus incanus	Mauve Rockrose	Shrub
66.	W	Cistus incanus salviafolius	Sageleaf Rockkrose	Shrub
67.	W	Cistus purpureus	Orchid Rockrose	Shrub
68.	W	Citrus species	Citrus	Tree
69.	_	Clarkia bottae	Showy Fairwell to Spring	Annual
70.	_	Cneoridium dumosum	Bushrue, Pt. Reyes Ceanothus	Shrub
71.	_	Collinsia heterophylla	Chinese Houses	Annual
72.	W	Comarostaphylis diversifolia	Summer Holly	Shrub
73.	N	Convolvulus cneorum	Bush Morning Glory	Shrub
74.	W	Coprosma kirkii	Creeping Coprosma	Ground cover/Shrub
75.	W	Coprosma pumila	Prostrate Coprosma	Low Shrub
76.	_	Coreopsis californica	California coreopsis	Annual
77.	W	Coreopsis lanceolata	Coreopsis	Ground cover

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	Code	Botanical Name	Common Name	Plant Form
78.	X	Correa pulchella	Australian Fushia	Ground cover
79.	W	Cotoneaster lacteus	Grayleaf Cotoneaster	Shrub
80.	W	Cotoneaster congestus Likiang	Likiang Cotoneaster	Ground cover/Vine
81.	X	Crassula [illegible]	Taylor's Parches	Ground cover
82.	X	Crassula ovata	Jade Tree	Shrub
83.	X	Crassula tetragona	Jade Plant	Shrub
84.	W	Croton californicus	California Croton	Ground cover
85.	X	Delosperma 'alba'	White Trailing Ice Plant	Ground cover
86.	_	Dendromecon rigida	Bush Poppy	Shrub
87.	_	Dichelostemma capitatum	Blue Dicks	Herb
88.	N	Distictis buccinatoria	Blood-Red Trumpet Vine	Vine/Climbing vine
89.	N	Dodonaea viscosa	Hopseed Bush	Shrub
90.	X	Drosanthemum floribundum	Rosea Ice Plant	Ground cover
91.	X	Drosanthemum hispidum	Ice Plant, Showy Dewflower	Ground cover
92.	_	Dudleya lanceolat	Lance Leaved Dudleya	Succulent
93.	_	Dudleya pulverulenta	Chalk Dudleya	Succulent
94.	W	Elaeagnus pungens	Silverberry	Shrub
95.	_	Encelia californica	California Encelia	Small shrub
96.	_	Epilobium canum (Zauschneria californica)	Hoary California Fushia	Shrub
97.	_	Eriastrum sapphirinum	Mojave Wolly Star	Annual
98.	N	Eriobotrya japonica	Loquat	Tree
99.	_	Eriodictycon crassifolium	Thick-Leaf Yerba Santa	Shrub
100.	_	Eriodictycon trichocalyx	Mojave Wooly Star	Annual
101.	W	Eriophyllum confertiflorum	Golden Yarrow	Shrub
102.	W	Erythrina species	Coral Tree	Tree
103.	W	Eschscholzia californica	California Poppy	Flower
104.	X	Eschscholzia mexicana	Mexican Poppy	Herb
105.	N	Euonymus fortunei	Winter Creeper Euonymus	Ground cover
106.	N	Fiejoa sellowiana	Pineapple Guava	Shrub/Tree
107.	N	Fragaria chiloensis	Wild Strawberry/ Sand Strawberry	Ground cover
108.	_	Frankenia salina	Alkali Heath	Ground cover
109.	W	Fremontodendron californicum	California Flannelbush	Shrub
110.	X	Gaillardiaa x grandiflora	Blanketflower	Ground cover
111.	W	Galvezia speciosa	Bush Snapdragon	Shrub
112.	W	Garrya ellipta	Silktassel	Shrub
113.	X	Gazania hybrids	South African Daisy	Ground cover
114.	X	Gazania rigens leucolaena	Trailing Gazania	Ground cover
115.	_	Gilia capitata	Globe Gilia	Perennial
116.	W	Gilia lepthantha	Showy Gilia	Perennial

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	Code	Botanical Name	Common Name	Plant Form
117.	X	Gilia tricolor	Bird's Eyes	Perennial
118.	N	Ginkgo biloba	Maidenhair Tree	Tree
119.		Gnaphalium californicum	California Everlasting	Annual
120.	W	Gravia glandulosa	Starflower	Shrub
121.		Grindelia stricta	Gum Plant	Ground cover
122.	N	Hakea suaveolens	Sweet Hakea	Shrub
123.	W	Harde bergia comptoniana	Lilac Vine	Shrub
124.	N	Helianthemum mutabile	Sunrose	Ground cover/Shrub
125.		Helianthemum scoparium	Rush Rose	Shrub
126.		Heliotropium curassavicum	Salt Heliotrope	Ground cover
127.	X	Helix canariensis	English Ivy	Ground cover
128.	W	Hesperaloe parviflora	Red Yucca	Perennial
129.		Heteromeles arbutifolia	Toyon	Shrub
130.	X	Hypericum calcycinum	Aaron's Beard	Shrub
131.	N	Iberis sempervirens	Edging Candytuft	Ground cover
132.	N	Iberis umbellatum	Globe Candytuft	Ground cover
133.		Isocoma menziesii	Coastal Goldenbush	Small shrub
134.		Isomeris arborea	Bladderpod	Shrub
135.	W	Iva hayesiana	Poverty Weed	Ground cover
136.	N	Jublans californica	California Black Walnut	Tree
137.		Juncus acutus	Spiny Rush	Perennial
138.		Keckiella antirrhinoides	Yellow Bush Penstemon	Subshrub
139.		Keckiella cordifolia	Heart Leaved Penstemon	Subshrub
140.		Keckiella ternata	Blue Stemmed Bush Penstemon	Subshrub
141.	W	Kniphofia uvaria	Red Hot Poker	Perennial
142.	W	Lagerstroemia patersonii	Crape Myrtle	Tree
143.	X	Lampranthus aurantiacus	Bush Ice Plant	Ground cover
144.	X	Lampranthus filicaulis	Redondo Creeper	Ground cover
145.	X	Lampranthus spectabilis	Trailing Ice Plant	Ground cover
146.	W	Lantana camara cultivars	Yellow Sage	Shrub
147.	W	Lantana montevidensis	Trailing Lantana	Shrub
148.		Lasthenia californica	Dwark Goldfields	Annual
149.	W	Lavandula dentataq	French Lavendar	Shrub
150.	W	Leptospermum laevigatum	Australian Tea Tree	Shrub
151.	W	Leucophyllum frutescens	Texas Ranger	Shrub
152.		Leymus condensatus	Giant Wild Rye	Large grass
153.	N	Ligustrum japonicum	Texas Privet	Shrub
154.	X	Limonium perezii	Sea Lavender	Shrub
155.	W	Liquidambar styraciflua	American Sweet Gum	Tree
156.	W	Liriodendron tulipifera	Tulip Tree	Tree

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	Code	Botanical Name	Common Name	Plant Form
157.	X	Lonicera japonica 'Halliana'	Hall's Japanese Honeysuckle	Vining Shrub
158.	_	Lonicera hispidula	Wild Honeysuckle	Vining Shrub
159.	X	Lotus corniculatus	Bird's Foot Trefoil	Ground Cover
160.	_	Lotus Heermannii	Woolly Lotus	Perennial
161.	_	Lotus Scoparius	Deerweed	Shrub
162.	W	Lupinus arizonicus	Desert Lupine	Annual
163.	W	Lupinus benthamil	Spider Lupine	Annual
164.	_	Lupinus bicolor	Sky Lupine	Flowering annual
165.	_	Lupinus sparsiflorus	Coulter's Lupine	Annual
166.	W	Lyonothamnus floribundus ssp. Asplenfolius	Fernleaf Ironwood	Tree
167.	W	Macademia Integrifolia	Macadamia Nut	Tree
168.	W	Mahonia aquifolium 'Golden Abundance'	Golden Abundance, Oregon Grape	Shrub
169.	W	Mahonia nevinii	Nevin Mahonia	Shrub
170.	_	Malacothamnus fasciculatus	Chaparral Marrow	Shrub
171.	X	Makephora luteola	Trailing Ice Plant	Ground cover
172.	W	Maytenus boaria	Mayten Tree	Tree
173.	W	Melaleuca nesophila	Pink Melaleuca	Shrub
174.	N	Metrosideros excelsus	New Zealand Christmas Tree	Tree
175.	*	Mimulus species	Monkeyflower	Flower
176.	_	Mirabilis californica	Wishbone Bush	Perennial
177.	N	Myoporum debile	Trailing Myoporum	Shrub
178.	N	Myoporum insulare	Boobialla	Shrub
179.	W	Myoporum parvifolium	Creeping Boobialla	Ground cover
180.	W	Myoporum 'Pacificum'	Trailing Myoporum	Shrub
181.	_	Nassella [stipa] lepida	Foothill Needlegrass	Ground cover
182.	_	Nassella stipa] pulchra	Purple Needlegrass	Ground cover
183.	_	Nemophila menziesii	Baby Blue Eyes	Annual
184.	X	Nerium oleander	Oleander	Shrub
185.	_	Oenothera hookeri	California Evening Primrose	Flower
186.	W	Oenothera speciosa	Showy Evening Primrose	Perennial
187.	X	Ophiopogon japonicus	Mondo Grass	Ground cover
188.	*	Opuntia littoralis	Prickly Pear	Cactus
189.	*	Opuntia oricola	Oracle Cactus	Cactus
190.	*	Opuntia prolifera	Coast Cholla	Cactus
191.	W	Osmanthus fragrans	Sweet Olive	Shrub
192.	X	Osteospermum fruticosum	Trailing African Daisy	Ground cover
193.	X	Parkinsonia aculeata	Mexican Palo Verde	Tree
194.	W	Pelargonium peltatum	Ivy Geranium	Ground cover
195.	X	Penstemon species	Beard Tongue	Shrub

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	Code	Botanical Name	Common Name	Plant Form
196.	W	Photinia Fraseri	Red Robin	Shrub
197.	W	Pistacia chinensis	Chinese pistache	Tree
198.	X	Pittosporum undulatum	Victorian Box	Tree
199.	**	Plantago arenaria	California Plantain	Annual
200.	**	Plantago insularis	Woolly Plantain	Annual
201.	X	Plantago sempervirens	Evergreen Plantain	Ground cover
202.	W	Platanus racemosa	California Sycamore	Tree
203.	W	Plumbago auriculate	Plumbago Cape	Shrub
204.		Populus fremontii	Western Cottonwood	Tree
205.	X	Portulacaria afra	Elephant's Foot	Shrub
206.		Potentilla glandulosa	Sticky Cinquefoil	Subshrub
207.	X	Potentilla tabernaemontanii	Spring Cinquefoil	Ground cover
208.	X	Prunus caroliniana	Carolina Cherry Laurel	Shrub/Tree
209.		Prunus ilicifolia ssp. Ilicifolia	Holly Leaved Cherry	Shrub
210.	X	Prunus lyonii	Catalina Cherry	Shrub/Tree
211.	N	Punica granatum	Pomegranate	Shrub/Tree
212.	W	Puya species	Puya	Succulent/shrub
213.	W	Pyracantha species	Firethorn	Shrub
214.		Quercus agrifolia	Coast Live Oak	Shrub
215.	*	Quercus berberdifolia	California Scrub Oak	Shrub
216.	*	Quercus dumosa	Coastal Scrub Oak	Shrub
217.	X	Quercus engelmannii	Engelmann Oak	Tree
218.	X	Quercus suber	Cork Oak	Tree
219.	X	Rhamnus alaternus	Italian Buckthorn	Shrub
220.		Rhamnus californica	California Coffee Berry	Shrub
221.		Rhamnus crocea	Redberry	Shrub
222.		Rhamnus crocea ssp. Ilicifolia	Hollyleaf Redberry	Shrub
223.	N	Rhaphiolepis species	Indian Hawthorn	Shrub
224.		Rhus integrifolia	Lemonade Berry	Shrub
225.	N	Rhus lancea	African Sumac	Tree
226.		Rhus ovataa	Sugarbush	Shrub
227.		Ribes aureum	Golden Currant	Shrub
228.		Ribes indecorum	White Flowering Currant	Shrub
229.		Ribes speciosum	Fuschia Flowering Gooseberry	Shrub
230.	W	Ribes viburnifolium	Evergreen Currant	Shrub
231.	*	Romneya coulteri	Matilija Poppy	Shrub
232.	X	Romneya coulteri 'White Cloud'	White Cloud Matilija Poppy	Shrub
233.	W	Rosmarinus officinalis	Rosemary	Shrub
234.	W	Salvia greggii	Autumn Sage	Shrub

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235.	W	Salvia sonomensis	Creeping Sage	Ground cover
236.	W	Sambucus mexicana	Mexican Elderberry	Tree
237.	W	Santolina chamaecyparissis	Lavender Cotton	Ground cover
238.	W	Santolina rivens	Green Lavender Cotton	Shrub
239.	_	Satureja chandleri	San Miguel Savory	Perennial
240.	_	Scirpus acutus	Hard-Stem Bulrush	Perennial
241.	_	Scirpus californicus	California Bulrush	Perennial
242.	X	Sedum acre	Goldmoss Sedum	Ground cover
243.	X	Sedum album	Green stonecrop	Ground cover
244.	X	Sedum confusum	Stonecrop	Ground cover
245.	X	Sedum x rubrotinctum	Pork & Beans	Ground cover
246.	X	Senecio serpens	Dusty Miller	Ground cover
247.	_	Sisyrinchium bellum	Blue-Eyed Grass	Ground cover
248.	_	Solanum douglasii	Douglas Nightshade	Shrub
249.	_	Solanum xantii	Purple Nightshade	Perennial
250.	W	Stenocarpus sinuatus	Firewheel Tree	Tree
251.	W	Strelitzia nicolai	Giant Bird of Paradise	Perennial
252.	W	Strelitzia reginae	Bird of Paradise	Perennial
253.	_	Symphoricarpos mollis	Creeping Snowberry	Shrub
254.	W	Tecoma stans [stenolibium stans]	Yellow Bells	Shrub/small tree
255.	X	Tecomaria capensis	Cape Honeysuckle	Ground cover
256.	N	Teucrium chamaedrys	Germander	Ground cover
257.	N	Thymus serpyllum	Lemon Thyme	Ground cover
258.	N	Trachelospermum jasminoides	Star Jasmine	Shrub
259.	_	Trichostems lanatum	Wolly Blue-Curls	Shrub
260.	X	Trifolium hirtum 'Hyron'	Hyron Rose Clover	Ground cover
261.	X	Trifolium fragiferum 'O'Connor's'	O'Connor's Legume	Ground cover
262.	_	Umbellularia californica	California Laurel	Tree
263.	_	Verbena Lasiostachys	Western Vervain	Perennial
264.	N	Verbena peruviana	Peruvian Verbena	Ground cover
265.	X	Verbena species	Verbena	Ground cover
266.	X	Vinca minor	Dwarf Periwinkle	Ground cover
267.	_	Vitis Girdiana	Desert Wild Grape	Vine
268.	X	Vulpia myuros 'Zorro'	Zorro Annual Fescue	Grass
269.	W	Westringia fruticosa	Coast Rosemary	Shrub
270.	W	Xanthorrhoea species	Grass Tree	Perennial / shrub
271.	W	Xylosma congestum	Shiny Xylosma	Shrub
272.	X	Yucca species	Yucca	Shrub
273.	_	Yucca whippiei	Yucca	Shrub

X = Plant Species prohibited in wet and dry fuel modification zones adjacent to native open space lands. Acceptable in all other fuel modification zones and locations.

W = Plant species appropriate for use in wet fuel modification zones adjacent to native open space lands. Acceptable in all other wet and irrigated dry (manufactured slopes) fuel modification zones and locations.

_ = Plant species native to Riverside, Orange and San Diego Counties. Acceptable in all fuel modification (wet or dry zones) in all locations.

N = Plant species acceptable on a limited basis (maximum 30% of the area at time of planting) in wet fuel modification zones adjacent to native open space reserve lands. Acceptable in all other fuel modification zones and locations.

* = If seed collected from local seed source.

** = Not native plant species but can be used in all fuel modification zones.

APPENDIX 'C'
Literature References

Literature References

1. *Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model,* General Technical Report RMRS-GTR-153. June 2005. Joe H. Scott, Robert E. Burgan, United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

2. *BEHAVEPlus: Fire Modeling System, version 5.0.5: Variables.* General Technical Report RMRS-GTR-213WWW Revised. September 2009. Patricia L. Andrews, United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

3. *BEHAVEPlus Fire Modeling System, Version 5.0.0* General Technical Report RMRS-GRT-106WWW Revised. June 2008. Patricia L. Andrews, Collin D. Bevins and Robert C. Seli. United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

4. *BEHAVEPlus Fire Modeling System, Version 5.0 User's Guide.* General Technical Report RMRS-GRT-106WWW Revised. July 2009. Patricia L. Andrews, Collin D. Bevins, Robert C. Seli. United States Department of Agriculture - Forest Service, Rocky Mountain Research Station, Missoula, Montana.

5. The 2022 California Fire Code Chapter 49

6. The 2022 California Fire Code with Local Amendments

7. The 2022 California Residential Code, Section R337.

8. Chapter 7A-California of the 2022 Building Code

9. National Fire Protection Association - NFPA 13 Standard for the Installation of Sprinkler Systems in One – and Two-Family Dwellings and Manufactured Homes, 13-R &13-D, 2022 Editions

10. National Fire Protection Association - NFPA 1144 *Standard for Reducing Structure Ignition Hazards from Wildfire (*2018).

11. National Fire Protection Association - NFPA 1142, 2012 Edition. Table C.11 (b) Time-Distance Table Using an Average Speed of 35 mph

12. *The California State and Local Responsibility Area Fire Hazard Severity Zone Map – Fire and Resource Assessment Program of CAL FIRE*

15. Western Region Climate Center. *Historic Climate Data from Remote Automated Weather Stations.* RAWS USA Climate Archive. Reno, NV. Data for all Remote Automated Weather Stations is available at: http://www.raws.dri.edu/index.html

APPENDIX 'D'

Non-combustible & Ignition Resistant Building Materials

Non-Combustible & Ignition Resistant Building Materials For Balconies, Carports, Decks, Patio Covers and Floors

Examples of non-combustible & fire-resistant building materials for balconies, carports decks, patio covers, and floors are as follow:

I. NON-COMBUSTIBLE HEAVY GAGE ALUMINUM MATERIALS - *Metals USA Building Products Group - Ultra-Lattice*

Ultra-Lattice Stand Alone Patio Cover

Ultra-Lattice Attached Patio Cover

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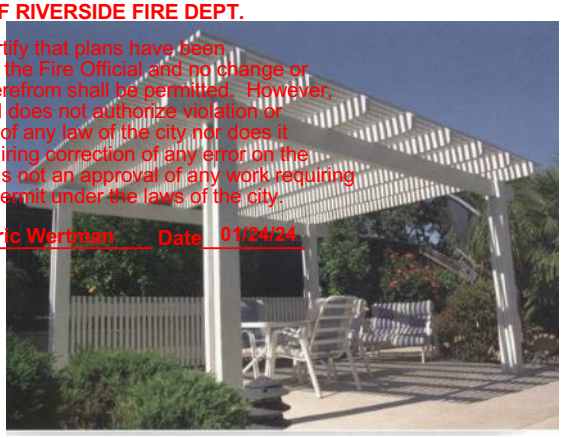
Engineer Eric Wertman Date 01/24/24



Ultra-Lattice Solid Patio Cover

Ultra-Lattice Vs. Wood

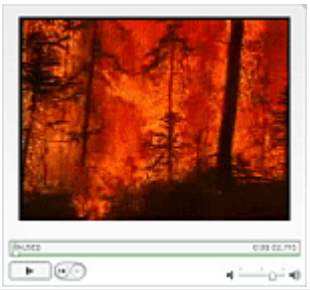
II. FRX Exterior Fire-Retardant Treated Wood

Exterior Fire Retardant Treated (FRT) Wood

FRX® fire retardant treated wood may be used in exterior applications permitted by the codes where: public safety is critical, other materials would transfer heat or allow fires to spread, sprinkler systems cannot easily be installed, corrosive atmospheres necessitate excessive maintenance of other materials, or fire protection is inadequate or not readily available. The International Building, Residential and Urban-Wildland Interface Codes and regulations permit the use of fire-retardant treated wood in specific instances. See below for typical exterior uses and typical residential uses.

Typical Exterior Uses

- Balconies
- Decks



Homeowners and Residential Architects: See this 2-minute video and the diagram below.

For information on fire retardant treated wood for exterior uses, visit

III. TREX COMPANY, INC –"Trex Accents ®: Fire Defense ™ " wood and polyethylene composite deck board, nominal 5/4" thick x 5-1/2" width, nominal density of 0.036 lb./in^3.

Trex Accents®: Fire Defense™

The perfect blend of beauty and brawn.

Trex's #1 selling platform, Trex Accents®, exceeds the strict fire regulations set by the State of California and San Diego County.

- Offers superior safety performance:
  - Exceeds ASTM E84 Class B Flame Spread.
  - Exceeds 12-7A-4 Part A (underflame) and Part B (Burning Brand).
- Self-extinguishing even under extreme fire exposure.

Approved for use by the California State Fire Marshal's Office and San Diego County. Read the California Department of Forestry and Fire Protection, Office of the State Fire Marshal WILDLAND URBAN INTERFACE (WUI)PRODUCTS Report. (PDF)

IV. SOLID "WOOD" DECKING

Company Name: Various Manufacturers

Product Description: Solid "Wood" decking: "Redwood", "Western Red Cedar", "Incense Cedar", "Port Orford Cedar", and "Alaska Yellow Cedar".
Sizes: Minimum nominal 2" thickness (American Softwood Lumber Standard PS 20).
Lumber grades: Construction Common and better grades for Redwood, 3 Common and better grades for Cedars, and commercial decking or better grades for both Redwood and Cedars.

Special Instructions: Solid wood decking shall be installed over solid wood joists spacing 24" or less on center.

Decking (SFM Standard 12-7A-4)

V. Vents

Examples of Approved Vents

Brandguard

O'Hagin Fire & Ice® Line – Flame and Ember Resistant
An available option for all O'Hagin attic ventilation products, this attic vent not only features all the same design, construction elements and color choices as the O'Hagin Standard Line, but also features an interior stainless-steel matrix that resists the intrusion

of flames and embers. This patent-pending attic vent is accepted for use by many local fire officials for installation in Wildland Urban Interface (WUI) zones.

Vulcan Vents

The founders of Gunter Manufacturing have been working closely over the last two years, with the scientists and inventors of Vulcan Technologies to bring to market this incredible product.

Combining our quality vent products with the fire-stopping honeycomb matrix core designed by Vulcan has produced unique and remarkable results.

Gunter manufacturing has over 50 years of combined sheet metal manufacturing experience. Special orders are not a problem. Their vent frames are industry standard frames so there is little or no learning curve for installers and contractors. Their stated goal is to provide people with the vents they need to secure their homes with additional safety against wildfires and give them piece of mind from knowing that their home or structure is protected by a product that works!

The core of their fire and ember safe vents are manufactured out of hi-grade aluminum honeycomb and coated with an intumescent coating made by FireFree Coatings. The intumescent coating is designed to quickly swell up and close off when exposed to high heat. The expanded material acts as an insulator to heat, fire, and embers

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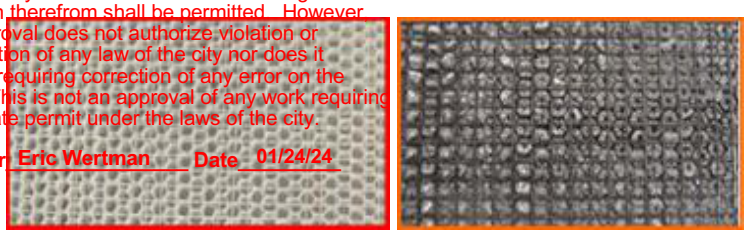
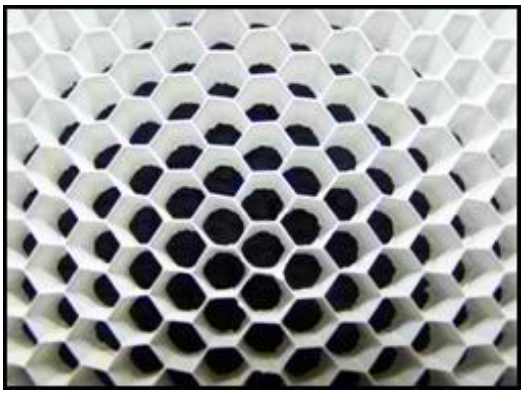
Engineer Eric Wertman Date 01/24/24



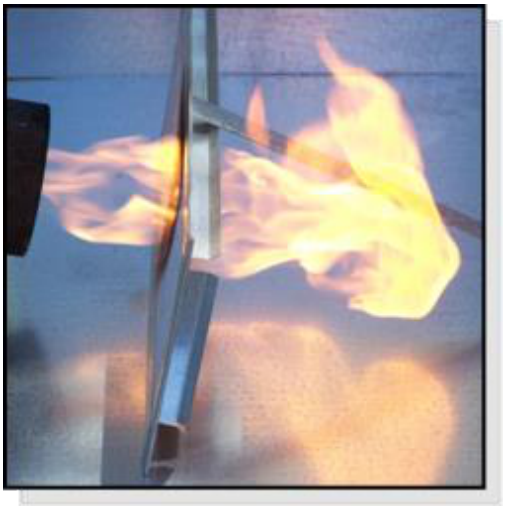
Before **After**

After the cells close off, they are extremely well insulated, and fire or embers cannot penetrate.

Even before the cells close off, the vent is designed to protect against flying embers. In many cases embers will attack a structure before fire ever comes near, so this feature is especially important.



Close-up of the coated honeycomb matrix.



Fire easily passes through a standard vent, on the left, but stops cold when it comes up against a Vulcan Vent shown on right.

APPENDIX 'E'

Ignition Resistant Construction Requirements

The following is a summary of the current requirements for ignition resistant construction for high fire hazard areas under Chapter 7A of the California Building Code (CBC) 2022 edition. However the requirements listed below are not all inclusive and all exterior building construction including roofs, eaves, exterior walls, doors, windows, decks, and other attachments must meet the current CBC Chapter 7A ignition resistance requirements, the California Fire Code, and any additional County and/or City codes in effect at the time of building permit application. See the currrent applicable codes for a detailed description of these requirements and any exceptions.

1. All structures will be built with a Class A Roof Assembly and shall comply with the requirements of Chapter 7A and Chapter 15 of the California Fire Code. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions.

2. Roof valley flashings shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909, at least 36-inch-wide (914 mm) running the full length of the valley.

3. Attic or foundation ventilation louvers or ventilation openings in vertical walls shall be covered with a minimum of 1/16-inch and shall not exceed 1/8-inch mesh corrosion-resistant metal screening or other approved material that offers equivalent protection.

4. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be fire stopped with approved materials or have one layer of a minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

5. Enclosed roof eaves and roof eave soffits with a horizontal underside, sloping rafter tails with an exterior covering applied to the under-side of the rafter tails, shall be protected by one of the following:
   - noncombustible material
   - Ignition-resistant material
   - One layer of $^{5}/_{8}$-inch Type X gypsum sheathing applied behind an exterior covering on the underside of the rafter tails or soffit
   - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the rafter tails or soffit including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual

- Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in Section 707A.10 when tested in accordance with the test procedures set forth in ASTM E2957.
- Boxed-in roof eave soffit assemblies with a horizontal underside that meet the performance criteria in accordance with the test procedures set forth in SFM Standard 12-7A-3.

Exceptions: The following materials do not require protection:
1. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
2. Fascia and other architectural trim boards.

6. The exposed roof deck on the underside of unenclosed roof eaves shall consist of one of the following:
   - Noncombustible material, or
   - Ignition-resistant material, or
   - One layer of 5/8-inch Type X gypsum sheathing applied behind an exterior covering on the underside exterior of the roof deck, or
   - The exterior portion of a 1-hour fire resistive exterior wall assembly applied to the underside of the roof deck designed for exterior fire exposure including assemblies using the gypsum panel and sheathing products listed in the Gypsum Association fire Resistance Design Manual.

   Exceptions: The following materials do not require protection:
   1. Solid wood rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).
   2. Solid wood blocking installed between rafter tails on the exposed underside of open roof eaves having a minimum nominal dimension of 2 inch (50.8 mm).
   3. Gable end overhangs and roof assembly projections beyond an exterior wall other than at the lower end of the rafter tails.
   4. Fascia and other architectural trim boards.

7. Vents - ventilation openings for enclosed attics, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, and underfloor ventilation openings shall be fully covered with metal wire mesh, vents, other materials or other devices that meet one of the following requirements:
   A. Vents listed to ASTM E2886 and complying with all the following:
      i. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
      ii. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
      iii. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
   B. Vents shall comply with all the following:
      i. The dimensions of the openings therein shall be a minimum of $^{1}/_{16}$-inch (1.6 mm) and shall not exceed $^{1}/_{8}$-inch (3.2 mm).
      ii. The materials used shall be noncombustible.
      Exception: Vents located under the roof covering, along the ridge of roofs, with the exposed surface of the vent covered by noncombustible wire mesh, may be of combustible materials.

iii. The materials used shall be corrosion resistant.

8. Vents shall not be installed on the underside of eaves and cornices.

Exceptions:

1. Vents listed to ASTM E2886 and complying with all the following:
   - There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
   - There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
   - The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
2. The enforcing agency shall be permitted to accept or approve special eave and cornice vents that resist the intrusion of flame and burning embers.
3. Vents complying with the requirements of Section 706A.2 shall be permitted to be installed on the underside of eaves and cornices in accordance with either one of the following conditions:
   3.1. The attic space being ventilated is fully protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or,
   3.2. The exterior wall covering, and exposed underside of the eave are of noncombustible materials, or ignition-resistant materials, as determined in accordance with SFM Standard 12-7A-5 Ignition-Resistant Material and the requirements

9. All chimney, flue or stovepipe openings that will burn solid wood will have an approved spark arrester. An approved spark arrester is defined as a device constructed of nonflammable materials, having a heat and corrosion resistance equivalent to 12-gauge wire, 19-game galvanized steel or 24-gage stainless steel. or other material found satisfactory by the Fire Protection District, having ½-inch perforations for arresting burning carbon or sparks nor block spheres having a diameter less than 3/8 inch (9.55 mm). It shall be installed to be visible for the purposes of inspection and maintenance and removeable to allow for cleaning of the chimney flue.

10. All residential structures will have automatic interior fire sprinklers installed according to the National Fire Protection Association (NFPA) 13R 2019 edition - *Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies*.

11. The exterior wall covering, or wall assembly shall comply with one of the following requirements:
    - Noncombustible material, or
    - Ignition resistant material, or
    - Heavy timber exterior wall assembly, or
    - Log wall construction assembly, or
    - Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact expose test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1 of the California Building Code, or

- Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section including;

- One layer of 5/8-inch Type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, or
- The exterior portion of a 1-hour fire resistive exterior wall assembly designed for exterior fire exposure includes assemblies using the gypsum panel and sheathing products listed in the Gypsum Associate Fire Resistance Design Manual.

12. Exterior walls shall extend from the top of the foundation to the roof and terminate at 2-inch nominal solid blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure.

13. Gutters shall be provided with the means to prevent the accumulation of leaf litter and debris within the gutter that contribute to roof edge ignition.

14. No attic ventilation openings or ventilation louvers shall be permitted in soffits, in eave overhangs, between rafters at eaves, or in other overhanging areas.

15. All projections (exterior balconies, decks, patio covers, unenclosed roofs and floors, and similar architectural appendages and projections) or structures less than five feet from a building shall be of non-combustible material, one-hour fire resistive construction on the underside, heavy timber construction or pressure-treated exterior fire-retardant wood. When such appendages and projections are attached to exterior fire-resistive walls, they shall be constructed to maintain the same fire-resistant standards as the exterior walls of the structure.

16. Deck Surfaces shall be constructed with one of the following materials:
    - Material that complies with the performance requirements of Section 709A.4 when tested in accordance with both ASTM E2632 and ASTM E2726, or
    - Ignition-resistant material that complies with the performance requirements of 704A.3 when tested in accordance with ASTM E84 or UL 723, or
    - Material that complies with the performance requirements of both SFM Standard 12-7A-4 and SFM Standard 12-7A-5, or
    - Exterior fire retardant treated wood, or
    - Noncombustible material, or
    - Any material that complies with the performance requirements of SFM Standard 12-7A-4A when the attached exterior wall covering is also composed of noncombustible or ignition-resistant material.

17. Accessory structures attached to buildings with habitable spaces and projections shall be in accordance with the Building Code. When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas and exterior wall construction in accordance with Chapter 7A of the Building Code.

18. Exterior windows, skylights and exterior glazed door assemblies shall comply with one of the following requirements:
    - Be constructed of multiplane glazing with a minimum of one tempered pane meeting the requirements of Section 2406 Safety Glazing, or
    - Be constructed of glass block units, or
    - Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or
    - Be tested to meet the performance requirements of SFM Standard 12-7A-2.

19. All eaves, fascia and soffits will be enclosed (boxed) with non-combustible materials. This shall apply to the entire perimeter of each structure. Eaves of heavy timber construction are not required to be enclosed as long as attic venting is not installed in the eaves. For the purposes of this section, heavy timber construction shall consist of a minimum of 4x6 rafter ties and 2x decking.

20. Detached accessory buildings that are less than 120 square feet in floor area and are located more than 30 feet but less than 50 feet from an applicable building shall be constructed of noncombustible materials or of ignition-resistant materials as described in Section 704A.2 of the California Building Code.
    Exception: Accessory structures less than 120 square feet in floor area located at least 30 feet from a building containing a habitable space.

21. All rain gutters, down spouts and gutter hardware shall be constructed from metal or other noncombustible material to prevent wildfire ignition along eave assemblies.

22. All side yard fence and gate assemblies (fences, gate and gate posts) when attached to the home shall be of non-combustable material. The first five feet of fences and other items attached to a structure shall be of non-combustible material.

23. Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8 inch. Gaps between doors and door openings shall be controlled by one of the methods listed in this section.
    - Weather-stripping products made of materials that:
      (a) have been tested for tensile strength in accordance with ASTM D638 (Standard Test Method for Tensile Properties of Plastics) after exposure to ASTM G155 (Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials) for a period of 2,000 hours, where the maximum allowable difference in tensile strength values between exposed and non-exposed samples does not exceed 10%; and (b) exhibit a V-2 or better flammability rating when tested to UL 94, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.
    - Door overlaps onto jambs and headers.
    - Garage door jambs and headers covered with metal flashing.

24. Exterior doors shall comply with one of the following:
    1. The exterior surface or cladding shall be of noncombustible material or,

2. The exterior surface or cladding shall be of ignition-resistant material or,
3. The exterior door shall be constructed of solid core wood that complies with the following requirements:
   3.1 Stiles and rails shall not be less than 1-3/8 inches thick.
   3.2 Panels shall not be less than 1-1/4 inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than 3/8 inch thick.
4. The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252 or,
5. The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707 or,
6. The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1.

25. Fire access tunnels shall have two hour rated walls consisting of two layers of 5/8" Type 'X' gypsum wallboard panels on each side of the studs. The EZ Taping Systems "Fire Tape" product or equivalent should be used as an alternative to convention joint tape when:
    1. Two or more layers of listed Type 'X' gypsum wallboard are applied vertically with joints staggered and joints of the face board are":
       a. Tightly butted and taped with EZ Taping Systems "Fire Tape" or equivalent product or
       b. Finished with joint compound of EZ Taping Systems "Fire Tape" or equivalent product if the gap between gypsum wallboard panels is visible at the joint.
    2. Two or more layers of USG "Sheetrock" Fire code C gypsum wallboard are applied (horizontally or vertically).
    3. Gypsum panels shall be attached with Type S drywall screws, placed 8" oc to vertical edges and 12" oc to top and bottom runners and intermediate studs.
    4. Fire Tape shall be nominal 2" wide and applied on the vertical joints at studs.

** FAHJ – Fire Authority Having Jurisdiction
SFM – State Fire Marshal
NFPA – National Fire Protection Association

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Engineer Eric Wertman Date 01/24/24

APPENDIX 'F'

Site Plan and Fuel Treatment Exhibit

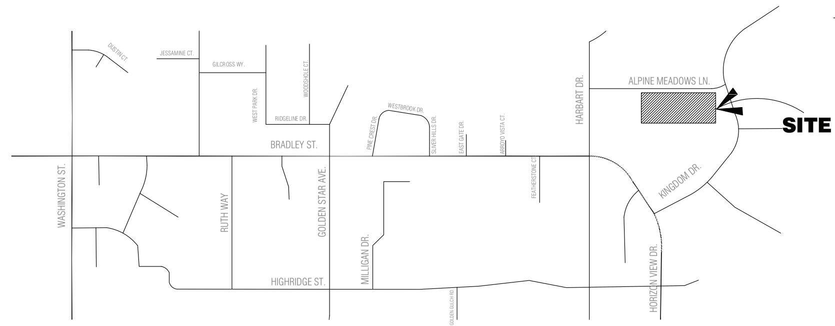
These Documents must be included at time of submittal

Three Single Family Homes

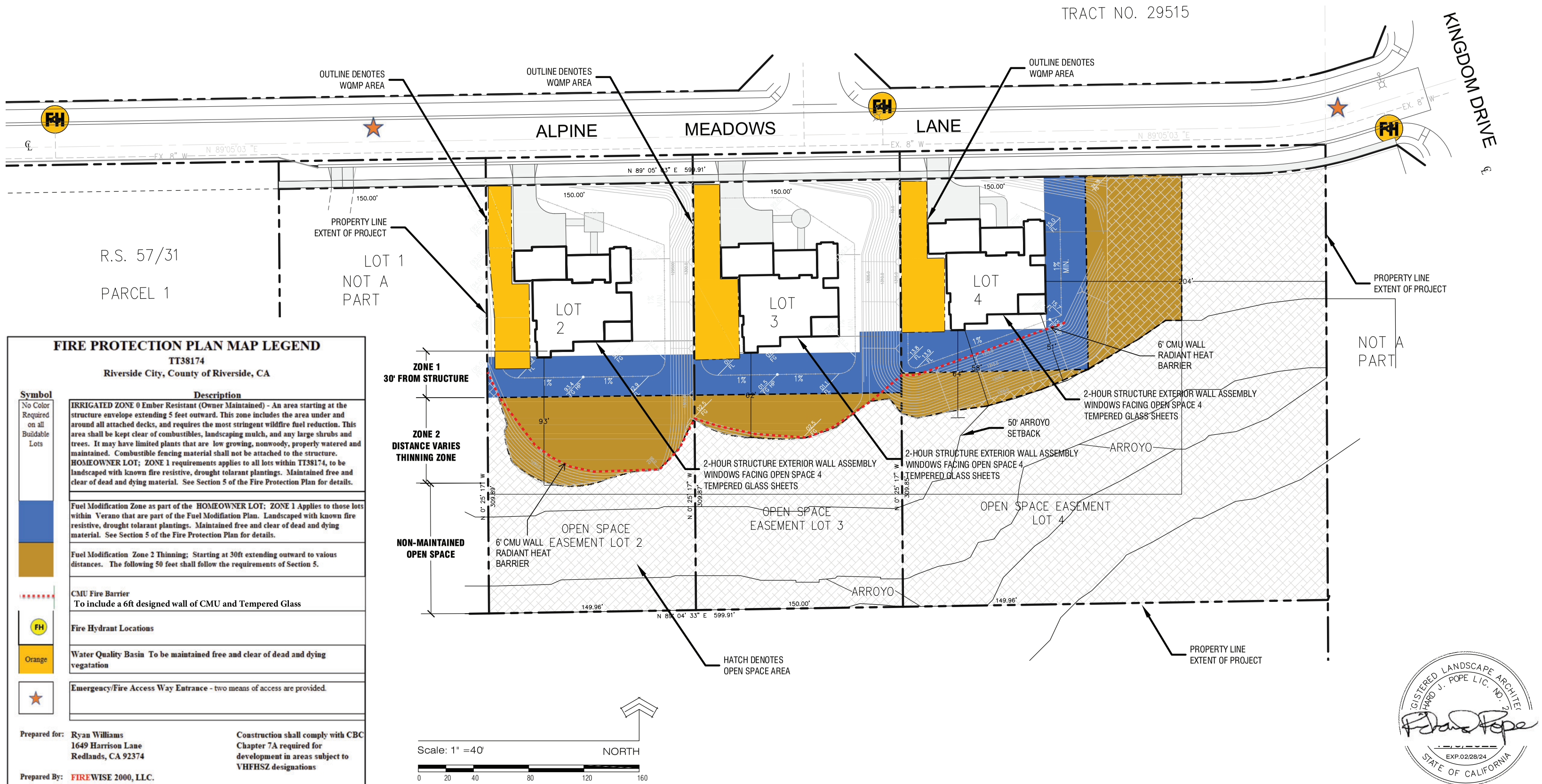
FIRE PROTECTION PLAN

Tract 38174
Alpine Meadows Lane
Riverside, CA 92506
APN: 243-230-027-0000

Applicant:
Ryan Williams
1649 Harrison Ln.
Redlands CA 92374
Contact: Ryan Williams
Phone: (909)471-0808
Email: ryanpwilliams1987@gmail.com



Vicinity Map
not to scale
North



FIRE PROTECTION PLAN MAP LEGEND

TT38174
Riverside City, County of Riverside, CA

Symbol	Description
No Color Required on all Buildable Lots	IRRIGATED ZONE 0 Ember Resistant (Owner Maintained) - An area starting at the structure envelope extending 5 feet outward. This zone includes the area under and around all attached decks, and requires the most stringent wildfire fuel reduction. This area shall be kept clear of combustibles, landscaping mulch, and any large shrubs and trees. It may have limited plants that are low growing, nonwoody, properly watered and maintained. Combustible fencing material shall not be attached to the structure. HOMEOWNER LOT; ZONE 1 requirements applies to all lots within TT38174, to be landscaped with known fire resistive, drought tolarant plantings. Maintained free and clear of dead and dying material. See Section 5 of the Fire Protection Plan for details.
(blue)	Fuel Modification Zone as part of the HOMEOWNER LOT; ZONE 1 Applies to those lots within Verano that are part of the Fuel Modifiation Plan. Landscaped with known fire resistive, drought tolarant plantings. Maintained free and clear of dead and dying material. See Section 5 of the Fire Protection Plan for details.
(brown)	Fuel Modification Zone 2 Thinning; Starting at 30ft extending outward to vaious distances. The following 50 feet shall follow the requirements of Section 5.
(red dotted line)	CMU Fire Barrier To include a 6ft designed wall of CMU and Tempered Glass
FH	Fire Hydrant Locations
Orange	Water Quality Basin To be maintained free and clear of dead and dying vegatation
★	Emergency/Fire Access Way Entrance - two means of access are provided.

Prepared for: Ryan Williams
1649 Harrison Lane
Redlands, CA 92374

Prepared By: FIREWISE 2000, LLC.
PO Box 339
Lower Lake, CA 95457
Telephone: 760-745-3947
info@firewise 2000.com

Construction shall comply with CBC Chapter 7A required for development in areas subject to VHFHSZ designations

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE CITY'S WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE

SIGN ________ DATE 12/9/2022

RICHARD POPE AND ASSOCIATES Landscape Architecture
1585 South 'D' Street, Suite 202
San Bernardino, CA 92408
phone: (909) 888-5568
e-mail: richardpopeassociates.la@gmail.com
www.richardpopeandassociates.com
Richard Pope, Landscape Architect CA# 2664

LICENSED LANDSCAPE ARCHITECT RICHARD J. POPE LIC. NO. 2664 EXP.02/28/24 STATE OF CALIFORNIA

JOB: 22-04 CKE LKD
January 26, 2022

SHEET 1 OF 2

CITY OF RIVERSIDE FIRE DEPT.

This is to certify that plans have been approved by the Fire Official and no change or deviation therefrom shall be permitted. However, this approval does not authorize violation or cancellation of any law of the city nor does it prevent requiring correction of any error on the plans. This is not an approval of any work requiring a separate permit under the laws of the city.

Engineer Eric Wertman Date 01/24/24

APPENDIX 'G'

Approved AM&M Request

CITY OF RIVERSIDE FIRE DEPT
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Engineer: Eric Wertman Date 01/24/24

City of Riverside Fire Department

Application for Alternate Materials & Methods Of Design and Construction

Distribution
- ☐ Owner
- ☐ Petitioner
- ☐ Plan Reviewer
- ☐ Inspection
- ☐ Fire Prevention

Project Address: Tract 38174 Lot 2, 3 and 4, Alpine Meadows Lane Riverside, CA 92506 APN: 243-230-027-0000

Plan Check #: GP-2023-06164

Petitioner: (Print Name): Michael Ackerman, RCE, QSD/P, QISP

Relation to the project: (check one)
- ☐ Architect of Record
- ☒ Engineer of Record
- ☐ Designer of Record
- ☐ Owner
- ☐ Contractor

Street Address:

Daytime Phone: (909) 263-1734

Structure Information:
Use: Residential
Occupancy Class: R-3
Construction Type: V-B
No. of Stories: 2
Fire Sprinklered? yes- NFPA 13D

Architect/Engineer Seal & Signature:

REGISTERED PROFESSIONAL ENGINEER MICHAEL ACKERMAN R.C.E. 64663 CIVIL STATE OF CALIFORNIA

Email: (Please print) michael@ackermanassociates2000.com

Alternate Contact Name and Phone Number:

REQUEST: Provide a brief description of the proposed modification or the alternate material or method being proposed. (You may attach additional document if necessary but this section must be completed)

The location of the pad does not meet 100 feet of defensible space as required by California Building Code. Distance of allowable fuel treatment is limited to on pad, setback of minimum 40 feet to habitat.

Alternate methods proposed with 2 measures:

1) 6-ft tall masonry wall as designated on the attached exhibit along to protect the structures from, convected/radiant heat and blowing ground embers.

2) A 2-hour exterior rated wall assembly for those surfaces facing the reduced Fuel Modification Area. Assembly to include 2 sheets of tempered glass for windows exposed to open space.

Code Section(s):	Issue(s):

JUSTIFICATION: Explain how the proposed modification or alternate meets the intent of the applicable code sections while maintaining equivalent protection in suitability, strength, effectiveness, fire resistance, durability, safety, and sanitation (as applicable). Include any relevant practical difficulties for strict compliance. (You may attach additional documentation if necessary but this section must be completed)

The Project is unable to provide for the required 100 ft of fuel treatment due to Environmental constraints, a standard desogm feature is the use of a barrier to stop the forward progress of the fire, deflect any radiant heat, and stop blowing ground embers from impacting adjacent structures.

The addition of the 2-hour wall assembly and dual pain tempered windows will provide equivalency, when added to those code requirements for construction in a VHFHSZ. See attached specifications.

Petitioner's Signature:	Title:	Date:

CITY OF RIVERSIDE FIRE DEPT.

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Engineer Eric Wertman Date 01/24/24

Project Address:	**Plan Check Number:**
Tract 38174 Lot 2, 3, and 4, Alpine Meadows Lane Riverside, CA 92506	GP-2023-06164

FOR STAFF USE ONLY

Assigned to :	**Project Status:**	**Staff Recommendation:**
Staff Signature: _____	☐ Preliminary Design	☒ Approve Request as Stated
Date: 1/23/2024	☒ Plan Review	☐ Approve Request with Conditions
	☐ Under Construction	☐ Deny Request as Stated
	☐ Construction Complete	

Fire Department Staff Comments:

APPROVED AS REQUESTED.

FIRE'S APPROVED ALTERNATE MEANS METHOD(AMM) APPLICATION FOR PROPOSED DETACHED SINGLE FAMILY RESIDENCES(Lot 2, 3,and 4) SHALL BE SUBMITTED WITH THE BUILDING PERMIT ARCHITECTURAL PLANS.

Fire Department Conditions of Approval/Reasons for Denial:

1.) 6-ft tall masonry wall as designated on the attached exhibit along the east PL to protect the structures from, convected/radiant heat and blowing ground embers.

2.) A 2-hour exterior rated wall assembly for those surfaces facing the reduced Fuel Modification Area. Assembly to include 2 sheets of tempered glass for windows exposed to open space

Determination of Fire Marshal: _____ Authorized Signature **Date:** 1/23/2024	☒ Approve Request as Stated ☐ Approve Request with Conditions ☐ Deny Request as Stated

Fire Protection Conditions of Approval/Reasons for Denial:

FP-AMM-2015

DATE: 10 April 2023

CITY OF RIVERSIDE FIRE DEPT.

TO: CITY OF RIVERSIDE FIRE DEPARTMENT
3900 MAIN STREET, 3RD FLR
RIVERSIDE, CA 92522

This is to certify that plans have been approved by the Fire Official and no change or deviation therefrom shall be permitted. However, this approval does not authorize violation or cancellation of any law of the city nor does it prevent requiring correction of any error on the plans. This is not an approval of any work requiring a separate permit under the laws of the city.

Engineer Eric Wertman Date 01/24/24

FROM: Michael Ackerman, RCE, QSD/P, QISP
Ackerman Associates 2000 Inc.
Civil Engineering and Construction Management

RE: Tract 38174 Lot 2, 3, and 4 Alpine Meadow Ln, Riverside, CA

I acknowledge that this letter is being written under the AMoCM application form in conjunction with a Fire Protection Plan for TR38174 specifically Lots 2, 3, and 4.
We are proposing a 6' tall CMU wall/barrier on the south side of the parcel as designated on the exhibit, and a 2-hour rated exterior wall assembly, with dual tempered glazing assemblies, for those wall surfaces facing the exposed open area with reduced separation.

The proposed alternate protection measures have been utilized in other projects within the city and state.

1) The proposed wall has generally been accepted as an alternate mitigation measure when projects have less than a 100-foot buffer as it provides a barrier for radiant heat at the leading edge of a fire and reduces/stops wind-blown ground embers. The heat flux at the barrier is only momentary. In this case the flame lengths are less than the distance to the structure envelope. See attached additional information on site wall design and site images for locations.

2) In conjunction with the added fire walls, the exterior wall surface of Lots 2, 3, and 4 facing reduced buffered areas will be built with 2-hour fire rated surfaces at the vertical walls on the exterior fire exposed sides, window assemblies shall be designed with 2 sheets of tempered glass vs the standard required 1 sheet. See attached additional information on the tested 2-hour wall design "GA FILE NO. WP 8207" comprised on 2 layers of 5/8" type X gypsum wall board behind the exterior finish and site images for locations.

Sincerely,

Michael Ackerman, RCE, QSD/P, QISP
michael@ackermanassociates2000.com

REGISTERED PROFESSIONAL ENGINEER
MICHAEL ACKERMAN
R. C. E. 64663
CIVIL
STATE OF CALIFORNIA

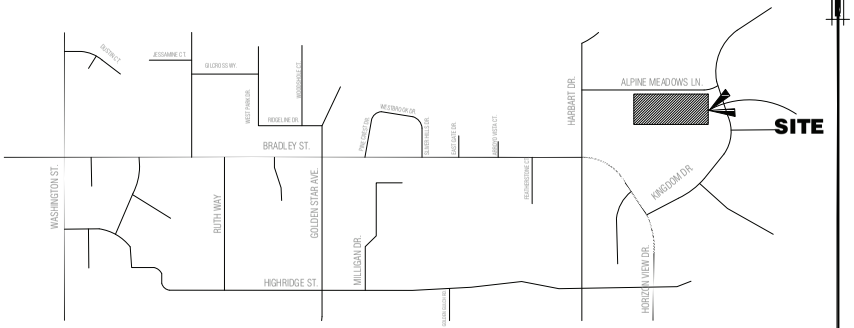
Three Single Family Homes

FIRE PROTECTION PLAN

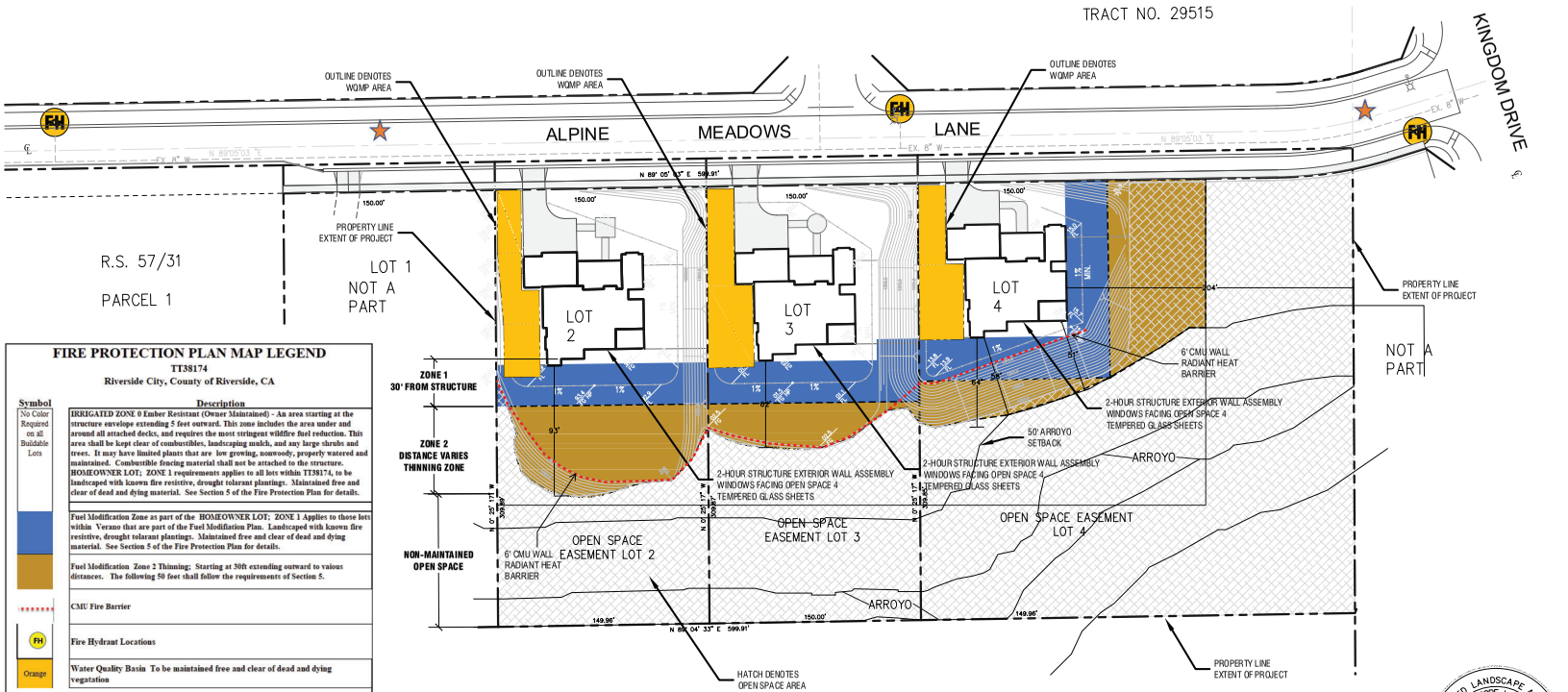
Tract 38174
Alpine Meadows Lane
Riverside, CA 92506
APN: 243-230-027-0000

Exhibit With Design Features
AM&M

Applicant:
Ryan Williams
1649 Harrison Ln.
Redlands CA 92374
Contact: Ryan Williams
Phone: (909)471-0808
Email: ryanpwilliams1987@gmail.com



Vicinity Map
not to scale
North



FIRE PROTECTION PLAN MAP LEGEND

TT38174
Riverside City, County of Riverside, CA

Symbol	Description
No Color Required on all Buildable Lots	IRRIGATED ZONE 0 Ember Resistant (Owner Maintained) - An area starting at the structure envelope extending 5 feet outward. This zone includes the area under and around all attached decks, and requires the most stringent wildfire fuel reduction. This area shall be kept clear of combustibles, landscaping mulch, and any large shrubs and trees. It may have limited plants that are low growing, nonwoody, properly watered and maintained. Combustible fencing material shall not be attached to the structure. HOMEOWNER LOT; ZONE 1 requirements applies to all lots within TT38174, to be landscaped with known fire restrictive, drought tolarant plantings. Maintained free and clear of dead and dying material. See Section 5 of the Fire Protection Plan for details.
	Fuel Modification Zone as part of the HOMEOWNER LOT; ZONE 1 Applies to those lots within Verano that are part of the Fuel Modification Plan. Landscaped with known fire restrictive, drought tolarant plantings. Maintained free and clear of dead and dying material. See Section 5 of the Fire Protection Plan for details.
	Fuel Modification Zone 2 Thinning; Starting at 30ft extending outward to vaious distances. The following 50 feet shall follow the requirements of Section 5.
	CMU Fire Barrier
FH	Fire Hydrant Locations
Orange	Water Quality Basin To be maintained free and clear of dead and dying vegatation
	Emergency/Fire Access Way Entrance - two means of access are provided.

Prepared for: Ryan Williams
1649 Harrison Lane
Redlands, CA 92374

Prepared By: FIREWISE 2000, LLC.
PO Box 339
Lower Lake, CA 95457
Telephone: 760-745-3947
info@firewise 2000.com

Construction shall comply with CBC Chapter 7A required for development in areas subject to VHFHSZ designations

Scale: 1" =40'
NORTH
0 20 40 80 120 160

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE CITY'S WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

SIGN _____ DATE 12/9/2022

REGISTERED LANDSCAPE ARCHITECT RICHARD J. POPE LIC. NO. 2664 EXP. 02/28/24 STATE OF CALIFORNIA

JOB: 22-04 CKE LKD
January 26, 2022

RICHARD POPE AND ASSOCIATES
Landscape Architecture
1585 South 'D' Street, Suite 202
San Bernardino, CA 92408
phone: (909) 888-5568
e-mail: richardpopeassociates.la@gmail.com
www.richardpopeandassociates.com
Richard Pope, Landscape Architect CA# 2664

EXTERIOR WALLS

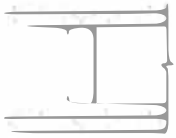
GA FILE NO. WP 8206	PROPRIETARY*	2HOUR FIRE

GYPSUM WALLBOARD, GLASS MAT GYPSUM SUBSTRATE, STEEL STUDS

EXTERIOR SIDE: Base layer 5/8" proprietary type X gypsum sheathing or glass mat gypsum substrate (sheathing) applied parallel or at right angles to 3-1/2", 33 mil (20 ga.), steel studs 24" o.c. with 1" Type S-12 drywall screws 16" o.c. Face layer 5/8' proprietary type X gypsum sheathing or glass mat gypsum substrate (sheathing) applied parallel or at right angles to studs with 1-5/8" Type S-12 drywall screws 16" o.c.

INTERIOR SIDE: Base layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 1" Type S-12 drywall screws 16" o.c. Face layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 1-5/8" Type S-12 drywall screws 16" o.c.

Face layer horizontal joints need not be staggered or backed from base layer or on opposite sides. (LOAD-BEARING)



Thickness: 6-1/8"
Approx. Weight: 7 psf
Fire Test: UL R1319, 08CA62192, 5-15-09; 08NK23546, 6-2-08; UL Design U423

PROPRIETARY GYPSUM PANEL PRODUCT

United States Gypsum Company ... 5/8" SECUROCK® Glass-Mat Sheathing Panels
5/8" SHEETROCK® Brand Ultralight Panels FIRECODE® X

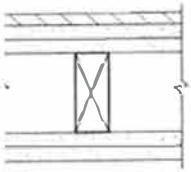
GA FILE NO. WP 8207	PROPRIETARY*	2HOUR FIRE

GYPSUM WALLBOARD, GLASS MAT GYPSUM SUBSTRATE, WOOD STUDS

EXTERIOR SIDE: Base layer 5/8" proprietary type X glass mat gypsum substrate (sheathing) applied parallel or at right angles to 2 x 4 wood studs 16" o.c. with 1-1/4', Type W drywall screws 8" o.c. Face layer 5/8" proprietary type X glass mat gypsum substrate (sheathing) applied parallel or at right angles to studs with 1-7/8" Type W drywall screw 8" o.c. Exterior cladding to be attached through glass mat gypsum panel to studs.

INTERIOR SIDE: Base layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles to 2 x 4 wood studs 16" o.c. with 1-1/4", Type W drywall screws 8" o.c. Face layer 5/8" proprietary type X gypsum wallboard applied parallel or at right angles to studs to with 1-7/8" Type W drywall screw 8" o.c.

Joints staggered 16" each layer and side. (LOAD-BEARING)



Thickness: 6-1/8"
Approx. Weight: 12 psf
Fire Test: UL R14196, 11NK04002, 3-3-11, UL Design U301

PROPRIETARY GYPSUM PANEL PRODUCTS

American Gypsum Company LLC ..... 5/8" FireBlock® Type X Gypsum Board
5/8" M-Glass® Type X Exterior Gypsum Sheathing

SOLID FENCING - BLOCK WALL

CITY OF RIVERSIDE FIRE DEPT.

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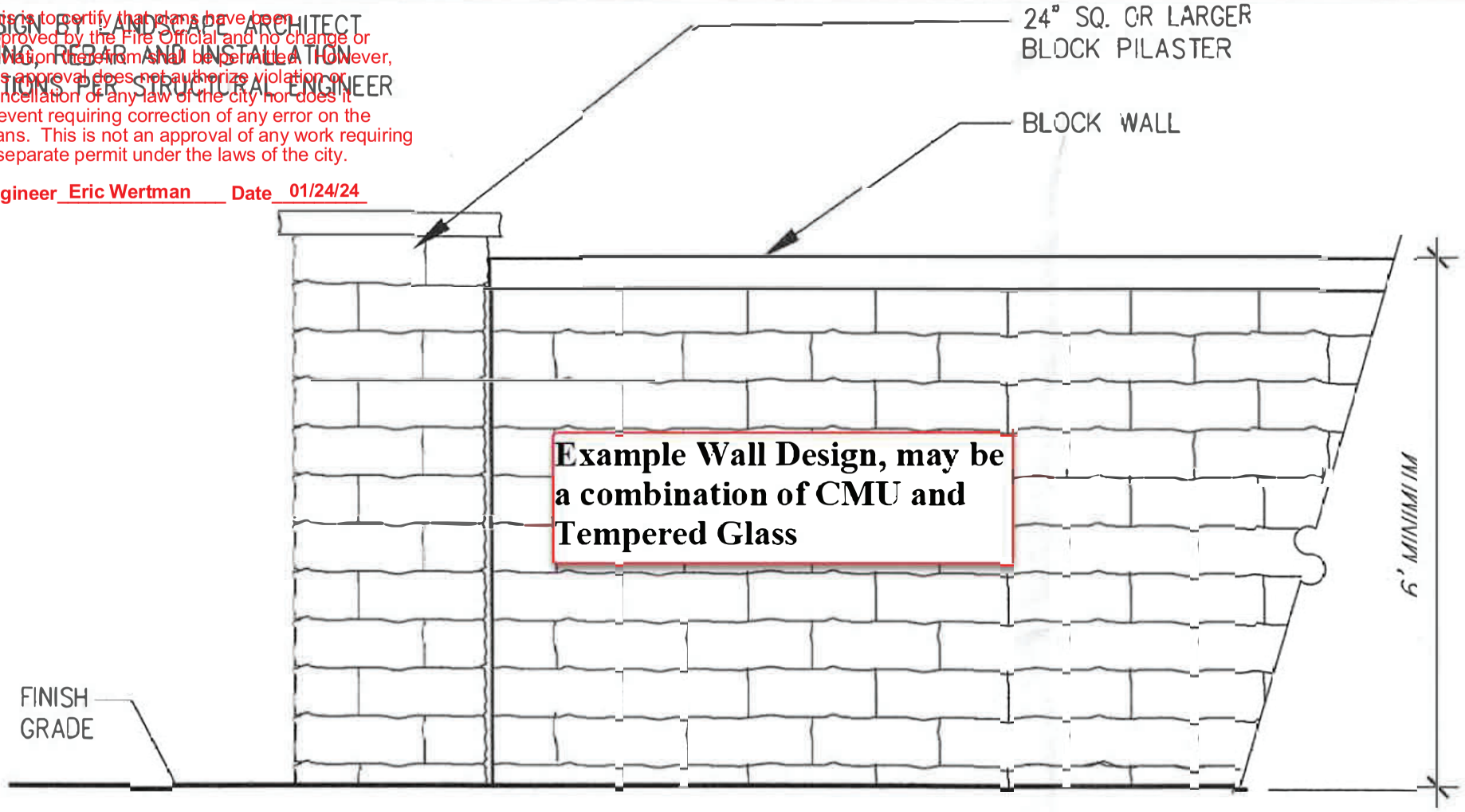
Engineer Eric Wertman Date 01/24/24

FINAL DESIGN BY LANDSCAPE ARCHITECT
ALL FOOTING, REBAR AND INSTALLATION
SPECIFICATIONS PER STRUCTURAL ENGINEER



Ruth Villalobos & Associates, Inc.

February 5, 2024

Candice Assadzadeh, Senior Planner
City of Riverside
Community Economic Development Department – Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

RE: 841 Alpine Meadows Lane Tentative Parcel Map No. 39174, PR-2021-001023 (PM, GE) – Responses to Len Nunney January 15, 2024 comments Received on Draft Initial Study/Mitigated Negative Declaration

As outlined in Title 17 of the RMC, (Section 17.08.011), "Arroyo" shall mean those areas shown within the limits of the Mockingbird Canyon, Woodcrest, Prenda, Alessandro, Tequesquite, or Springbrook Arroyos and associated tributaries as shown on Exhibits A-F of this title. The limits of these arroyos and arroyo tributaries shall include all the land within the water course area, the adjacent slopes having and average natural slope of 30 percent or greater, and all other areas within the boundaries shown on Exhibits A-F of this title."

The commenter indicates that the biologist who evaluated the site failed to recognize that the arroyo boundaries [assume they are referring to Exhibits A-F of RMC Title 17] were never based on the presence of riparian vegetation but on the landform bordering the arroyo.

In contrast, the biologist did consider the landform bordering the arroyo, including topography. As outlined in the Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey (Appendix B of the Initial Study/Mitigated Negative Declaration), Section 4.6.3 – Current Conditions, pages 54-, Figure 14a shows the topography of the parcel. Based on the topographic map, the slopes adjacent to the actual boundaries of the arroyo reach a maximum of approximately 24 percent at the eastern end of the parcel and decrease to about 10.5 percent at the western end of the parcel. There are no slopes outside of the actual boundaries of the arroyo within the parcel (as shown on Figures 12a, 12b, and 14) that have an average natural slope of 30 percent or greater. A slope analysis (Figure 14b) found that slopes adjacent to the actual boundaries of the arroyo are less than 30 percent with the exception of two small areas (about 760 square feet total) in the southeastern corner of the parcel, which is not proposed for development.

The biologist also considered current and historic aerial photographs, hydrology, soil types, and other available data when evaluating the project site, as indicated in the following excerpts from the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis* (Appendix B of the Initial Study/Mitigated Negative Declaration).
Pages 26-27, Section 5.1.1 Methods:

5.1.1) Methods

Pre-Survey Research Methods and Purpose

A wealth of information is available online and is updated at regular intervals by the agencies and universities. To ensure efficiency and greater accuracy in the field, areas of interest are identified during the research stage prior to conducting the field survey. Useful maps are uploaded to handheld GPS and applications are downloaded in preparation for real-time data inquiries. Potential for jurisdictional features (riparian/riverine) to occur onsite is assessed via aerial photography, topographic mapping, soil types, trends to hydric conditions, area hydrology, and prior wetlands inventory mapping, etc. Finally, condition of area drainages is forecast based on available rainfall data.

Field Survey Methods and Purpose

Field work was conducted by L&L delineator Leslie Irish on September 7, 2021. L&L visited the site and examined the drainage width and length. Aerial images of previous years available in Google Earth were reviewed and compared to verify consistency and to detect any anomalies for further examination in the field.

Project boundaries were investigated to identify areas where water is received onto the property or transmitted offsite to downstream resources. These areas were then walked, measured, and assessed via three (3) criteria to determine presence or absence of evidence of flow, hydrophilic vegetation, or hydric soil conditions. Where evidence of flow was present, combined with or without hydrophytes, soils were examined for anoxic conditions. Soils identified as suitable for development of hydric conditions were given special attention. Soil color characteristics were evaluated using a "Munsell color chart" and all data were reported on appropriate Arid West Wetland Determination Data Forms (WD).

In addition, per the following from the *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis* (Appendix B of the Initial Study/Mitigated Negative Declaration), Sections 4.5 Jurisdictional Waters and Wetlands, and 4.5.1 MSHCP Riparian/Riverine and Vernal Pool Habitat, pages 50-51, the drainage feature within the project property is an ephemeral drainage that crosses the southeast portion of the parcel from east to west, is tributary to Prenda Creek and the streambed within the property measures 654 linear feet with an average width of 6.6 feet which is streambed/riverine and not riparian as follows:

4.5) Jurisdictional Waters and Wetlands

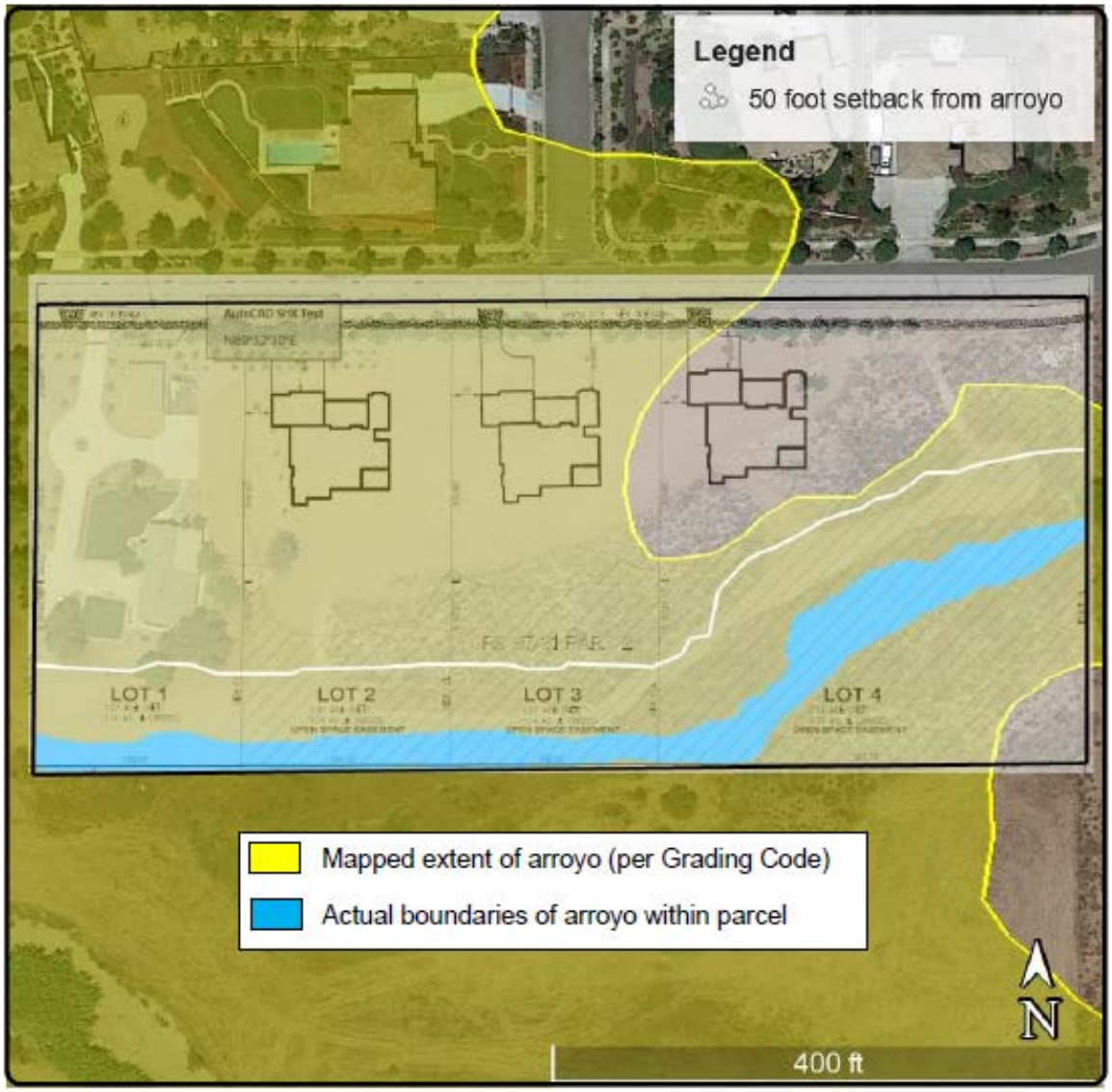
The property is largely within the mapped extent of the Prenda Arroyo, as identified by the City of Riverside, although the Project disturbance area is not within the watercourse as it currently exists (see Section 4.6). The Prenda Arroyo includes Prenda Creek, an ephemeral drainage that is a blueline stream on U.S. Geological Survey (USGS) maps. Prenda Creek is located about 150 feet south of the parcel (at its closest point). An ephemeral drainage that is tributary to Prenda Creek crosses the southeast portion of the parcel from east to west. This unnamed drainage is not a blueline stream. The Prenda Dam is located on Prenda Creek and is about 0.3 mile west (downstream) of the site.

A jurisdictional delineation was conducted in September 2021 and found that the streambed within the property measures 654 linear feet with an average width of 6.6 feet. The delineation found 0.46 acre of CDFW streambed and no CDFW wetlands on the parcel (Table 5a and Figure 11). Of this area, 0.088 acre is also federal Waters of the U.S. There are no federal wetlands (Table 5b and Figure 11).

4.5.1) MSHCP Riparian/Riverine and Vernal Pool Habitat

The jurisdictional delineation found 0.46 acre of MSHCP riverine habitat and no MSHCP riparian habitat on the site. Impacts to MSHCP riverine habitat requires preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP). TPM 38174 indicates that the Project will avoid the jurisdictional area. Therefore, the Project would not impact MSHCP riparian/riverine habitat and a DBESP is not required (Table 5a and Figure 11).

Therefore, the assessment of Prenda Arroyo by L&L biologists was not solely based on the presence or absence of riparian vegetation, but other factors including, topography, soil types, and hydrology, as well as the drainage feature's historic to current active channel, a comprehensive set of parameters.



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

QUIN-05-752

Figure 12b
Actual Boundaries of Arroyo and Project Impact Area
(Aerial obtained from Google Earth, August 2019)

Alpine Meadows Lane, City of Riverside

In an effort to clarify that the project does require a Grading Exception in order to allow grading within the extent of the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F, a minor revision (addition) is recommended to the Initial Study. This minor

revision is to provide additional clarification and does not change the analysis or conclusions in the Initial Study.

The recommended revision to 4c and 11b of the Initial Study is as follows, with the additions shown in underline:

> A Grading Exception is needed to allow grading within the extent of the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F. The arroyos in RMC, Title 17 Grading, Exhibits A-F were mapped using aerial photography, rather than site specific assessments. A Biological Resources Study was prepared for the project, which included a detailed site assessment and associated mapping of the actual boundaries of the Prenda Arroyo and the 50-foot setback, by means of a site walk and review of available literature and data. The project biologist determined that the boundaries of the Prenda Arroyo and the 50-foot setback are smaller than what is mapped in Tile 17 – Grading Code of the RMC. Based on watercourse, topography, and vegetation the actual boundaries of the Prenda Arroyo is located within the southeast portion of the subject parcel, from east to west, as shown in Figures12a and 12b of the project's Revised Biological Resources Assessment and Breeding Season Burrowing Owl Survey prepared by L& L Environmental, Inc. – Appendix A. The 50-foot setback from the actual boundaries of the Prenda Arroyo does not extend into the proposed graded pad area. There would be no impact to the Prenda Arroyo. However, as the project is located within the mapped Prenda Arroyo, as identified in the Riverside Municipal Code (RMC), Title 17 Grading, Exhibits A-F, a Grading Exception is required, and Grading Exception Findings were prepared for the project.

The comments do not affect the analysis completed or conclusions provided in the Draft Initial Study/Mitigated Negative Declaration (IS/MND), does not provide new information or evidence related to the analysis completed in the IS/MND, and does not reflect on the adequacy or content of the IS/MND. The comments are noted for the record and only minor revisions were warranted to provide additional clarification but does not change the analysis or conclusions in the IS/MND.

Sincerely,

Sonya Hooker
Vice President/ Director of Environmental Services
Ruth Villalobos & Associates (RVA), Inc.
3602 Inland Empire Blvd., Suite C310
Ontario, CA 91764