

Initial Study/Mitigated Negative Declaration No. 2352

TENTATIVE TRACT MAP NO. 37803

Lead Agency:

City of Perris
Planning Division
135 N. "D" Street
Perris, California 92570

Prepared by:

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SECTION 1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Pursuant to the California Environmental Quality Act (CEQA, *California Public Resources Code*, Sections 21000, et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines, *California Code of Regulations*, Title 14, Sections 15000 et seq.), as amended, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to identify the potential environmental impacts associated with the develop of proposed Tentative Tract Map No. 37803 (proposed project) located at the southwest corner of Metz Road and A Street. This IS/MND evaluates each of the environmental issues listed in Section 5.0 of this IS/MND. The objective of this IS/MND is to inform the City of Perris decision makers, representatives of other affected/responsible agencies, and other interested parties of the potential environmental effects that may be associated with the development and operation of the proposed project, and recommend mitigation measures, when required by CEQA, to reduce potentially significant environmental impacts.

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the City of Perris is the Lead Agency and is charged with the responsibility of deciding whether or not to approve the proposed project.

1.2 FINDINGS OF THIS MITIGATED NEGATIVE DECLARATION

This IS/MND is based on an Environmental Checklist Form (Form), as suggested in Section 15063(d)(3) of the State CEQA Guidelines, as amended and provided in Section 5.0 of this MND. Section 5.0 includes a series of questions about the project for each of the listed environmental topics. The Form evaluates whether or not there would be significant environmental effects associated with the development of the project and provide mitigation measures, when required, to reduce impacts to a less than significant level. An explanation for each answer is also included in Section 5.0.

The IS/MND reviews the potential environmental effects of the proposed project for each of the following areas:

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

As identified through the analysis presented in this MND, the proposed project would have no impacts or a less than significant level impact with the following topics:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services and Utilities
- Recreation.

The project would have a less than significant level impact with the implementation of the recommended mitigation measures for the following topics:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Noise
- Transportation
- Tribal Cultural Resources

1.3 CONTACT PERSON

The Lead Agency for the project is the City of Perris. Any questions about the preparation of the MND, its assumptions, or its conclusions should be referred to the following:

Nathan Perez, Senior Planner
City of Perris Planning Division
135 North "D" Street Perris, California 92570
(951) 943-5003

SECTION 2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The approximate 53.13 gross-acre project site is located at the southwest corner of Metz Road and A Street in the City of Perris in Riverside County. **Figure 1 – Regional Map** and **Figure 2 – Local Vicinity Map** depicts the regional location and local vicinity of the project site, respectively. The project site is located within Section 30, Township 4 South, Range 3 West, San Bernardino Base and Meridian.

The project site includes a range of topography from a low of 1,490 feet above sea level near Metz Road at A Street to a maximum of approximately 1,550 feet above sea level near the middle of the site. The site is vacant with some native vegetation and numerous rock outcroppings throughout the site. **Figure 3 – Aerial Map** shows the site and the surrounding area. The project is located on land designated by the California Department of Conservation in its Farmland Mapping and Monitoring Program as “Farmland of Local Importance and Other Land.”

As further discussed in the Biological Resources section of the IS/MND, the project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Vegetation types on the site consist primarily of brittlebush/buckwheat alliance and annual grassland/wildflowers. The site has historically been used for agricultural purposes and therefore, much of the site is disturbed and supports dense non-native grasses and herbs. However, there are isolated areas on the site with native plant species. The site is not located within any designated MSHCP “Criteria Area” cells, and it is not within a “Core” or “Linkage” area. No Riparian/Riverine areas or vernal pools are located within or adjacent to the site or off-site impact areas. There are no sensitive, rare or endangered plant or animal species on the site.

The General Plan Land Use Designation and zoning for the project site is R-6,000 - Residential 6,000. The area surrounding the site is currently dominated by vacant land and single-family detached housing and described below.

Direction from Project Site	Land Uses
North	Metz Road forms the northern boundary of the project and north of Metz Road is vacant land and single-family detached residential development.
East	A Street forms a portion of the east project boundary and east of A Street is the California Military Institute and vacant land. The Highland Vista Senior Community is also located adjacent to and east of the project site.



Figure 1
Regional Map



Figure 2
Local Vicinity Map



Figure 3

South	San Jacinto Avenue forms the southern project boundary and south of San Jacinto Avenue is single-family detached residential development.
West	Vacant land.

There are existing water, sewer, and drainage facilities in Metz Road, San Jacinto Avenue and A Street adjacent to the site. Existing roadways surrounding the site include Metz Road to the north, A Street to the east and San Jacinto Avenue to the south.

2.2 **PROJECT DESCRIPTION**

The project applicant is proposing the development of 145 single-family detached residential units at the project site. (**Figure 4 – Tentative Tract Map No. 37803**). The residential lots would range from a minimum size of 6,000 gross square feet to a maximum of 19,246 gross square feet with an average lot size of 6,822 gross square feet and an average usable lot size of 5,725 square feet. The project includes one- and two-story homes and includes Craftsman, Mediterranean and Southwest architecture.

There are two points of site access including an entry at Metz Road on the north and San Jacinto Avenue on the south. There are two drainage lots and eight landscape lots within the project. Lot A (0.65 acres) is a drainage lot in the northeast corner of the site and Lot B (0.93 acres) is a drainage lot in the southeast corner of the site. Lots C through J are landscape lots that are located throughout the site and range from 0.01 acres to 9.12 acres. Lot D is 9.12 acres and encompasses the rock outcroppings near the middle of the site.

The project applicant proposes street improvements along the project frontage on Metz Road, San Jacinto Avenue and A Street. All utilities, including water, sewer, electricity, natural gas, cable, telephone, and storm drains exist and are available in the streets adjacent to the site including Metz Road and San Jacinto Avenue. There is an existing 4-inch natural gas line in McKimball Road north of the site, a 3-inch natural gas line in A Street east of the site and a 3-inch natural gas line in San Jacinto Avenue adjacent to and south of the site. The 3-inch natural gas line in San Jacinto Avenue would serve the southern portion of the site and the 3-inch natural gas line in A Street would be extended west in Metz Road to serve the northern portion of the project. There is an overhead electrical line in Metz Road adjacent to and north of the site and an underground electrical line in San Jacinto Avenue adjacent to and south of the site that would serve the project. There is an existing 18-inch water line in Metz Road that would serve the northern half of the site and an 18-inch water line in San Jacinto Avenue that would provide potable water to the southern half of the project. An existing 8-inch sewer line in San Jacinto Avenue would serve the southern half of the project with sewer service. The northern half of the project would connect to an existing 8-inch sewer line in Roadrunner Way east of the project. The existing utilities would be extended to the site by the project developer. The project would provide approximately 563,825 square feet of landscaping and open space, which comprises approximately 24 percent of the site.

The project applicant proposes subsurface storm drains throughout the site that would collect and direct all on-site stormwater and nuisance runoff in subsurface storm drains. Surface water runoff from the site would drain to a 1.17-acre retention basin in the northeast corner of the site (Lot A) at the corner of Metz Road and A Street. The project applicant would construct a 66-inch reinforced concrete pipe (RCP) in Metz Road from the retention basin approximately 500

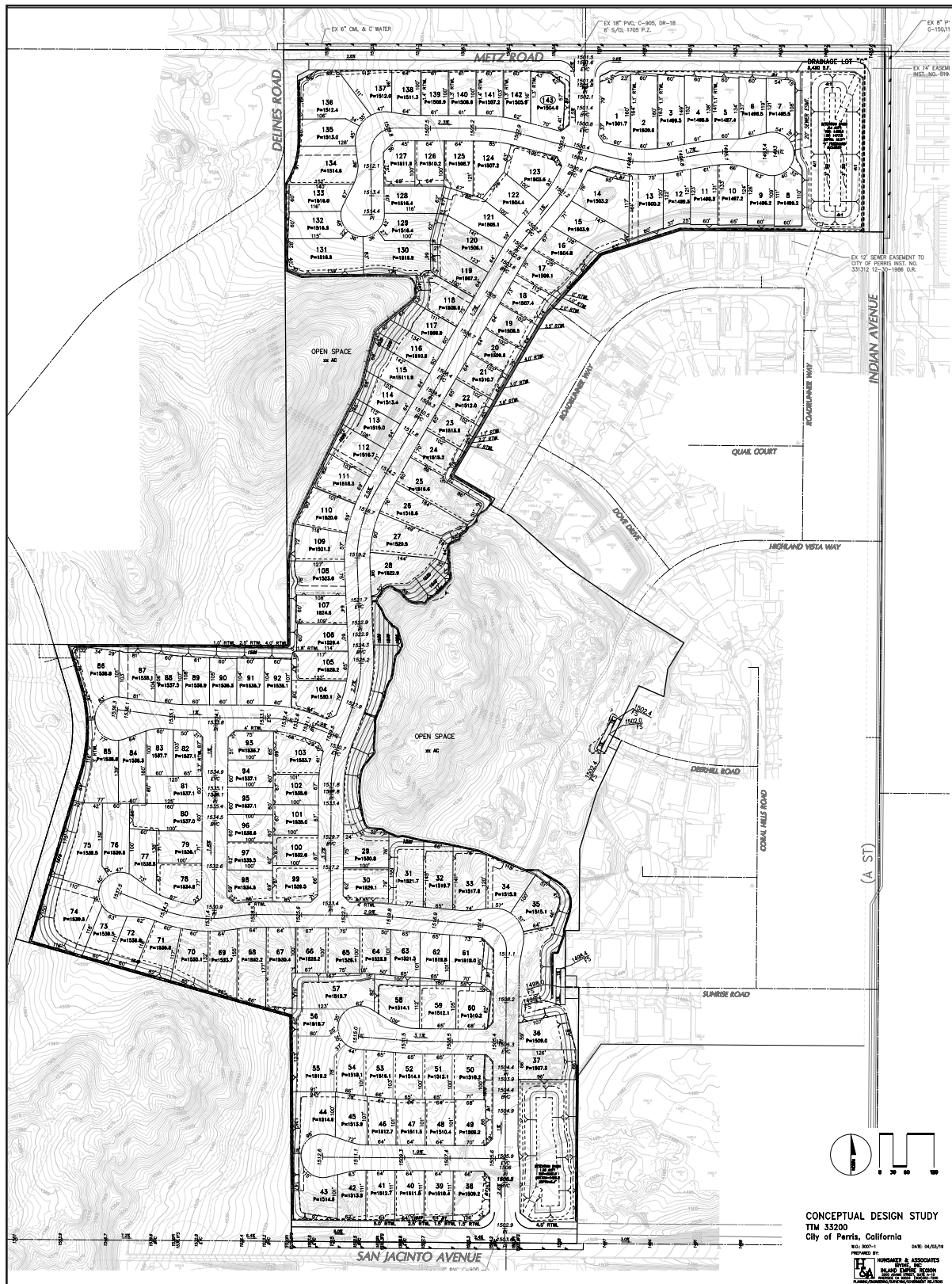


Figure 4
Tentative Tract Map No. 37803

feet east of the project site where storm water would be discharged into the existing Metz Basin. The retention basin would detain project runoff from the entire project site and provide water quality treatment for the runoff. In addition to providing the necessary treatment for pollutants of concern, the retention basin would also provide the volume needed so that runoff from the project site is discharged into an existing storm drain at a runoff rate that equals the existing conditions and would not impact the capacity of the existing downstream storm drain facilities.

Blasting is proposed for several areas of the site to remove rock formations that cannot be removed with standard grading equipment. **Figure 5, Proposed Blasting Map**, shows the areas within the site that are proposed for blasting and the distance of the blasting areas to the residential units closest to each blasting area. As shown, the area outlined in green in the southern section of the project site would not use blasting to remove the existing rock. For the area of the site outlined in green the contractor would use mechanical or chemical measures to break up the rock.

The size of the explosive charges has not been determined at this time. Blasting would consist of a drill and blast method to remove the rock and require drilling the blast holes, placing explosive charges in each of the blast holes, detonation, and the removal of the rock spoils with standard grading equipment. The project applicant would notify all residents adjacent to and within one-quarter mile of any on-site blasting two-days prior to any blasting. A video showing the proposed blasting is provided in the following link: https://adkan-my.sharepoint.com/personal/rreaves_adkan_com/_layouts/15/onedrive.aspx?originalPath=aHR0cHM6Ly9hZGthbi1teS5zaGFyZXBvaW50LmNvbS86ZjovcC9ycmVhdmVzL0VpOXF3ZVdFSmxWTmtxNmQ1VDZyX2ZVQjY4MmUtVGx5X1JQb1czRHFmMIA4cHc%5FcnRpbWU9Z2JDOWxYRUcyRWc&id=%2Fpersonal%2Frreaves%5Fadkan%5Fcom%2FDocuments%2FProjects%2F%5FTeam%20Folder%2FVideos%2FBlasting%2F20160304%5F163049%2Emp4&parent=%2Fpersonal%2Frreaves%5Fadkan%5Fcom%2FDocuments%2FProjects%2F%5FTeam%20Folder%2FVideos%2FBlasting. Mass grading of the site would occur concurrently with the blasting. On-going grading activities would be separated from the blasting areas at a distance required by the blasting consultant. Once the blasting is completed the rock and material would be hauled to other areas of the site and placed as fill material.

The project is scheduled to begin construction in the second quarter of 2021 and construction completed in the first quarter of 2022. The project would be mass graded and all utilities constructed in a single grading phase. The project would require approximately 946,211 cubic yards of cut and 946,211 cubic yards of fill and balanced on the site. Based on current market conditions the project would be constructed in fourteen phases with approximately ten homes for each phase and the project would be completed in approximately three years.

2.3 **PROJECT APPROVALS**

The following approvals and permits are required from the City of Perris to implement the proposed project:

- Adoption of a Mitigated Negative Declaration with the determination that the Mitigated Negative Declaration has been prepared in compliance with the requirements of CEQA, as amended;
- Approval of Tentative Tract Map No. 37803 to allow the development of 145 single-family homes on approximately 53.13 gross acres.

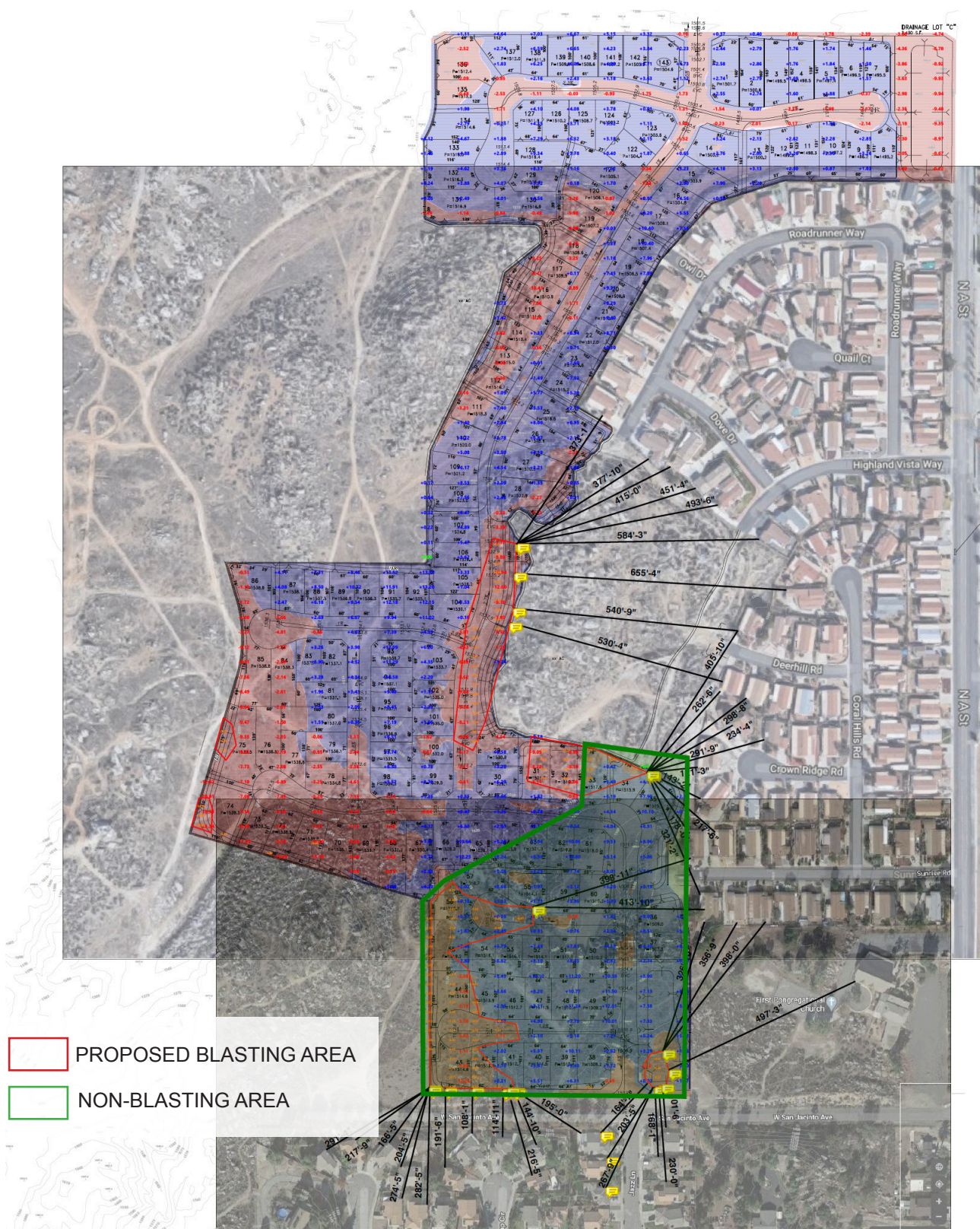


Figure 5
Proposed Blasting Map

Other non-discretionary actions anticipated to be taken by the City at the staff level as part of the project include:

- Review and approval of all off-site infrastructure plans, including street and utility improvements pursuant to the conditions of approval;
- Review all on-site plans, including grading and on-site utilities; and
- Approval of a Preliminary Water Quality Management Plan (PWQMP) to mitigate post-construction runoff flows.

Approvals and permits that may be required by other agencies include:

- A National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB) to ensure that construction site drainage velocities are equal to or less than the pre-construction conditions and downstream water quality is not worsened; and
- Approval of water and sewer improvement plans by the Eastern Municipal Water District.

2.4 DOCUMENTS INCORPORATED BY REFERENCE

The following reports and/or studies are applicable to the development of the project and are hereby incorporated by reference:

- *Perris Comprehensive General Plan 2030*, City of Perris, originally approved on April 26, 2005.
- *Perris General Plan 2030 Draft Environmental Impact Report*, SCH No. 2004031135, certified April 26, 2005.

These reports/studies are available for review at:

Public Service Counter
City of Perris Planning Division
135 North "D" Street
Perris, California 92570
(951) 943-5003
Hours: Monday – Thursday: 8:00 AM to 6:00 PM.

SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetic | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

SECTION 4.0 DETERMINATION

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find 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.
- ☐ I find 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 of Lead Agency Representative
Nathan Perez, Senior Planner
 Printed name

 Date
City of Perris
 Agency

SECTION 5.0 INITIAL STUDY

This section contains the Environmental Checklist Form for the proposed project. The Form is marked with findings as to the environmental effects of the project.

This analysis has been undertaken, pursuant to the provisions of CEQA, as amended, to provide the City of Perris with the factual basis for determining, based on the information available, the form of environmental documentation the project warrants. The basis for each of the findings listed in the attached Form is explained in the Explanation of Checklist Responses following the checklist.

ENVIRONMENTAL CHECKLIST FORM

City of Perris 135 North "D" Street, Perris, California 92570	
Project Title	Tentative Tract Map No. 37803
Lead Agency Name and Address	City of Perris Planning Division, 135 North "D" Street, Perris, California 92570
Contact Person and Phone Number	Nathan Perez, Senior Planner, (951) 943-5003
Project Location	Southeastern corner of Metz Road and A Street in the City of Perris, Riverside County, CA (Figure 2 – Local Vicinity Map) Assessor's Parcel Nos.: 311-080-033, 35, 311-090-009, 016, 020
Project Sponsor's Name and Address	Steve Letwinch, ABA Builders, Inc. 32823 Temecula Parkway Temecula, CA 92592
General Plan Designation	R-6,000 – Residential 6,000 (Figure 6 – General Plan Land Use)
Zoning Designation	R-6,000 – Residential 6,000 (Figure 7 – Zoning Map)

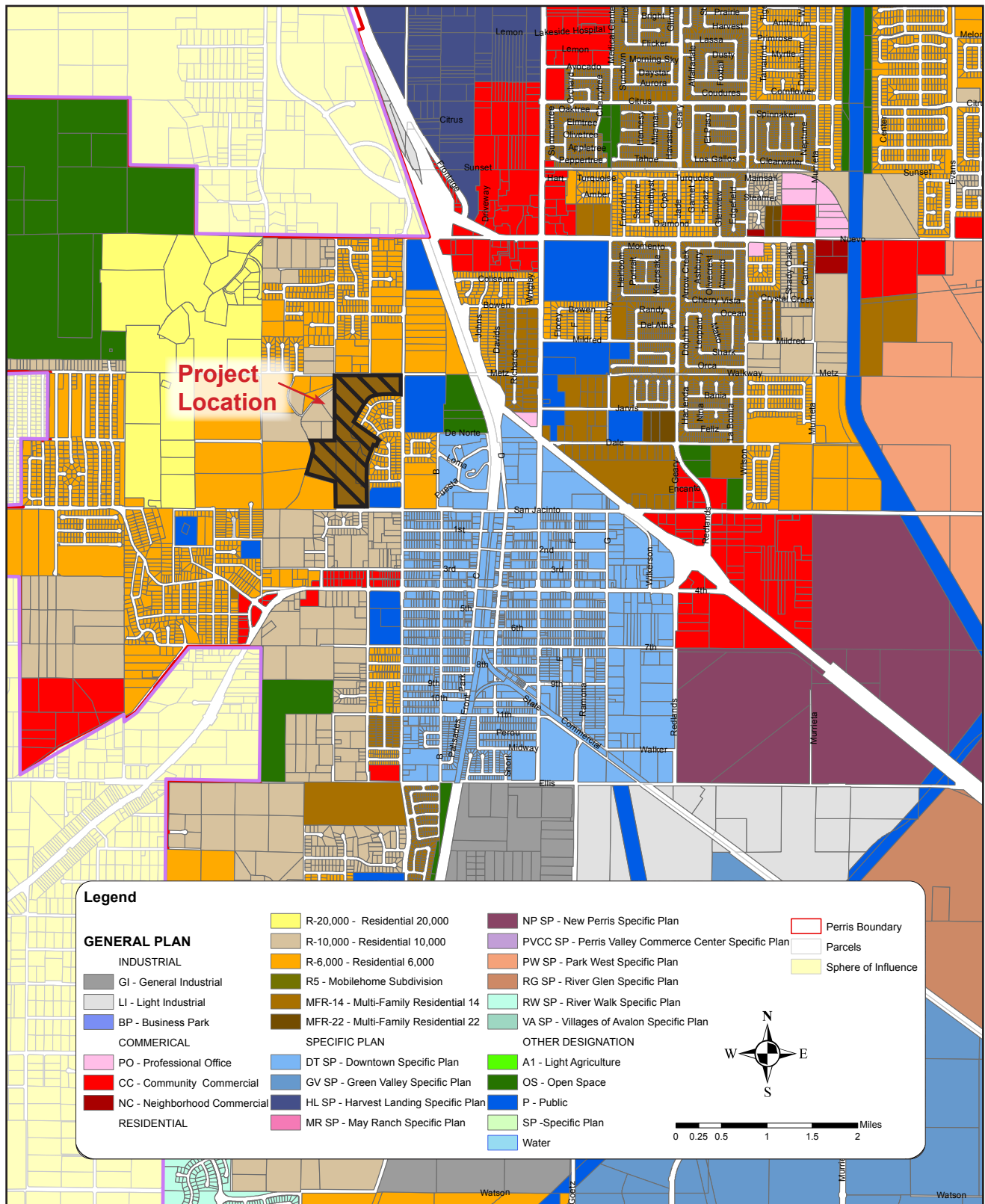


Figure 6
General Plan Land Use

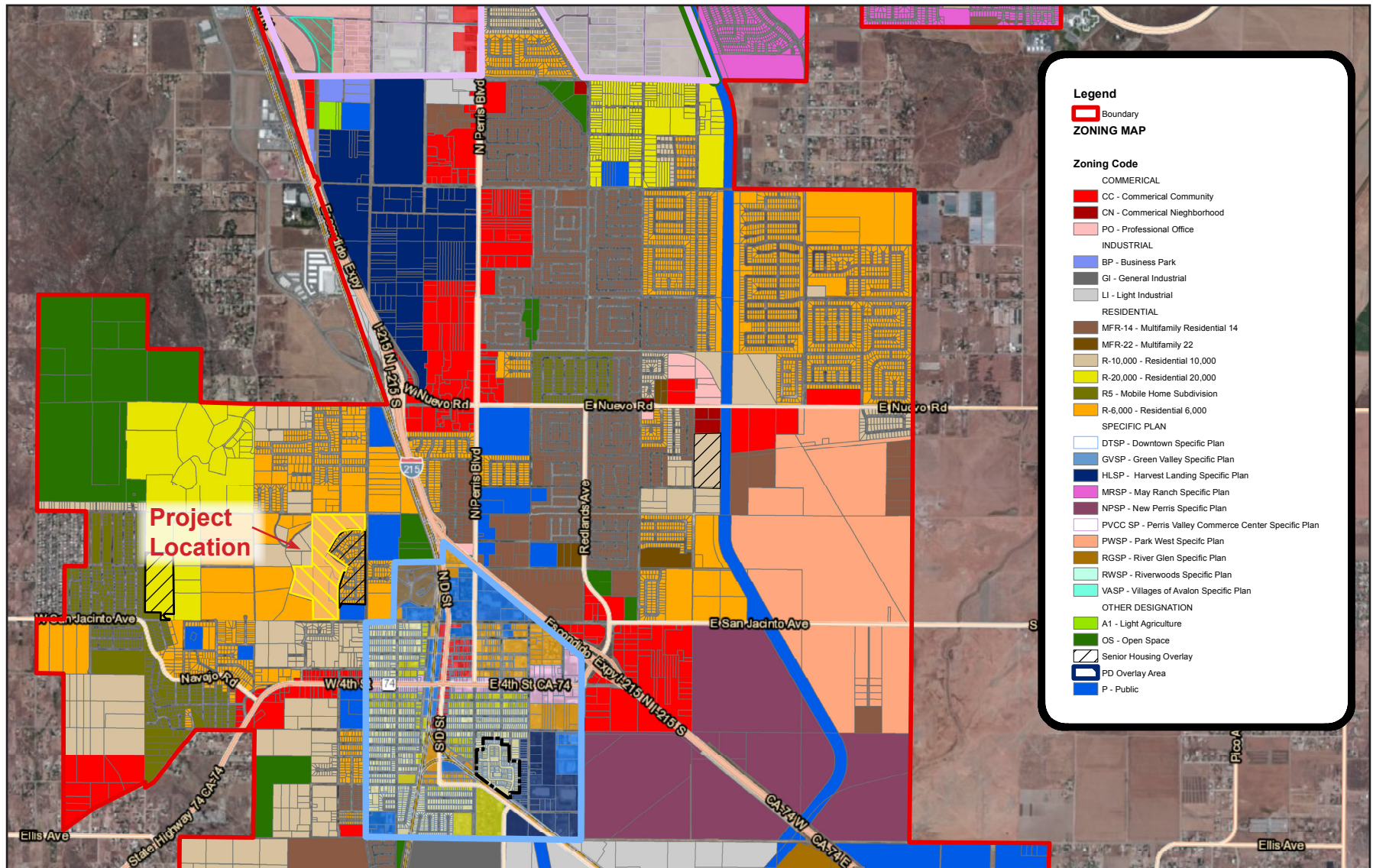


Figure 7
Zoning Map

<p>Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?</p>	<p>The City, as the lead agency, contacted two Native American tribes in compliance with Assembly Bill 52. While both tribes requested consultation with the City, one letter was received by the City two weeks the deadline to request consultation and the second tribe has not responded to the City's request for a date for consultation.</p>
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5.1. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality??	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Create a new source of substantial light or glare that will adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

References: Cadre 2017a, Perris 2005b, Perris 2009, Perris 2012, Perris 2014, Google Earth, International Dark-Sky Association

Explanation of Checklist Answers

- 1a. Less Than Significant Impact.** Scenic vistas can be defined as the view of an area that is visually or aesthetically pleasing. Development projects can potentially impact scenic vistas in two ways: 1) directly diminishing the scenic quality of the vista, or 2) by blocking the view corridors or “vistas” of scenic resources (Perris 2009, p. 19). The project site is vacant and mostly covered with large rock outcroppings and vegetation. Therefore, the site itself is not a scenic vista, nor does it currently block or diminish any scenic vista for the surrounding land uses.

The site is located within the Perris Valley and the terrain is comprised largely of rock outcroppings and slopes both northeast and southerly due to the highest elevation near the center of the site at approximately 1,564 feet above mean sea level. As described in the City’s General Plan 2030 (GP), virtually all building construction consistent with land use development standards would obstruct views of the foothills from at least some vantage points. However, these view corridors extend for miles along current and planned roadways, preserving scenic vistas from the broad basin to the surrounding foothills and development pursuant to the City’s General Plan was determined to have a less than significant level impact on scenic vistas (Perris 2005b, p. VI-2). The project applicant proposes the construction of 145 residential homes and because residential development and vacant land currently exists adjacent to and surrounding the site, the project site is not a scenic vista and the project would not block views of a scenic vista the potential scenic impacts would be less than significant.

- 1b. No Impact.** According to the City’s General Plan EIR, there is no one rock collection or collection of rocks in the City that is notable by virtue of unique formation, size, or character and there are no notable stands of native or mature trees in the City (Perris 2005b, p. VI-

2). Although there are several rock outcroppings on the site they are not recognized by the City as being notable. The closest officially designated State Scenic Highway is Highway 243, located approximately 20 miles east of the project (Perris 2009, p. 19). There are no scenic resources either on or adjacent to the project site that would be impacted by the project. As a result, no impact would occur.

- 1c. Less Than Significant Impact.** The project is located in an urbanized area with existing residential and public land use development. The project is consistent with the R-6000 zoning for the site and the proposed residential development for the site is consistent with and compatible with the existing residential and public use adjacent to and in the immediate project vicinity. The project would be required to meet and comply with all applicable city development standards for residential uses. Therefore, the project would have a less than significant level impact to public views and the visual character of the area.
- 1d. Less Than Significant With Mitigation Incorporated.** Light pollution may result due to introduction of new artificial light sources. The International Dark-Sky Association defines light pollution as any adverse effect of artificial light including sky glow, glare, light trespass, light clutter, decreased visibility at night and energy waste (International Dark-sky Association). Night lighting and glare can affect human vision, navigation, and other activities; however, it can also affect nocturnal wildlife, particularly night-hunting or foraging animals, such as owls, rodents, and others. Glare, which refers to reflected sunlight or artificial light that interferes with vision or navigation, may also arise from new development; for example, from the use of reflective materials on building exteriors.

The project would not introduce or generate any new sources of light or glare that is significantly greater or different from the light and glare that is generated by similar existing residential development adjacent to and surrounding the site. The project would include outdoor lighting on the proposed residential units that is typical of the exterior lighting on the residential homes in the immediate project vicinity. The street lights of the project would also be similar to other streets lights in the residential development in the project area.

The project would introduce new sources of nighttime light and glare into the area from improved street lighting and exterior lighting of the proposed residential units. However, all project lighting would be designed pursuant to the City of Perris Development Code, which includes requirements to shield light away from adjoining residences and streets to preclude lighting above the horizontal plane of the bottom of the lighting fixture (Perris Municipal Code, June 27, 2019, Chapter 19.25.090.f.6).

Through standard City procedures, compliance with City regulations regarding light, operational impacts with regard to the creation of new light and glare would be a less than significant level.

During Project construction, nighttime lighting may be used within the construction staging areas and within the residential buildings to provide security for construction equipment. Due to the distance between the construction area and the adjacent residence and motorists on adjacent roadways, such security lights may result in glare to residents and

motorists. However, this potential impact will be reduced to a less than significant level with implementation of the following mitigation measure.

Mitigation Measure No. 1 Prior to issuance of grading permits, the project developer shall provide evidence to the City that any temporary nighttime lighting installed for security purposes shall be downward facing and hooded or shielded to prevent security light spillage outside of the staging and construction areas or direct broadcast of security light into the sky.

5.2.AGRICULTURE AND FORESTRY 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 Department of Conservation as an optional model to use in assessing impacts on agricultural farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

References: Perris 2005a, Perris 2005b, FMMP, Riverside 2015a, Google Earth

Explanation of Checklist Answers

- 2a. No Impact.** The project site is identified as Farmland of Local Importance by the Farmland Mapping Management Program of the California Resources Agency (FMMP). Because there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) at the site, the project would not convert any Farmland to non-agricultural use. Thus, the project would not have any farmland impacts.
- 2b. No Impact.** The City's 1991 General Plan eliminated the agricultural land use designation from within City boundaries. Therefore, there are no agricultural zones identified by the City and the proposed project site is not covered under a Williamson Act Contract (Perris 2005b, p. VI-3). The project site is zoned R-6000 and is designated for residential use. Therefore, the project would not conflict with an existing zoned agricultural use nor a Williamson Act Contract and would have no agricultural use or Williamson Act impacts.
- 2c. No Impact.** The City of Perris zoned the project site as R-6000, which allows residential use. There is no existing or proposed zoning of forest land, timberland, or Timberland Production Zones within the City and there is no commercial forestry or timber production industry within the City (Perris 2005a). Therefore, the project would not remove and impact any forestland or timberland as defined by Public Resources Code section 4526, or a Timberland Production Zone as defined by Government Code section 51104(g).
- 2d. No Impact.** As discussed in Section "2c" above, there is no land zoned forest land within the City. Furthermore, there are no existing land use designations explicitly for timber production zones or other commercial timber activities within the larger County of Riverside area (Riverside 2015a, p. 4.5-11). Therefore, the project would not impact any forest land and would not convert forest land to non-forest uses.
- 2e. No Impact.** The project site is vacant and there are no agricultural production activities either on the site or in the immediate vicinity of the project site. Therefore, no impacts would occur with respect to conversion of agricultural land to a non-agricultural use.

5.3.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:

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2005a, Perris 2012, SCAQMD 2008, SCAQMD 2017, CARB 2005, CARB 2015, Google Earth

An Air Quality and GHG Analysis¹ was prepared for the project. A copy of the air quality and GHG report is included in Appendix A to this IS/MND.

Explanation of Checklist Answers

- 3a. Less Than Significant Impact.** The City of Perris is located within the South Coast Air Basin (“SCAB”), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD has prepared a series of Air Quality Management Plans (AQMPs) over the years to establish a comprehensive program to lead the SCAB into compliance with all federal and state air quality standards. The most recent of these, the 2016 AQMP, was most recently adopted in March 2017 (SCAQMD 2017).

The proposed project does not directly relate to the 2016 AQMP in that there are no specific air quality programs or regulations governing residential development projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. Accordingly, if a project demonstrates compliance with local land use plans and/or population projections, then the 2016 AQMP would have taken into account such uses when it was developed and the project would not conflict with implementation of such a plan.

The project site is designated for residential use by the Perris General Plan. The General Plan land use designation for the site and the zoning for the site is R-6,000 – Residential 6,000. The General Plan and zoning for the site allows low-density residential development up to 7 dwelling units per acre. The project provides 145 dwelling units with a density of 2.69 dwelling units per acre. Because the project complies with the General Plan and zoning designation for the site, it would not conflict with or obstruct implementation of the 2016 AQMP.

- 3b. Less Than Significant Impact.**

Air Emission Thresholds

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the SCAB for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified

¹ Air Quality and GHG Impact Analysis, TTM 37803, Perris California, Giroux & Associates, June 11, 2020.

except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with mass daily emissions that exceed any of the mass daily emission thresholds identified in Table 1 are recommended by the SCAQMD to be considered cumulatively significant under CEQA guidelines.

Table 1
SCAQMD Daily Emissions Thresholds of Significance (lbs./day)

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Source: SCAQMD Air Quality Significance Thresholds, April 2019.

Construction Emission Impacts

The California Emissions Estimator Model (CalEEMod) was developed by the SCAQMD to provide a model to calculate both construction and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

Estimated construction emissions were modeled using the current version of CalEEMod (version 2016.3.2) to identify maximum daily emissions for each pollutant during project construction. Construction emissions were modeled using the default construction equipment and a construction schedule for a project of the size proposed as shown in Table 2.

Table 2
Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Grading (90 days)	2 Graders
	2 Scrapers
	2 Excavators
	1 Dozer
	2 Tractors

Construction (500 days)	1 Crane
	3 Loader/Backhoes
	1 Welder
	1 Generator Set
	3 Forklifts
Paving (35 days)	2 Pavers
	2 Paving Equipment
	2 Rollers
Painting (35 days)	1 Air Compressor

Utilizing the equipment fleet and durations shown in Table 2, the worst-case daily construction emissions were calculated and are shown in Table 3.

Table 3
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Emissions*	Construction	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Year 2020		5.7	67.3	35.1	0.1	5.8	3.9
Year 2021		2.7	22.9	23.4	0.1	3.0	1.5
Year 2022		53.9	20.8	22.7	0.1	2.8	1.3
SCAQMD Thresholds		75	100	550	150	150	55

*with mandatory compliance with SCAQMD Rule 403

As shown, the peak daily construction activity emissions are below SCAQMD CEQA thresholds without the need for mitigation. This would be a less than significant cumulative impact. The only model-based mitigation measure that was applied to the project was watering exposed dirt surfaces at least three times per day during grading to minimize the generation of fugitive dust as required by SCAQMD Rule 403.

SCAQMD's Rule 403

The project would be required to comply with SCAQMD Rule 403 to reduce fugitive dust emissions during project construction and the life of the project. Project compliance with Rule 403 is achieved through the application of standard best management practices during construction and operation activities, which include the application of water or chemical stabilizers to disturbed soils, manage haul road dust by the use of water, cover haul vehicles, restrict vehicle speeds on on-site unpaved roads to 15 mph, sweep loose dirt from paved site access roadways, stop construction activity when wind speeds exceed 25 mph and establish a permanent ground cover on finished areas.

Ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures to control diesel exhaust emissions is recommended. The following mitigation measure is recommended to control combustion emissions:

Mitigation Measure No. 2 Throughout project construction the contractor shall:

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

Blasting Air Pollution Emissions

A blasting and recommended practices report², including an air quality analysis, was prepared for the project. A copy of the report is included in Appendix B.

Blasting is proposed during project grading. Construction blasting may lead to air emissions from several pathways. Explosive detonation creates chemical reactions that produce a variety of air pollutants (primarily gaseous). Ejected materials are primarily fugitive dust, especially larger diameter particulate matter. The air emissions that are generated per a blasting event are further determined by the explosive charge weight, which is driven by safety concerns and construction objectives. Due to the large number of variables, air quality assessments associated with blasting are speculative. In recognition of this difficulty, EPA assigns a generic emission factor in the development of a national emissions inventory for construction and production blasting activities.

Ammonium nitrate/fuel oil (ANFO) mixtures are commonly used as explosives because they are inexpensive and relatively safe. The explosion of 200 pounds per day of ANFO is stated by EPA to produce the following gaseous pollutants:

CO - 6.7 pounds
NOx - 1.7 pounds
SO2 - 0.2 pounds

Compared to the previously cited construction activity significance thresholds, the daily emissions from the chemical reactions of explosives is less than significant. Any measurable air quality impacts would likely derive from fugitive dust associated with ejected material.

Blast hole drilling is a multi-step process that entails placing the drill and adjusting the leveling jacks, extending the boom, deploying any dust control equipment as needed, drilling the hole and reversing the procedure upon hole completion. When blasting occurs a drill and blast method is proposed for removal of the rock. The rock blasting would involve drilling blast holes, placing explosive charges in each of the blast holes, detonation, and the removal of spoils. There is also potential for subsequent on-site rock crushing for aggregate.

Each blast sequence would typically include one hour of drilling and blast preparation, 15-minute safety check to ensure the area is clear and ready for the blast, a blast consisting

² Assessment of Rock Blasting Impacts and Recommended Practices, REVEY Associates, Inc., September 2020.

of a sequence of timed explosive charges as described above, and up to 4 hours to remove spoils. This would limit blasting to two events per day in any particular area.

The unmitigated PM-10 emission rate stated in EPA AP-42, Table 11.9.4 is 0.65 lb./hole drilled. For a single rig typical of the rock outcropping blasting, the daily PM-10 emission rate is 1.3 pounds per day. The addition of this PM-10 level to the construction activity fugitive dust burden would not cause the regional significance threshold of 150 pounds/day to be exceeded.

Blasting itself creates very little PM-10 as the intent of the blast is to fracture the rock layer without creating any ejected material. During the blast itself, most other on-site work in proximity to the blast is halted for safety reasons. Although grading could occur on other portions of the site, the site is more than 53 acres. If grading occurs concurrent with blasting it could be as much as 2,500 feet from on-site grading activities.

The PM-10 emission rate is stated in EPA AP-42, Table 11.9.1 to be 0.2 lb./blast. Given the reduced on-site activity level on blasting day and the charge being buried deep into the ground, no cumulatively significant PM-10 emissions would result from the blasting. Loading the fractured material into haul trucks can generate a localized dust nuisance in close proximity to the loader filling the truck bed. In the EPA reference above, a complicated formula involving wind speed (directly proportional), moisture content (inversely proportional) and the ratio of PM-10 to total suspended particulates predicts an unmitigated PM-10 emission rate of 0.19 pounds of PM-10 per ton loaded. Daily production of fractured rock is not currently known, but a reasonable estimate of 30 tons per day would yield 5.7 pounds of PM-10 per day. As with the drilling emissions that may occur simultaneously, the overall regional PM-10 burden would not exceed the adopted SCAQMD significance threshold.

The fractured material may be crushed on-site and used as on-site fill. With required dust control for on-site crushers, the AP-42 emission factor is 0.042 pound per ton processed. The 30 ton/day throughput for truck loading would equate to 1.3 pounds of PM-10 from on-site crushing. The addition of this increment to the over-all PM-10 burden would still remain below the regional PM-10 significance threshold of 150 pounds/day.

Blasting Mitigation

Although blasting emissions are anticipated to be less than air emission thresholds, the following measures are recommended to ensure that blasting emissions are less than significant.

- Mitigation Measure No. 3** A blasting execution plan shall be submitted to the City Engineer and approved prior to any implosion event. The blasting execution plan shall evaluate the feasibility of staged implosion to minimize dust generation and exposure.
- Mitigation Measure No. 4** A public notification program shall be instituted prior to each implosion event, which includes recommendations to minimize exposure to airborne dust.

Mitigation Measure No. 5 Each implosion event shall be scheduled during periods of low/no wind speeds.

Mitigation Measure No. 6 A dust control plan shall be approved by the City Engineer prior to the first implosion event that identifies specific measures and equipment necessary to minimize dust from windblown storage piles, off-site tracking of dust, debris loading, truck hauling of debris, vehicle speed limits, and other dust suppression measures to minimize dust. The contractor shall implement all feasible engineering controls to control fugitive dust including exhaust ventilation, blasting cabinets and enclosures, vacuum blasters, drapes, water curtains or wet blasting. Watering methods, such as water sprays and water applications, also shall be implemented during blasting, rock crushing or any activity to reduce fugitive dust generated during transfer and conveyance of crushed material.

Operational Emission Impacts

The project would generate 1,369 daily trips using trip generation numbers provided in the project traffic report. Operational emissions were calculated using CalEEMod2016.3.2 for an assumed full occupancy year of 2022. The calculated operational emissions of the project are shown in Table 4. As shown, the operational emissions would not exceed SCAQMD operational emission thresholds of significance. The long-term operational emissions by the project would be less than significant.

Table 4
Daily Operational Emissions

Source	Operational Emissions (lbs/day)					
	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area	7.2	2.3	12.9	0.0	0.2	0.2
Energy	0.1	1.1	0.5	0.0	0.1	0.1
Mobile	2.4	12.2	31.8	0.1	10.0	2.7
Total	9.7	15.6	45.2	0.1	10.3	3.0
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod2013.2.2 Output in Appendix A

3c. Less Than Significant Impact. A sensitive receptor is a person in the population who is particularly susceptible to health effects due to exposure to an air contaminant. The following are land uses (sensitive sites) where sensitive receptors are typically located:

- Schools, playgrounds and childcare centers
- Long-term health care facilities
- Rehabilitation centers

- Convalescent centers
- Hospitals
- Retirement homes
- Residences³

The closest sensitive receptors to the project site are the residents north of the site, north of Metz Road, adjacent to and east of the site and south of the site, south of site, south of San Jacinto Avenue.

Localized Significance Thresholds - Construction and Operational

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

The use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility. An LST analysis for operational emissions can also be performed.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500- meter source-receptor distances. For the project, there are several residential areas that are adjacent to the project site. Therefore, the most conservative distance of 25-meters was modeled.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5-acre sites. LSTs are based on the ambient concentrations of that pollutant and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether dispersion modeling may be required. Therefore, based on SCAQMD methodology for the use of CalEEMod construction emissions to LST thresholds, a daily construction area of 4.5 acres was used⁴.

³ South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, Chapter 2, page 2-1.

⁴ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2> Fact Sheet for Applying CalEEMod to Localized Significance Thresholds

The LST thresholds and calculated emissions are shown in Table 5. If the project emissions exceed the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling be performed. The project LSTs were compared to the maximum daily construction activities and maximum daily operational activities. As shown in Table 5, project emissions are less than LST construction and operational thresholds and include SCAQMD Rule 403 that requires on-site dust mitigation. The construction and operational LST emissions would be less than significant.

Table 5
LST and Project Emissions (lb./day)

Perris Valley Construction Thresholds	CO	NOx	PM-10	PM-2.5
LST Threshold	1,460	253	12	7
Max On-Site Emissions	35	67	6	4
Perris Valley Operational Thresholds	CO	NOx	PM-10	PM-2.5
LST Threshold	1,460	253	4	2
Max On-Site Emissions*	13.4	6.5	0.3	0.3

*only on-site emissions, excludes mobile source

Localized Significance Thresholds Blasting

During the actual on-site blasting, most other on-site work in proximity to the blast is halted for safety reasons. Although grading could occur on other portions of the site, the site is more than 53 acres so that grading equipment could be operating up to 2,500 feet away. It is, therefore, not reasonable to assume that both grading equipment and blasting operations could both occur simultaneously at a 25-meter distance from an existing residence.

The SCAQMD LST look-up tables for PM-10 emissions for a one-acre site in the Perris Valley show the following PM-10 emission levels are which are considered to create a possible localized impact as a function of source-receiver distance:

- 25 meters - 4 pounds per day
- 50 meters - 12 pounds per day
- 100 meters - 30 pounds per day

An LST impact could occur if drilling and loading operations were to occur within 38 meters (interpolated) of any off-site residential property line. Based on the location of the proposed blasting sites and the location of existing residences in proximity to the proposed blasting sites blasting would not occur within 38 meters of the closest residence. Drilling dust can be reduced by over 90 percent through the use of down-hole wet suppression or by dry shroud and dust collector. Both methods are equally effective. A partial enclosure of the load-out station, particularly with plastic curtains on the loader side dumping into the truck, is more than 80 percent effective (G. Gonzales, "Dust Protection in Mining", Thesis, 2018). Blasting and support operations within 38 meters of the site boundary adjacent to

any residential use would require selection of appropriate mitigation. With available mitigation, the localized PM-10 emissions burden could be reduced to around 3 pounds per day to shrink that off-site impact zone to less than 25 meters.

Construction-Related Health Risks

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

Localized Roadway CO Concentrations

There is a direct relationship between traffic/circulation congestion and CO impacts, since exhaust fumes from vehicular traffic are the primary source of CO. As CO is a localized gas that dissipates very quickly under normal meteorological conditions, CO concentrations decrease substantially as distance from the source (intersection) increases. The highest CO concentrations are typically found in areas directly adjacent to congested roadway intersections. These areas of vehicle congestion have historically had the potential to create pockets of elevated levels of CO, which are called CO “hot spots.” However, with the turnover of older vehicles, introduction of cleaner fuels, and the implementation of control technology on industrial facilities, CO concentrations have been declining.

Micro-scale air quality impacts have traditionally been analyzed in environmental documents where the region was a non-attainment area for CO. However, the SCAQMD has demonstrated in the CO attainment redesignation request to the EPA that there are no “hot spots” anywhere in Southern California, even at intersections with higher volumes, worse congestion, and higher background CO levels than those located in the project area. If the worst-case intersections in the SCAB have no “hot spot” potential, local impacts near the project site would be below thresholds, with a large margin of safety.

A project is considered to have significant impacts if project-related mobile-source emissions result in an exceedance of the California one-hour and eight-hour CO standards, which are:

- 1-hour = 20 ppm
- 8-hour = 9 ppm

The maximum ambient 1-hour CO concentration in 2020 was 2.2 ppm in the City of Riverside. In order to cause an exceedance of the CO standard, a ten-fold worsening of total automotive traffic would be required. The project would not exceed localized CO standards.

- 3d. Less Than Significant Impact.** The human nose is the best means of determining the strength of an odor; however, not all people are equally sensitive and they do not always

agree about the severity of an odor once it is detected. Therefore, precise documentation of the strength and nature of an odor is generally unavailable.

It is anticipated that the major potential sources of odor from the project would occur during construction, particularly from construction equipment diesel exhaust. However, this impact would be limited to the immediate vicinity of the project site and would be short-term during mostly grading and construction activities when diesel powered construction equipment would operate. The area immediately surrounding the project site is dominated by vacant land and residential development. The vacant land does not contain any sensitive receptors.

The California Air Resources Board (CARB) has developed an Air Quality and Land Use Handbook to outline common sources of odor complaints, including sewage treatment plants, landfills, recycling facilities, and petroleum refineries (CARB 2005, p. 2-2). The project is a proposed residential development and not included on CARB's list of facilities that are known to be prone to generate odors. Further, odor intensity decreases as distance from the source increases because it allows fresh air to mix with the odors. With the exception of existing residential development along the east project boundary, north of the site, north of Metz Road and south of the site, south of San Jacinto Avenue, there are no sensitive receptors in the immediate vicinity of the project. Therefore, odor-related impacts during project construction when odors would be generated due to the operation of diesel-powered construction equipment would be a less than significant level.

5.4. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.4. BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2011, Cadre 2017a, Cadre 2017b

A General Biological Assessment and MSHCP Habitat Consistency Analysis⁵ was prepared for the project. In addition, a Focused Burrowing Owl Survey⁶ was also prepared for the project. Copies of the biological reports are included in Appendix C to this IS/MND.

Explanation of Checklist Answers

4a. Less Than Significant With Mitigation. The project is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. The MSHCP is a collaborative effort with U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFW) to determine the species of particular concern in western Riverside County. The MSHCP is the overriding document that provides the framework for where and when surveys are conducted and how conservation may occur in the Plan area.

TeraCor consulted the Riverside County Regional Conservation Authority (RCA) MSHCP Information Map to determine if the project site is located within a MSHCP designated Cell Group or Criteria Cell. Based on their review the project site is not located in either a Cell Group or Criteria Cell. Therefore, the project is not required by the MSHCP to provide any conservation.

The project site was surveyed by a TERACOR biologist on April 7, 2019, April 11, 2019, May 11, 2019, July 19, 2019, July 26, 2019 and September 7, 2019. A list of the plants, birds, mammals, amphibians and reptiles that were either observed on the site or expected to occur on the site are listed in Appendix B of the biology report.

The project applicant proposes to conserve and protect two areas of the site that total approximately 11.07 acres. The two areas are Lots C and D on the tentative tract map shown in Figure 3. The two areas include sage scrub covered rock outcrops that would remain in their current condition.

California Natural Diversity Data Base

The State of California maintain the Natural Diversity Data Base (CNDDB), which is a computerized inventory of information on the location of California rare, threatened,

⁵ General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37803, TeraCor Resource Management, September 30, 2019.

⁶ Step I Habitat Assessment, Step II, Part A Focused Burrow Survey and Step II, Part B Focused Burrowing Owl Survey for Tentative Tract No. 37803 A 53.15-acre Property Located in the City of Perris, Riverside County, California, TeraCor Resource Management, September 13, 2019.

endangered and otherwise sensitive plants, animals and natural communities. Valuable information regarding the species occurrence, population numbers, occurrence dates and the potential for threats to the organism(s) are included in each occurrence record.

While various avian, mammal and reptilian species were observed during focused site surveys, none of the observed species are considered to be rare, threatened, endangered or otherwise sensitive plants.

Burrowing Owl

The Burrowing Owl (BUOW) is a California Department of Fish and Wildlife “Species of Special Concern Second Priority”. The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) affords special consideration to BUOW due largely to localized declines. The MSHCP requires evaluations of their potential presence within specified survey areas across the MSHCP area. BUOW can inhabit grasslands, deserts, and open scrublands characterized by low-growing vegetation.

Because the project site includes habitat that could support BUOW, surveys were conducted on the project site on April 7, 2019, April 11, 2019, June 20, 2019 and July 26, 2019. The surveys were conducted in compliance with the County of Riverside Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area. Based on the results of the four surveys, no BUOW were observed during the site surveys. In addition, no BUOW signs were detected within or near any California ground squirrel burrows and burrow complexes, which are considered suitable BUOW habitat.

Vegetation

Literature was reviewed that identifies plant names, identification, vegetation communities and associations and relevant descriptions. The literature that was reviewed included The Jepson Manual, Vascular Plants of California – Second Edition, California Department of Fish and Wildlife California Natural Community List (2018), and A Manual of California Vegetation – Second Edition.

Based on the surveys of the site, the project site is primarily composed of two major vegetation community types that include annual non-native grassland/wildflower field in the more level and gently sloping areas, and a sage scrub series dominated by brittlebush and California buckwheat in the rocky, sloped, more densely-vegetated granite outcrops.

Several very small patches of Blue elderberry scrub and scattered individual red willow scrubs and mule fat scrub are present at the south end of the site where there has been substantial modification of the substrates. In addition, there are approximately 3-4 patches of ornamental vegetation comprised mainly of California pepper trees that were identified and mapped as ornamental in the southern portion of the property near San Jacinto Avenue.

Based on the site surveys, the project would result in an impact to MSHCP plant and animal species.⁷ Consistent with the MSHCP the following measures are recommended to reduce potential biological resource impacts to a less than significant level.

Mitigation Measure No. 7 Prior to the start of grading, the project developer shall pay the required Stephens Kangaroo rat fee to the MSHCP.

Mitigation Measure No. 8 Prior to the start of grading or the clearance of any vegetation, the project developer shall retain a qualified biologist to conduct a pre-construction nesting bird survey in accordance with the following:

- a) The survey shall be conducted no more than three (3) days prior to the start of grading or clearance of vegetation.
- b) If a pre-construction survey indicates that bird nests are not present, or if present they are inactive, or if the existing habitat is unoccupied no further mitigation is required.
- c) If a pre-construction survey identifies an active bird nest, a species-specific no disturbance buffer zone shall be established by a qualified biologist around the active nest until a qualified biologist determines that all young have fledged.

Mitigation Measure No. 9 In accordance with MSHCP provisions that limit the use of exotic and invasive plants, the project landscape plan shall exclude all invasive plant species such as, but not limited to crimson fountain grass, pampas grass, giant reed, tree of heaven, and all other ornamental landscape elements that have the potential to spread into adjoining or nearby habitat areas.

Mitigation Measure No. 10 Prior to the start of grading or the clearance of any vegetation Lots C and D shall be fenced with orange construction fencing to avoid entry into Lots C and D by construction equipment and workers. The orange construction fencing shall remain in place until project construction is completed.

Mitigation Measure No. 11 Prior to the start of any construction activities, all construction contractors shall receive a copy of all mitigation measures required to reduce impacts to biological resources and a brochure that depicts the regulatory status of the biological resources that are present on the site. In

⁷ General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37803, TeraCor Resource Management, September 30, 2019, page 59.

addition, the project biologist shall provide verbal instruction to all site workers at a pre-construction meeting to provide a clear understanding of the onsite biological resources that are to be protected in accordance with the mitigation measures.

Although no burrowing owls were detected on the site, in accordance with MSHCP requirements the following mitigation measure is recommended:

Mitigation Measure No. 12 30-days prior to the start of grading or construction, whichever occurs first, the project developer shall retain a qualified biologist to conduct a burrowing owl survey. If burrowing owls are not detected no further mitigation is required. If burrowing owls are detected the project developer and the biologist shall submit to CDFW a burrowing owl relocation plan for approval.

- 4b. No Impact.** Based on the biological site surveys there are no riparian or riverine areas on the project site.⁸ Therefore, the project would not impact any riparian areas.
- 4c. No Impact.** Based on the biological site surveys there are no vernal pools or wetlands on the project site.⁹ Therefore, the project would not impact any vernal pools or wetlands.
- 4d. Less Than Significant Impact.** There are no wildlife corridors either on or adjacent to the project site. The project would not remove any existing MSHCP recognized wildlife corridors.¹⁰ The project would also not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Therefore, the project would not have any significant wildlife movement impacts.
- 4e. Less Than Significant Impact.** The City of Perris adopted an ordinance (Ordinance No. 1123) that established a local development mitigation fee to fund the preservation of natural ecosystems in accordance with the MSHCP. The City also adopted the following General Plan policies for the protection of biological resources:

Goal II	Preservation of areas with significant biotic communities.
Policy II.A	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.
Measure II.A.2	Public and private projects, located in areas with potential for moderate or high plant and wildlife sensitivity, require biological surveys as part of the development review process.
Measure II.A.3	Public and private projects that are also subject to federal or State approval with respect to impacts to Water of the U.S. and/or

⁸ General Biological Assessment and MSHCP Consistency Analysis for Tentative Tract No. 37803, TeraCor Resource Management, September 30, 2019, page 14.

⁹ Ibid.

¹⁰ Ibid, page 22.

	Streambeds require evidence of completion of the applicable federal permit process prior to the issuance of a grading permit.
Goal III	Implementation of the Multi-Species Habitat Conservation Plan (MSHCP).
Policy III.A	Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.

The project developer would be required to pay applicable MSHCP fees pursuant to Ordinance No. 1123. The project would not have significant conflicts with the MSHCP with compliance with Ordinance No. 1123. The project would not have any significant impacts to local policies or ordinances.

- 4f. Less Than Significant Impact.** As discussed in Section “4a” above, the project is located within the MSHCP and would result in impacts that include direct effects to MSHCP covered plant and animal species. These impacts, however, are what the Plan foresaw and seeks to adequately offset through fee payment.

The project includes two areas of sage scrub covered rock outcrops that would be conserved with project implementation. The conservation of these two areas, Lots C and D, comprise a total of 11.07 acres, or approximately 21% of the project site. This eleven-acre set-aside is a generous dedication which conserves sage scrub habitat and key visual elements of the site, and partially off-sets the conversion of 42.1-acres of habitat to residential properties. Certain organisms are likely to persist, such as common lizards and snakes and birds, but some animals which are cut off from adjoining habitats are likely to eventually not occur, especially on the larger of the two conserved lots which will lose connectivity to similar habitat to the west. It must be made clear, however, that MSHCP fee payment is intended to adequately off-set these negative consequences of development. Significant critical lands in western Riverside County are being conserved and managed in an effort to maintain habitat for all of the species covered under the MSHCP. One additional benefit of the 11.07-acre conserved lots is the conservation and education value they would have to residents, particularly children, who would explore these areas and learn to appreciate the importance of conservation as responsible citizens.

As required by Ordinance No. 1123 the project developer must pay the required MSHCP fee to mitigate the potential biological resource impacts by the project. Payment of the required MSHCP fee would reduce biological impacts to a less than significant level.

5.5 CULTURAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

References: Perris 2011, Perris 2005a, Perris 2005b

A cultural resources report ¹¹ was prepared for the project. A copy of the cultural resources report is included in Appendix D to this IS/MND.

Explanation of Checklist Answers

5a. No Impact. A records search was conducted at the National Register of Historic Places (National Register), the California Register, and documents and inventories from the California Office of Historic Preservation (OHP), including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties and the Inventory of Historic Structures to determine if there are any historical resources on the site. In addition, a walk-over of the site was conducted to determine if there are any undiscovered historical resources at the site. Based on the completed records search and the on-site survey there are no historical resources on the site. Therefore, the project would not impact any historical resources.

5b. Less Than Significant With Mitigation. The records search that was conducted at the Eastern Information Center (EIC), which included the review of all prerecorded historic-period and prehistoric cultural resources and known cultural resources surveys and excavation reports generated from projects located within one mile of the project site revealed that 36 cultural resource studies have taken place resulting in the recording of 93 cultural resources. One of the studies assessed a portion of the project site, but did not identify any cultural resources within the site.

The project site was carefully inspected during a site survey on January 17 and January 20, 2020. Vegetation on the site included native and nonnative seasonal grasses, native plants from coastal sage scrub vegetation community, and non-native scrub brush. Sediments include silty sands containing some granitic cobbles and boulders. Many of the boulders on the site have been drilled, blasted, and relocated by mechanical equipment. However, none of the boulders exhibited any grinding slicks associated with prehistoric activity. The property has been subject to severe disturbances related to blasting, discing, grading, off-road vehicle use, and weed abatement.

¹¹ Cultural Resources Assessment, Tentative Tract Map No. 37803, Perris, Riverside County, California, BCR Consulting, May 8, 2020.

Based on the site survey no cultural resources were identified. Although no cultural resources were identified, due to the fact that 93 cultural resources have been recorded within one mile of the project site there is the potential for cultural resources to be present and if present could be impacted during project grading and construction. Therefore, the following mitigation measure is recommended to reduce potential archaeological resource impacts to a less than significant level.

Mitigation Measure No. 13 Prior to the issuance of grading permits, the project developer shall retain a professional archaeologist.¹² The task of the archaeologist shall be to monitor the initial ground-altering activities at the subject site and off-site project improvement areas for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no grading activities shall occur at the site until the archaeologist has been approved by the City.

The archaeologist shall be responsible for monitoring grading activities, maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be equipped to record and salvage cultural resources that may be unearthed during grading activities. The archaeologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.

In the event that archaeological resources are discovered at the project site, the handling of the discovered resources will differ. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred/ceremonial objects belong to the property owner. All artifacts discovered at the development site shall be inventoried and analyzed by the professional archaeologist.

If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project proponent and project archaeologist shall notify the City of Perris Planning Division, the Pechanga Band of Luiseño Indians, the Soboba Band of Luiseño Indians, and any other tribes identified by the California Native American Heritage

¹² For the purpose of this measure, the City of Perris considers professional archaeologists to be those who meet the United States Secretary of the Interior's standards for recognition as a professional, including an advanced degree in anthropology, archaeology, or a related field, and the local experience necessary to evaluate the specific project. The professional archaeologist must also meet the minimum criteria for recognition by the Register for Professional Archaeologists (RPA), although membership is not required.

Commission (NAHC) as being affiliated with the area. A designated Native American observer from one of the tribes identified by the NAHC as being affiliated with the area shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribes. All items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.

Native American artifacts that are relocated/reburied at the project site would be subject to a fully executed relocation/reburial agreement with the assisting Native American tribes or bands. This shall include measures and provisions to protect the reburial area from any future impacts. Relocation/reburial shall not occur until all cataloging and basic recordation have been completed. Native American artifacts that cannot be avoided or relocated at the project site shall be prepared in a manner for curation at an accredited curation facility in Riverside County that meets federal standards per 36 CFR Part 79 and makes the artifacts available to other archaeologists/researchers for further study such as University of California, Riverside Archaeological Research Unit (UCR-ARU) or the Western Center for Archaeology and Paleontology. If more than one Native American group is involved with the project and they cannot come to an agreement as to the disposition of Native American artifacts, they shall be curated at the Western Center by default. The archaeologist shall deliver the Native American artifacts, including title, to the accredited curation facility within a reasonable amount of time along with the fees necessary for permanent curation.

Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation or returned to the property owner, as deemed appropriate.

Once grading activities have ceased or the archaeologist, in consultation with the designated Native American observer, determines that monitoring is no longer necessary,

monitoring activities can be discontinued following notification to the City of Perris Planning Division.

A report of findings, including an itemized inventory of recovered artifacts, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report shall provide evidence that any Native American and Non-Native American archaeological resources recovered during project development have been avoided, reburied, or curated at an accredited curation facility. A copy of the report shall also be filed with the Eastern Information Center (EIC) and submitted to the Pechanga Band of Luiseño Indians, the Soboba Band of Luiseño Indians, and any other Native American groups involved with the project.

- 5c. Less Than Significant With Mitigation.** The project site has historically been vacant and as a result is not anticipated to have any human remains, including those interred outside of formal cemeteries. In the unlikely event that human remains are discovered during construction the following measure is recommended to reduce potential human remain impacts to a less than significant level.

Mitigation Measure No. 14 In the event that human remains (or remains that may be human) are discovered at the project site during grading or earthmoving, the construction contractors, project archaeologist, and/or designated Native American observer shall immediately stop all activities within 100 feet of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).

If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Native American representatives at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the project proponent and the MLD. In the event that the project proponent and the MLD are in

disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98I and 5097.94(k)).

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the EIC.

5.6. ENERGY: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation of Checklist Answers

- 6a. Less Than Significant Impact.** Information found in this section, as well as other aspects of the project's energy implications, are discussed in greater detail elsewhere in this IS/MND, including section "5.8" (Greenhouse Gas Emissions) and section "5.17" (Transportation) of this IS/MND.

Construction-Related Energy Consumption

Estimated Energy Consumption

Heavy-duty construction equipment associated with demolition, grading, the construction of utilities, paving, and building construction would include, excavators, graders, tractors/loaders/backhoes, dozers, scrapers, air compressors, cranes, forklifts, generators, pumps, welders, rollers, trenchers and pavers. The majority of the equipment would likely be diesel-fueled; however, smaller equipment, such as air compressors and forklifts may be electric, gas, or natural gas-fueled. For the purposes of this assessment, it is assumed that the construction equipment would be diesel-fueled, due to the speculative nature of specifying the amounts and types of non-diesel equipment that might be used, and the difficulties in calculating the energy, which would be consumed by this non-diesel equipment.

The number of construction workers required to construct the project would vary based on the phase of construction and the activity taking place. The transportation fuel required by construction workers to travel to and from the site would depend on the total number

of worker trips estimated for the duration of construction activity. A 2007 study by the California Department of Transportation (Caltrans) estimates the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) in the year 2020 is 18.78 miles per gallon. Assuming construction worker vehicles have an average fuel economy consistent with the Caltrans study and each construction worker commutes an average of 20 miles a day to and from the site, the maximum 50 workers on-site during each construction phase of the project is estimated to consume approximately 53 gallons of gasoline a day. Assuming all 50 construction workers are employed at the site for a year (52 weeks), the fuel used by construction workers commuting to the site is approximately 345 barrels (13,780 gallons) of gasoline and represents less than 0.00010 percent of the statewide transportation gasoline consumption in 2016, which is the latest year that data is available.

Construction equipment fuels (e.g., diesel, gasoline, natural gas) would be provided by local or regional suppliers and vendors. Electricity would be supplied by the local utility provider (e.g., Southern California Edison) via existing connections. A temporary water supply, primarily for fugitive dust suppression and street sweeping, would also be supplied by the local provider (e.g., City).

Electricity used during construction to provide temporary power for lighting and electronic equipment (e.g., computers, etc.) inside temporary construction trailers and for outdoor lighting when necessary for general construction activity would generally not result in a substantial increase in on-site electricity use. Electricity use during construction would be variable depending on lighting needs and the use of electric-powered equipment and would be temporary for the duration of construction activities. Thus, electricity use during construction would generally be considered negligible.

Energy Conservation: Regulatory Compliance

The project would utilize construction contractors who demonstrate compliance with applicable California Air Resources Board (CARB) regulations governing the accelerated retrofitting, repowering, or replacement of heavy-duty diesel on- and off-road equipment. The CARB has adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants. Compliance with the above anti-idling and emissions regulations would result in a more efficient use of construction-related energy and minimize or eliminate wasteful and unnecessary consumption of energy.

With respect to solid waste, CALGreen requires 65% of most construction and demolition waste be diverted from a landfill. The project would generate various types of debris during project demolition and construction. Concrete and asphalt that is removed from the site during demolition can either be ground and reused on the site as base material for driveways or sold to a recycler.

Anticipated Energy Consumption

The daily operation of the project would generate a demand for electricity, natural gas, and water supply, as well as generating wastewater requiring conveyance, treatment and disposal off-site, and solid waste requiring off-site disposal. Southern California Edison is

the electrical purveyor in the City of Perris and would provide electricity to the project. The Southern California Gas Company is the natural gas purveyor in the City of Perris would provide natural gas to the project.

Energy Conservation: Regulatory Compliance

The California Energy Commission (CEC) first adopted the Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Part 11 of the Title 24 Building Standards Code is referred to as the CALGreen Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental quality.” As of January 1, 2011, the CALGreen Code is mandatory for the construction of all new buildings in the state. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality. The CALGreen Code was most recently updated in 2016 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2017. The project would be required by the City to comply with the applicable provisions of Title 24 and the CALGreen Code.

With respect to solid waste, the project is required to comply with applicable regulations, including those pertaining to waste reduction and recycling. The city’s waste hauler would divert and recycle project-generated municipal waste in accordance with applicable city ordinances.

Energy Conservation: Project Design Features

The project would be designed to include green building, energy saving, and water saving measures and other sustainability features. Consistent with the CALGreen Code, the project would be required to meet and comply with the residential mandatory measures that include water efficiency and conservation, material conservation and resource efficiency, environmental quality, etc. As such, the project would be designed to reduce wasteful, inefficient, and unnecessary consumption of energy.

Estimated Energy Consumption

The long-term operation of the project would result in transportation energy use primarily for residents that commute to and from their place of employment. Transportation fuels, primarily gasoline, would be provided by local or regional suppliers and vendors. As discussed previously, in 2016, California consumed a total of 348,830 thousand barrels of gasoline for transportation, which is part of the total annual consumption nationwide of 3,410,051 thousand barrels by the transportation sector. Project-related vehicles would require a fraction of a percent of the total state’s transportation fuel consumption. A 2008 study by Caltrans determined that the statewide average fuel economy for all vehicle types (automobiles, trucks, and motorcycles) in 2020 would be 18.78 miles per gallon.

Alternative-Fueled Vehicles

Alternative-fueled, electric, and hybrid vehicles could be used by some project residents. The use of these types of alternative fueled vehicles would reduce the overall consumption of gasoline by the project. The effect is anticipated to be minimal in today's current vehicle market due to the relatively few number of alternative vehicles that are in use. According to the Los Angeles Times, alternative-fueled vehicles make up approximately 2.3% of all vehicles registered in California. The above transportation fuel estimates for the project do not account for alternative-fueled, electric, and hybrid vehicles, which are more energy efficient vehicles. Thus, the assessment is a conservative estimate of transportation fuel consumption. The project would not have any wasteful, inefficient or unnecessary consumption of energy resources during either project construction or the life of the project because the project would be required to comply with all applicable state energy conservation measures.

- 6b. Less Than Significant Impact.** The project would be required by the city to comply with all applicable CALGreen Code energy conservation measures, including California Code of Regulations, Title 24, Part 6, California Energy Code. The project would not conflict with or obstruct state or local renewable energy or energy efficiency requirements. Any potential impacts would be a less than significant level.

5.7. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.7. GEOLOGY AND SOILS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

References: Perris 2005a, Perris 2005b, RCIT, SoCalGeo, Perris 2009

A geotechnical report¹³ was prepared for the project. A copy of the geotechnical report is attached in Appendix E to this IS/MND.

Explanation of Checklist Answers

7a(i). Less Than Significant Impact. There are no mapped Alquist-Priolo Zones within the City and there are no County of Riverside-designated special status studies fault zones (Perris 2005a, p. SE-3). The closest active faults to the site include the Elsinore-Temecula fault that is located approximately 8.6 miles to the southwest, the Elsinore-Glen Ivy Fault located approximately 9.1 miles to the west and the San Jacinto – San Jacinto Valley Fault located approximately 14 miles to the east.¹⁴ Although seismic activity is known to exist throughout Southern California, there are no known faults through or near the site that would significantly impact the project due to the rupture of an unknown earthquake fault.

7a(ii). Less Than Significant Impact. Although there are no faults directly within the City, there are several active faults within the Southern California region that may contribute to ground shaking at the site. Therefore, strong ground shaking can be expected at the site during moderate to severe earthquake in the general region. The project would be designed and constructed according to the current California Building Codes (CBC), which require structures to be designed to meet or exceed the seismic safety standards in the CBC. Therefore, ground-shaking impacts to the project would be a less than significant level.

7a(iii). Less Than Significant Impact. Liquefaction occurs when shallow, fine to medium-grained sediments saturated with water are subjected to strong seismic ground shaking. It generally occurs when the underlying water table is 50 feet or less below the surface.¹⁵ Based on the geotechnical report, the potential for liquefaction or dynamic settlement due to the design earthquake event to affect structures at the site is considered very low, based on the lack of shallow groundwater and relatively dense nature of underlying materials.¹⁶ Therefore, based on the subsurface conditions encountered at the site the potential impacts due to liquefaction and ground failure are a less than significant level.

¹³ Geotechnical Exploration Proposed Residential Development TTM 37803, Perris, California, Leighton and Associates, Inc. December 14, 2018.

¹⁴ Ibid, page 7.

¹⁵ City of Perris General Plan, Safety Element, page 9.

¹⁶ Geotechnical Exploration Proposed Residential Development TTM 37803, Perris, California, Leighton and Associates, Inc. December 14, 2018, page 8.

- 7a(iv). No Impact.** The geotechnical report states there is no evidence of on-site landslides/debris flow during field investigations and the review of referenced reports. The on-site bedrock is generally not prone to land sliding and thin deposits of surficial soils are present only in the relatively low-lying portions of the site and therefore, are not considered prone to land sliding.¹⁷ Therefore, based on the geotechnical report the project will not be impacted by landslides.
- 7b. Less Than Significant Impact.** Once operational, the majority of the project site would be paved and developed with residential units, streets and supporting infrastructure. Therefore, there would not be any significant soil erosion impacts associated with the long-term operations of the site. Short-term erosional impacts associated with construction would be minimized through compliance with standard erosion control practices and New Point Discharge Elimination System (NPDES) permit that is required by the state and includes the preparation of a Stormwater Pollution Prevention Plan (SWPPP). The incorporation of all state required Best Management Practices (BMPs) of the SWPPP would reduce short-term construction erosion impacts to a less than significant level.
- 7c. Less Than Significant Impact.** The preliminary geotechnical report did not identify any existing geological conditions or soils that would become unstable and significantly impact the Project as proposed. As discussed in section “7a.iii.” and “7a.iv.” above, liquefaction and landslides will not significantly impact the project. The geotechnical report provides site-specific recommendations to develop the site from a geotechnical and soils perspective. The City engineer will require the recommendations in the geotechnical report be incorporated into the grading and building plans to comply with the City’s Grading Ordinance to reduce on-site geotechnical and soil conditions to a less than significant level.
- 7d. Less Than Significant Impact.** Based on the results of the geotechnical report the laboratory tests indicate the near surface soils generally possess a very low expansion potential. Therefore, expansive soil impacts would be a less than significant level.
- 7e. No Impact.** The Project will be required by the city to connect to the existing sewer system in Metz Road and San Jacinto Avenue and the use of septic tanks will not be allowed. The project would not have any alternative wastewater impacts.
- 7f. Less Than Significant With Mitigation.** Based on the cultural resources report¹⁸, some of the geologic units underlying the site are considered to have high paleontological sensitivity and known to have Pleistocene fossil specimens associated with mastodon, ancient horse, camel and other specimens. As a result, any fossil specimens uncovered during project grading and construction could be scientifically significant.¹⁹ The following mitigation measure is recommended to reduce potential paleontological impacts by the project to a less than significant level.

¹⁷ Ibid, page 5.

¹⁸ Cultural Resources Assessment, Tentative Tract Map No. 37803, Perris, Riverside County, California, Appendix D.

¹⁹ Cultural Resources Assessment, Tentative Tract Map No. 37803, Perris, Riverside County, California, Appendix D.

Mitigation Measure No. 15 Prior to the issuance of grading permits, the project applicant shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision of a qualified professional paleontologist (or his or her trained paleontological monitor representative) during onsite and off-site subsurface excavation that exceeds three (3) feet in depth. Selection of the paleontologist shall be subject to approval of the City of Perris Director of Development Services and no grading activities shall occur at the site until the paleontologist has been approved by the City.

Monitoring shall be restricted to undisturbed subsurface areas of older alluvium, which might be present below the surface. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, would signify completion of the program to mitigate impacts to paleontological resources.

5.8. GREENHOUSE GAS EMISSIONS: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2016

An Air Quality and GHG Analysis²⁰ was prepared for the project. A copy of the air quality and GHG report is included in Appendix A to this IS/MND.

Explanation of Checklist Answers

8a. Less Than Significant Impact.

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” Greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

In response to the requirements of SB 97, the State Resources Agency developed guidelines for the treatment of GHG emissions under the California Environmental Quality Act (CEQA) Guidelines (Guidelines). These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. Based on the Guidelines, a project would have a potentially significant impact if it:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

²⁰ Air Quality and GHG Impact Analysis, TTM 37803, Perris California, Giroux & Associates, June 11, 2020.

Section 15064.4 of the Guidelines specifies how significance of GHG emissions is to be evaluated. Emissions may be quantitative, qualitative or based on performance standards. The Guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, which was used for this project.

In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions that recommended a threshold of 3,000 Metric Tons (MT) CO₂e for all land use projects. The 3,000 MT/year recommendation has been used as a guideline for the GHG analysis for this project. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

Construction Activity GHG Emissions

For the GHG analysis, the project is assumed to be constructed within three years. During project construction, the CalEEMod (version 2016.3.2) computer model predicts that the construction activities would generate the annual CO₂e emissions shown in Table 6.

Table 6
Construction Emissions (Metric Tons CO₂e)

	CO₂e
Year 2020	747.4
Year 2021	657.9
Year 2022	226.4
Total	1,631.7
Amortized	54.4

The SCAQMD policy is to amortize construction GHG emissions over a 30-year lifetime. As shown in Table 6, the amortized construction emission level is 54.4 metric tons CO₂e and less than the threshold of 3,000 Metric Tons (MT) CO₂e per year. The GHG impacts from project construction are less than significant.

Project Operational GHG Emissions

The total operational and annualized construction emissions for the project are shown in Table 7. As shown, the total project GHG emissions are below the SCAQMD recommended significance threshold of 3,000 MT CO₂e. The operations of the project would not result in the generation of a significant level of greenhouse gases.

Table 7
Proposed Operational Emissions

Consumption Source	
Area Sources*	34.0
Energy Utilization	634.5
Mobile Source	1,959.0
Solid Waste Generation	85.6
Water Consumption	72.1
Construction	54.4
Total	2,839.6
Guideline Threshold	3,000

*assumes use of natural gas hearths as mandated by the SCAQMD

- 8b. Less Than Significant Impact.** The City of Perris adopted a Climate Action Plan (CAP) on February 23, 2016.²¹ The CAP was developed to address global climate change through the reduction of harmful GHG emissions at the community level, and as part of California's mandated statewide GHG emissions reduction goals under AB 32. The Perris CAP, including the GHG inventories and forecasts, is based on the Western Riverside Council of Governments (WRCOG's) Subregional CAP. The Perris CAP utilized WRCOG's analysis of existing GHG reduction programs and policies that have already been implemented in the sub-region and applicable best practices from other regions to assist in meeting the 2020 sub-regional reduction target. The CAP reduction measures chosen for the City's CAP were based on their GHG reduction potential, cost benefit characteristics, funding availability, and feasibility of implementation in the City of Perris. The CAP used an inventory base year of 2010 and included emissions from the following sectors: residential energy, commercial/industrial energy, transportation, waste, and wastewater. The CAP's 2020 reduction target is 15% below 2010 levels, and the 2035 reduction target is 47.5% below 2010 levels.

The City of Perris expects to meet these reduction targets through implementation of statewide and local measures. The project would be consistent with the 2008 Scoping Plan, the 2017 Scoping Plan, and the City of Perris Plan. As such, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases and a less than significant impact would occur with respect to this threshold.

The City of Perris CAP utilizes Western Riverside County Council of Government's (WRCOG's) analysis of existing greenhouse gas (GHG) reduction programs and policies that have already been implemented in the sub-region and of applicable best practices from other regions to assist in meeting the 2020 sub-regional reduction target (Perris 2016, p. 1-3). As discussed in Section "8.a" above, the project would not have a significant increase in either construction or operational GHG emissions. As a result, the project generated GHG emissions are below the recommended SCAQMD threshold of 3,000 MT CO₂e a year. The project would not impact and conflict with the City of Perris CAP or any applicable plan, policy, or regulations to reduce GHG emissions.

²¹ <http://www.cityofperris.org/city-gov/agenda/2016/02-23-16-council-8b.pdf>

5.9 HAZARDS/HAZARDOUS MATERIALS: Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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, will the project result in a safety hazard or excessive noise for people working or residing in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2005a, Perris 2005b, Perris 2009, Perris 2011, Perris 2012, Partner 2016a, Partner 2016b, Google Earth, DTSC 2007, AICUZ 2005, ALUC 2017a, ALUC 2017b

A Phase I Environmental Site Assessment (ESA)²² was prepared for the project site. A copy of the Phase I ESA is attached in Appendix F to this IS/MND.

Explanation of Checklist Answers

9a. Less Than Significant Impact. The Project site is vacant. Based on the Phase I ESA there was a pit in the south central area of the project site was used as a disposal site. Based on the photograph of the pit the items that were placed in the pit appear to be a wooden door, metal bed springs, carpeting and a dead tree.²³ Also in the central area of the site was a mound of trash that consisted largely of roofing material.²⁴ Homeless camps

²² Phase I Environmental Site Assessment, Tentative Tract No. 37803, Perris, California, Remediation Sciences, July 10, 2018.

²³ Ibid, Photo 20, Appendix A of Phase I ESA.

²⁴ Ibid, Photo 7, Appendix A of Phase I ESA.

also occupied other areas of the project site. Although a pit with trash, a pile of roofing material and homeless camps were found on the site there are no known hazardous materials on the site that could create a significant hazard to the public during project construction.

Like other residential development in Perris, while residents of the Project will use hazardous household materials to clean and maintain their residences. Based on the small quantities and types of household products, those materials will not create any significant hazardous material impacts to the public or the environment during the life of the project. Therefore, the Project will have a less than significant level hazardous material impacts.

- 9b. Less Than Significant Impact.** Based on the Phase I ESA, the Project site is vacant and undeveloped and there is no evidence of any hazardous materials on the property. Therefore, no hazardous materials would be released during project construction. The proposed residential uses proposed for the site would not generate or release any hazardous materials during the life of the project associated with residential use. The Project will not have any significant hazardous material impacts.
- 9c. No Impact.** The closest existing schools to the Project include the California Military Institute School that is located adjacent to and east of the Project, east of A Street and Perris Elementary school that is located approximately one-quarter mile south of the site. Based on the Phase I ESA there are no hazardous materials on the site that could impact any of the schools in the vicinity of the project. Similarly, the proposed residential use for the site will not generate or emit any hazardous materials and impact students or administrators at either of the existing schools in the project area. The project will not have any hazardous impact to area schools.
- 9d. No Impact.** The Phase I ESA indicates that there are no hazardous material sites either on or adjacent to the site that are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As a result, the project would not create or have any hazardous impact to the public or the environment.
- 9e. No Impact.** The project site is not within APZ I or II of the March Air Reserve Base/Inland Port Airport (MARB/IPA) Land Use Compatibility Plan (LUCP). As a result, the project is outside of Accident Potential Zone (APZ) I and is not subject to Airport Land Use Commission (ALUC) review.

The Perris Valley Airport is the only private airport within the City and includes Influence Area 1, which limits residential uses in the flight path.²⁵ The project is located approximately one and a half miles north and outside of the Influence Area of Perris Valley Airport.²⁶ Therefore, the project would not be impacted by activities at the Perris Valley Airport.

- 9f. Less Than Significant Impact.** The City of Perris participates in the Riverside County Multi-Agency Multi-Hazard Functional Plan (MHFP), which outlines requirements for emergency access and standards for emergency responses. The project would be

²⁵ City of Perris General Plan 2030 Draft Environmental Impact Report, p. IV. 42.

²⁶ Ibid, Figure 4.4-2.

required by the City to provide suitable site access for emergency vehicles, including fire, police and paramedics to comply with access requirements outlined in the MHFP. Therefore, the project would have a less than significant level impact on implementation of the adopted emergency response plan.

- 9g. Less Than Significant Impact.** Based on the General Plan the Project is not located within a designated wildfire hazard area.²⁷ The City of Perris is not located within a California State Responsibility Area (SRA) Very High, High or Moderate Fire Hazard Severity Zones.²⁸ However, the northern portion of the site adjacent to Metz Road is located in Local Responsibility Area (LRA) Very High Fire Hazard Severity Zone (VHFHSZ).²⁹ Effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VHFHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100-foot defensible space clearance. Project compliance with the CBC would reduce potential wildland fires to a less than significant level.

5.10. HYDROLOGY AND WATER QUALITY: Would the Project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	(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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

²⁷ City of Perris General Plan, Safety Element, Exhibit S-16 Wildfire Constraint Area.

²⁸ http://frap.fire.ca.gov/webdata/maps/riverside_west/fhszs_map.60.pdf

²⁹ http://frap.fire.ca.gov/webdata/maps/riverside_west/fhszl_map.60.pdf

5.10. HYDROLOGY AND WATER QUALITY: Would the Project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
d)	In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2005b, Perris 2009, Perris 2012, SWRCB 2012, FEMA 2014, Google Earth, EMWD 2017a, DWR

A Preliminary Water Quality Management Plan (WQMP)³⁰ and a Preliminary Hydrology Study³¹ were prepared for the project. Both reports are included in Appendix G to this IS/MND.

Explanation of Checklist Answers

10a. Less Than Significant Impact. The project would increase the amount of impervious surface area at the site associated with the construction of streets, sidewalks, houses and other impervious surfaces. All sources of runoff may carry pollutants and therefore have the potential to degrade water quality to a level below water quality standards or waste discharge requirements. Runoff from the site ultimately discharges into the Perris Valley Storm Drain, which is tributary to the San Jacinto River and Canyon Lake (Perris 2009, p. 8). Canyon Lake is currently listed as an impaired water body on the Clean Water Act (CWA) Section 303 (d) list because it exceeds water quality objectives for nutrients and pathogens (SWRCB 2012).

As required by the State of California Water Quality Control Board (WQCB), the project applicant has prepared a Preliminary Water Quality Management Plan (WQMP). As discussed in the Preliminary WQMP, the project includes the construction and maintenance throughout the life of the project two bioretention basins within the project site as treatment control Best Management Practices (BMPs) to treat potential runoff pollutants generated by the project. A bioretention basin only is proposed at the northeast corner of the site to capture and treat the surface water runoff from the northern two-thirds of the site. A second bioretention and flood control basin is proposed at the southeast corner of the site to capture and treat the surface water runoff from the southern one-third of the site. The bioretention basins would provide removal efficiency of 80% or greater for Priority Pollutants including bacteria, nutrients, pesticides, sediments, trash and debris, and oil and grease.³² The construction of and the proper on-going maintenance of the two proposed bioretention basins throughout the life of the project would reduce potential water quality standards impacts to a less than significant level.

10b. Less Than Significant Impact. The development of the site as proposed would reduce the amount of pervious area that is currently available for rainfall percolation. However, the project includes two on-site bioretention basins that would collect first flush and low

³⁰ Project Specific Water Quality Management Plan, TTM 37803, Hunsaker & Associates, August 20, 2019.

³¹ Preliminary Hydrology Study for Tentative Tract 37803, Hunsaker & Associates, August 2019.

³² Project Specific Water Quality Management Plan, TTM 37803, Hunsaker & Associates, August 20, 2019, page 22, Table E.4.

surface water runoff flows from the site. The bioretention basins would allow collected surface water to percolate into the local groundwater and recharge the local groundwater basin similar to the existing condition.

Potable water would be provided to the Project by Eastern Municipal Water District (EMWD). Based on EMWD's 2015 Urban Water Management Plan (UWMP), which was adopted in June 2016, between 2010 and 2015, an average of only approximately 10 percent of the EMWD's water supply came from groundwater (EMWD 2017a, p. 4). Nonetheless, EMWD has undertaken groundwater recharge operations with imported surplus Metropolitan Water District (MWD) water since 1990 and long-term facilities for groundwater recharge have been placed in operation under the Integrated Recharge and Recovery Program. Approximately 6,000 acre-feet (AF) were recharged in 2012, 7,500 AF were recharged in 2013 and 3,500 AF were recharged in 2014 (EMWD 2017a, p. 11). The EMWD also contributes to replenishment of the basin by providing recycled water to customers for use in lieu of private groundwater production to reduce the potential effects of incremental groundwater depletion through use. The project applicant proposes to use reclaimed water for non-potable water needs³³, such as landscape irrigation to reduce potable water demand.

The project would increase the amount of impervious surfaces within the EMWD's service area, which may potentially impact the amount of stormwater that percolates into the local groundwater basin. However, the project applicant proposes to two bioretention basins that would continue to allow surface water to percolate into the groundwater. The 53.13-gross acre project site is relatively small compared to the area of the entire groundwater basin. The construction of the two on-site detention basins would continue to allow surface water runoff from the site to percolate into and recharge the local groundwater. While the Project would reduce the amount of stormwater that currently percolates into the local groundwater, the fact that EMWD only relies on 10% of their water supply from groundwater and the project would continue to allow surface water to percolate into the groundwater the project would not significantly impact EMWDs water supply. The project would have a less than significant level impact to groundwater supplies and groundwater recharge.

- 10c.i. Less Than Significant Impact.** Silt would be generated from the site during project grading and construction, especially if construction occurs during the winter months when rainfall typically occurs. The City would require the project developer to prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with California State Water Resources Control Board (State Water Board), Construction Activities General Permit (State Water Resources Board Order No. 2012-0006-DWQ, NPDES No. CAS000002). The SWPPP would require the contractor to implement Best Available Technology Economically Achievable measures to reduce and eliminate storm water pollution from all construction activity through the implementation of Best Management Practices (BMPs). Implementation of the required SWPPP prior to and throughout project construction would reduce and minimize potential siltation impacts.

As discussed in Section "10a." above, the project applicant has prepared a Preliminary WQMP. The City would require the Preliminary WQMP be approved by the City prior to

³³ Ibid, page 14, D.2 Harvest and Use Assessment.

the start of grading. The WQMP identifies the BMPs that would be constructed and maintained throughout the life of the project to control erosion and siltation during the life of the project from entering the storm water runoff from the site. The types of pollutants that are anticipated to be generated during the life of the project include suspended solids, sediment, nutrients, heavy metals, pathogens, pesticides, toxic organic compounds, oil and grease and trash and debris. The state required WQMP identifies the measures that would be included in the project, including two detention basins, to control and reduce siltation. The implementation by the developer of the required SWPPP and WQMP would reduce potential erosion or siltation impacts to a less than significant level.

10c.ii. Less Than Significant Impact. The project is estimated to generate approximately 5 cubic feet per second (CFS) increased surface water flows compared to the existing condition for the two drainage areas on the site.³⁴ Drainage Basin 2 that is proposed for the southeast corner of the site is designed to accommodate the 100-year storm flows from the site to reduce both on-site and off-site (downstream) flooding. Therefore, there would not be any flooding impacts by the project.

10c.iii. Less Than Significant Impact. As discussed in Section “10c.iii.” above, the project applicant proposes to construct a detention basin in the southeast corner of the site that would detain 100-year stormwater flows from the site and reduce potential flooding impacts and not impact the existing capacity of the storm drain facilities downstream of the project. Therefore, project generated runoff would not exceed or impact the capacity of the existing downstream storm water drainage system that serves the site.

The project would be required to treat surface water runoff prior to its discharge to meet Regional Water Quality Control Board water quality requirements and provide safeguards that surface water runoff would not provide sources of polluted runoff. As discussed in Section “10a.” above, a Preliminary WQMP has been prepared and states that a proposed two onsite detention basins and underground Bio Retention medial would be installed to remove and prevent most project generated pollutants from the storm water prior to being discharge from the site into an existing 60” Reinforced Concrete Pipe (RCP) located at the intersection of San Jacinto and C Street. The installation and maintenance of the BMPs in compliance with the Preliminary WQMP would reduce and filter most project runoff pollutants and have a less than significant level impact to surface water quality.

10c.iv. Less Than Significant Impact. The project does not propose any improvements that would impede or redirect flood flows. As discussed in Section “10c.ii.” above, Drainage Basin 2 is proposed for the southeast corner of the site and designed to accommodate the 100-year storm flows from the project to reduce both on-site and off-site (downstream) flooding. The project would not have any significant flood flow impacts.

10d. No Impact. A seiche occurs when a wave oscillates in lakes, bays, or gulfs as a result of seismic disturbances. There are no bodies of water adjacent to or in close proximity to the site that could impact the project due to a seiche. The project is more than 35 miles northeast of the Pacific Ocean and approximately 1,490’ above mean sea level. Due to the distance and elevation of the site, the project would not be impacted by a tsunami. Based on the Federal Emergency Management Agency (FEMA) the project is not located

³⁴ Preliminary Hydrology Study for Tentative Tract 37803, Hunsaker & Associates, August 2019, Table 3.

within a flood hazard zone.³⁵ Therefore, the project would not be impacted by the risk of pollutants due to inundation of the project by a flood hazard, tsunami or seiche.

- 10e. Less Than Significant Impact.** As discussed in Section “10.a” above, the project developer has prepared a Preliminary WQMP and the developer would be required by the City to install and implement all proposed water quality collection and surface water runoff treatment measures in the WQMP to reduce surface water quality impacts. The project applicant proposes to construct two onsite water quality detention basins to filter potential water pollutants from project surface water runoff prior to the discharge of surface water from the site and allow surface water in the detention basins to percolate into the soil. As a result, the project would not conflict with or obstruct water quality control measures mandated by the state.

5.11. LAND USE AND PLANNING: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2012

Explanation of Checklist Answers

- 11a. No Impact.** The project site is an infill site surrounded by residential development and vacant land that is either approved for residential development or planned for future residential development. The project would not divide any established communities adjacent to the site.

- 11b. Less Than Significant Impact.** The project site is designated for residential use by the Perris General Plan. The General Plan land use designation for the site and the zoning for the site is R-6,000 – Residential 6,000. The General Plan and zoning for the site allows low-density residential development up to 7 dwelling units per acre. The project applicant proposes 145 dwelling units on approximately 53.13 gross-acres with a density of 2.69 dwelling units per acre and less than the maximum allowed of 7 dwelling units per acre which is consistent with the General Plan.

The Land Use Element of the General Plan includes a Strategy for Action that reflects the community’s expectations and ambitions for positive changes in the physical environment of the City and how these are to be achieved. Strategy for Action “Goals” represents a synthesis of input from those who live and work in the City of Perris and define desired General Plan outcomes. Outcomes consistent with these Objectives will coalesce into an environment of the highest quality and livability possible for the City of Perris in the year 2030.³⁶

³⁵ <https://msc.fema.gov/portal/search#searchresultsanchor>.

³⁶ Perris General Plan Land Use Element, page 90.

The Strategy of Action includes Policies that provide the overall direction for choosing among alternative courses of action necessary to achieve the Objectives set forth in the *Strategy for Action*. Policies provide a measure of flexibility needed to adapt the course of action to changes in the circumstances occurring during the estimated thirty-year time span of the General Plan.³⁷

The policies of the Land Use Element that are applicable to the proposed project include the following:

All activities undertaken by a planning agency must be consistent with the goals and policies of the agency's general plan. The General Plan Land Use Element, as approved in August 2016, plays a central planning role in correlating all City land use issues, goals, and objectives into one set of development policies. The project would help to achieve General Plan Land Use Element Goal I, encouraging quality housing in attractive neighborhoods at all income levels and stages of life, Goal II, encouraging new development be consistent with infrastructure capacity and municipal service capabilities; and Goal V, which encourages protection from natural or man-made disasters. Various elements of the General Plan include policies adopted for the purpose of avoiding or mitigating an environmental effect. The project's consistency with the key policies relevant to the project are listed in Table 8 and as shown the project would be consistent with these policies.

Table 8
General Plan Policy Consistency Analysis

GENERAL PLAN POLICY	CONSISTENCY ANALYSIS
Land Use Element	
Policy I.A Promote variety in dwelling types, densities and locations to satisfy changing demands as the community evolves and matures.	Consistent: The project applicant proposes one and two-story single-family dwelling units at a density of 2.69 dwelling units per acre in the western portion of the middle of the city and less than a mile west of I-215 for ease of access to the freeway. The project is consistent with and meets Policy I.A
Policy II.A New development consistent with infrastructure capacity and municipal services capacities.	Consistent: All required infrastructure, including sewer, water, storm drains, roads, electricity, and natural gas are located in the streets adjacent to the project site and would be extended to the project site. The landfill that would serve the project has adequate capacity to serve the project into the future. As discussed in Sections 5.17 and 5.19 of this Initial Study/MND the existing public services and utilities have adequate capacity to serve the project to a less than significant level. As discussed in Section 5.17 of this Initial Study/MND the roadways that would serve the

³⁷ Ibid.

	project have capacity to serve the project to a less than significant level. Therefore, the project is consistent with and meets Policy II.A.
Policy II.B Require new development to include school facilities or pay school impact fees, where appropriate.	Consistent: As discussed in Section 5.19c of this Initial Study/MND, as required by Government Code Section 65995, the project developer would be required by state law pay the required developer fee to the Perris Elementary School District and the Perris Union High School District prior to the issuance of building permits. Therefore, the project is consistent with and meets Policy II.B.
Policy V.A Restrict development in areas at risk of damage due to disasters.	Consistent: As discussed in Section 5.9 of this Initial Study/MND there are no hazardous materials on the site that would damage and impact the project. Per Section 5.10d of this Initial Study/MND the project site is not located in a flood hazard zone and would not be exposed to a hazard associated with a tsunami or seiche. Per Section 5.20 of this Initial Study/MND the project site is not located within a High or Very High Fire Hazard Severity Zone. Therefore, the project would not be at risk due to a disaster and is consistent with and meets Policy V.A.
Housing Element	
Policy 1.4 Locate higher density residential development in close proximity to public transportation, services and recreation.	Consistent: The project applicant proposes a density of 2.69 dwelling units per acre, which is classified as low-density by the Land Use element. The project site is less than one-quarter mile west of Metz Park, which is a 17.8 acre city park and provides picnic tables, playground, baseball/softball fields, soccer field, snack bar, restrooms and a walking trail. There is public transportation on 4th Street that is located approximately one-third of a mile from the project site. All public services are available to project residents within the city. The project is consistent with and meets Policy 1.4.
Policy 1.5 Promote construction of units consistent with the new construction needs identified in the Regional Housing Needs Assessment (RHNA).	Consistent: The project proposes 145 market rate single-family detached residential units. Based on Table III-1 of the City of Perris 2014-2021 Housing Element the proposed market rate units proposed by the project applicant are Above Moderate income category. The project would provide 145 units towards the

	city's total quantified number of 1,814 Above Moderate units. Therefore, the project would assist the city towards meeting its' RHNA number. The project is consistent with and meets Policy 1.5.
Policy 3.4 Ensure that water and sewer providers are aware of the City's intentions for residential development throughout the city.	Consistent: In January 2020, the City of Perris issued Will Serve letters stating that the city is willing to provide water and sewer service to the project. Therefore, the city is aware of the proposed project. The project is consistent with and meets Policy 3.4.
Policy 5.3 Encourage compatible design of new residential units to minimize the impact of intensified reuse of residential land on existing residential development.	Consistent: The project site is vacant and has not been developed. The project is not a reuse of residential land, but rather new residential development on vacant land. The project design is consistent with the adjacent surrounding development in terms of density. The project is consistent with and meets Policy 5.3.
Policy 6.1 Comply with all adopted federal and state actions to promote energy conservation.	Consistent: As discussed in Section 5.6 of this Initial Study/MND the project would be required by the City to comply with the applicable provisions of Title 24 and the CALGreen Code, including residential mandatory measures that include water efficiency and conservation, material conservation and resource efficiency, environmental quality, etc. The project is also required to comply with all applicable state regulations pertaining to waste reduction and recycling and applicable city ordinances. As such, the project would be designed to reduce wasteful, inefficient, and unnecessary consumption of energy. The project is consistent with and meets Policy 6.1.
Circulation Element	
Policy I.A Design and develop the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the designated Transportation System, Exhibit 4.2 Future Roadway Network	Consistent: The project is consistent with the residential land use proposed for the project site by the Land Use Element of the General Plan. All roadway improvements proposed by the project applicant are consistent with the transportation system that is proposed for the area by the Circulation Element and would serve the project. The project is consistent with and meets Policy I.A.
Policy II.A Maintain the following target Levels of Service: • LOS "D" along all City maintained roads (including intersections) and LOS "D" along I-	Consistent: As shown in Table 17 of this Initial Study/MND three of the seven intersections that were studied currently operate at LOS A, LOS B, LOS C and LOS D,

<p>215 and SR 74 (including intersections with local streets and roads). An exception to the local road standard is LOS "E", at intersections of any Arterials and Expressways with SR 74, the Ramona-Cajalco Expressway or at I-215 freeway ramps.</p> <ul style="list-style-type: none"> • LOS "E" may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations. 	<p>which are considered acceptable by the City. However, two of the studied intersections currently operate at LOS F in both the AM and PM peak hours, which is considered unacceptable by the City, and one intersection operates at an acceptable LOS C in the AM peak hour and an unacceptable LOS E in the PM peak hour. The project applicant proposes four mitigation measures to mitigate project impacts at the impacted intersections. The implementation of the four proposed mitigation measures would reduce potential project traffic impacts at the impacted intersections to acceptable levels of service. The project is consistent with and meets Policy II.A.</p>
<p>Policy II.B Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.</p>	<p>Consistent: The project applicant proposes to maintain the existing transportation network that currently serves the project site. The project applicant proposes four mitigation measures to mitigate project impacts at the impacted intersections to allow for expansion and based on cumulative development that would be served by those four intersections based on future travel demand, which could include alternative travel modes. The project is consistent with and meets Policy II.B.</p>
<p>Policy III.A To financially support a transportation system that is adequately maintained.</p>	<p>Consistent: The project applicant would financially support the transportation system by proposing to pay the projects fair share of the cost to implement the recommended mitigation measures to improve the impacted intersections to acceptable levels of service. The project is consistent with and meets Policy III.A.</p>
<p>Conservation Element</p>	
<p>Policy II.A Comply with state and federal regulations to ensure protection and preservation of significant biological resources.</p>	<p>Consistent: As discussed in Section "4a" of this Initial Study/MND the project would result in an impact to MSHCP plant and animal species. As required by Ordinance No. 1123 the project developer must pay the required MSHCP fee to mitigate the potential biological resource impacts by the project. The payment of the required MSHCP fee would reduce potential biological impacts to plant and animal species to a less than significant level. The project would not impact any other state or federal regulations regarding biological</p>

	resources. The project is consistent with and meets Policy II.A.
Policy III.A Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.	Consistent: As discussed in Section 4a of this Initial Study/MND the project would result in an impact to MSHCP plant and animal species. As required by Ordinance No. 1123 the project developer must pay the required MSHCP fee to mitigate the potential biological resource impacts by the project. The payment of the required MSHCP fee would reduce potential biological impacts to a less than significant level. The project is consistent with and meets Policy III.A.
Policy IV.A Comply with state and federal regulations and ensure preservation of the significant historical, archaeological and paleontological resources.	Consistent: As discussed in Section 5.5 of this Initial Study/MND no historical or cultural resources were identified on the site during an on-site survey. Although no cultural resources were identified, due to the fact that 93 cultural resources have been recorded within one mile of the project site there is the potential for cultural resources to be present and if present could be impacted during project grading and construction. As a result, mitigation measures in compliance with state and federal regulations are recommended to reduce potential impacts to cultural resources during grading that may exist on the site to a less than significant level. The project is consistent with and meets Policy IV.A.
Policy V.A Coordinate land-planning efforts with local water purveyors.	Consistent: In January 2020, the City of Perris issued Will Serve letters stating that the city is willing to provide water and sewer service to the project. The Will Serve letter is proof that the project applicant has coordinated the proposed project with the local water purveyor. Therefore, the project is consistent with and meets Policy V.A.
Policy VI.A Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).	Consistent: As stated in Section 5.7 of this Initial Study/MND the short-term erosional impacts associated with project construction would be minimized through compliance with standard erosion control practices and a NPDES permit that is required by the state. The City would require the project developer to prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with California State Water Resources Control Board (State Water Board), Construction Activities General Permit (State Water Resources Board Order

	No. 2012-0006-DWQ, NPDES No. CAS000002). The City would require that the project complies with all applicable requirements of the NPDES before any permits would be issued. The project is consistent with and meets Policy VI.A.
Policy VII.A Preserve significant hillsides and rock outcroppings in the planning areas.	Consistent: There are two areas on the project site with significant rock outcroppings. The project applicant proposes to preserve these two significant rock outcropping areas as open space lots (Lots 'C' [1.95-acres] and 'D' [9.12-acres]). These two areas will be preserved and maintained by the homeowner's association. consistent with and meets Policy VII.A. There are several other smaller rock outcropping areas on the site that would be removed by blasting to allow the development of residential units and interior streets. The removal of these small rock outcrop areas would be consistent with Policy VII.A because these rock outcroppings are small and not considered to be significant.
Policy VIII.A Adopt and maintain development regulations that encourage water and resource conservation.	Consistent: As identified in Section 2.0, Project Description, and further discussed in the Greenhouse Gas Emissions section of this Initial Study/MND, the project would be required to meet and comply with all applicable water conservation measures, including efficient landscape irrigation requirements and would include, but not be limited to: plants with low water usage; a high-efficiency drip irrigation system, with minimal or no overhead spray sprinklers; and an evapotranspiration/weather based smart controller using daily updated weather data. The project is consistent with and meets Policy VII.A.
Policy VIII.B Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.	Consistent: As discussed in Section 5.19 of the Initial Study/MND the 2016 CalGreen Code requires that 65 percent of construction waste be diverted from landfills. As required, 65 percent of the construction waste generated by the project would have to be diverted from the landfill. In addition, the project would be required to comply with applicable practices enacted by the City under the California Integrated Waste Management Act of 1989 (AB 939) and any other applicable local, State, and federal solid waste

	management regulations. AB 939 requires all counties to prepare a County Integrated Waste Management Plan. The County of Riverside adopted its Countywide Integrated Waste Management Plan (CIWMP) in 1998. The CIWMP includes the Countywide Summary Plan; the Countywide Siting Element; and the Source Reduction and Recycling Elements, the Household Hazardous Waste Elements, and Non-disposal Facility Elements for Riverside County and each city in Riverside County. The project is consistent with and meets Policy VIII.B.
Policy VIII.C Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).	Consistent: The project would be required by the City to be consistent with and meet all applicable energy efficient building standards. The project meets Policy VIII.C.
Policy IX.A Encourage land uses and new development that support alternatives to the single occupant vehicle.	Consistent: The project is located approximately 0.44 of a mile north of an existing bus stop at the northwest corner of 4 th Street and A Street. This bus stop is within walking distance of the project and would allow residents an alternative to the single occupant vehicle. The project is consistent with and meets Policy IX.A.
Policy X.A Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.	Consistent: The project applicant proposes to meet Title 24 energy requirements. Therefore, the project applicant is not requesting a density bonus or expedited permitting. The project is consistent with and meets Policy X.A.
Policy X.B Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.	Consistent: The project applicant proposes to plant trees throughout the project to lessen energy needs, reduce the urban heat island effect and incrementally improve air quality. The project is consistent with and meets Policy X.B

Noise Element	
Policy I.A. The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.	Consistent: The noise levels of the project meet and complies with the City of Perris noise criteria and the requirements of the State of California Noise/Land Use Compatibility Criteria. The project is consistent with and meets Policy I.A.
Policy IV.A Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.	Consistent: As shown in Exhibit N-3 of the Noise Element the project site is outside of the 60 dBA CNEL or higher noise contour of the Perris Valley Airport located south of the project site. As shown in Exhibit S-17 of the Safety Element the project site is located outside of the 60 dBA CNEL or higher noise contour of the March Air Reserve Base that is located north of the City of Perris. The project is consistent with and meets Policy IV.A.
Safety Element	
Policy I.B. The City of Perris shall restrict future development in areas of high flood hazard until it can be shown that risk is or can be mitigated.	Consistent: Based on Exhibit S-11 of the City of Perris Safety Element the project site is located in Zone X and not in a high flood hazard area. Furthermore, based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Panel 1440, map number 06065C144OH dated August 18, 2014 the project is not located within a flood hazard area. The project is consistent with and meets Policy I.B.
Policy I.C. Reduce the risk of damage from fires.	Consistent: As discussed in Section 5.20 of this Initial Study/MND the City of Perris adopted Ordinance No. 1336 that modified the 2016 California Fire Code. Specifically, Ordinance No. 1336 modified Chapter 49 Requirements for Wildland-Urban Interface Fire Areas of the Fire Code to add Section 4908 Fuel Modification Requirements for New Construction that requires, "All new buildings to be built or installed in hazardous fire areas shall comply with a list of specific fire protection requirements. Because the project applicant proposes new construction, the project would have to meet and comply with the fuel modification requirements per Ordinance No. 1336 to reduce the potential risk from fires. The project is consistent with and meets Policy I.C.
Policy I.D. Consult the AICUZ Land Use Compatibility Guidelines and ALUP Airport	Consistent: Based on Exhibit S-18 of the City of Perris Safety Element and map MA-1 of the March Air Reserve Base/Inland Port Airport

Influence Area development restrictions when considering development project applications.	Land Use Compatibility Plan adopted on November 13, 2014 the project site is located in Zone E, which has no limits or restrictions to the density of residential development proposed for the site. Based on Exhibit S-19 of the City of Perris Safety Element the project site is located outside of the Perris Valley Airport Influenced Area. The project is consistent with and meets Policy I.D.
Policy I.E. All development will be required to include adequate protection from damage due to seismic incidents.	Consistent: As discussed in Section 5.7 of this Initial Study/MND the project would be designed and constructed according to the current California Building Codes (CBC), which require structures to be designed to meet or exceed the seismic safety standards in the CBC. The project is consistent with and meets Policy I.E.
Policy II.A. The City shall require roadway improvements to expedite quick and safe travel by emergency responders.	Consistent: All project roadway improvement plans would be reviewed and approved by the City Engineer for compliance with city roadway design standards prior to the issuance of a building permit. The project is consistent with and meets Policy II.A.
Open Space Element	
Policy I.B. Developers will only receive credit for parkland dedication requirements for actual land used for, in lieu-fees contributed to, or improvements made upon active parkland.	Consistent: The City will require the project applicant to pay an in-lieu parkland fee
Policy III.A Preserve hillsides and rock outcroppings in the planning areas.	Consistent: There are two areas on the project site with rock outcroppings. The project applicant proposes to preserve these two rock outcropping areas as open space lots (Lots 'C' [1.95-acres] and 'D' [9.12-acres]). These two areas will be preserved and maintained by the homeowner's association. The project is consistent with and meets Policy III.A.
Healthy Community Element	
Policy HC 6.3 Promote measures that will be effective in reducing emissions during construction activities: <ul style="list-style-type: none"> • Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations. • All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that 	Consistent: The Air Quality and GHG Impact Analysis that was prepared for the proposed project evaluated project construction and operational emissions to thresholds adopted by SCAQMD. Based on SCAQMD thresholds, the project would not exceed any SCAQMD air emission thresholds during construction or the operational life of the project. The project applicant would prepare a Construction Management Plan as required by the City.

<p>may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD.</p> <ul style="list-style-type: none"> Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded. 	<p>The project is consistent with and meets Policy HC 6.3.</p>
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Because the project complies with the General Plan and zoning the project would not conflict with the General Plan or any policies or regulations for the development of the proposed 145 residential units. The project would not have any land use or planning impacts.

5.12. MINERAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

References: Perris 2005b, Riverside 2015b

Explanation of Checklist Answers

12a. No Impact. The project site is located within Mineral Resource Zone Three (MRZ-3), as classified by the State Mining and Geology Board.³⁸ Within MRZ-3, available geologic information suggests that mineral deposits exist, or are likely to exist; however, the significance of the deposit is unknown. Due to the existing residential use and other developments adjacent to and within close proximity to the site, it is unlikely that mining operations on the site are economically feasible. Because there are no known mineral resources on the site, no mineral resource impacts are anticipated.

12b. No Impact. The Perris General Plan does not identify any locally-important mineral resource recovery sites within the city (Perris 2005b, p. VI-28). Therefore, the project would not impact any locally-important mineral resource recovery sites.

³⁸ [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR206_Plate1.pdf](http://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR206_Plate1.pdf)

5.13. NOISE: Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project 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, will the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

References: Google Earth, Perris 2009, Perris 2011, ALUC

A noise study³⁹ was prepared to for the project and a copy is included in Appendix H to this IS/MND.

Explanation of Checklist Answers

- 13a. Less Than Significant With Mitigation.** The project site is currently vacant. Because the site is vacant there is no noise generated from the site. The main noise sources impacting the project site includes traffic on Metz Road adjacent to and north of the site, traffic on San Jacinto Avenue adjacent to and south of the site and traffic on A Street that is adjacent to and east of the site. The residential areas north, east and south of the site do not generate noise levels that impact the site due to the distance of those developments from the site and the low intensity of noise that is generated by the residential developments.

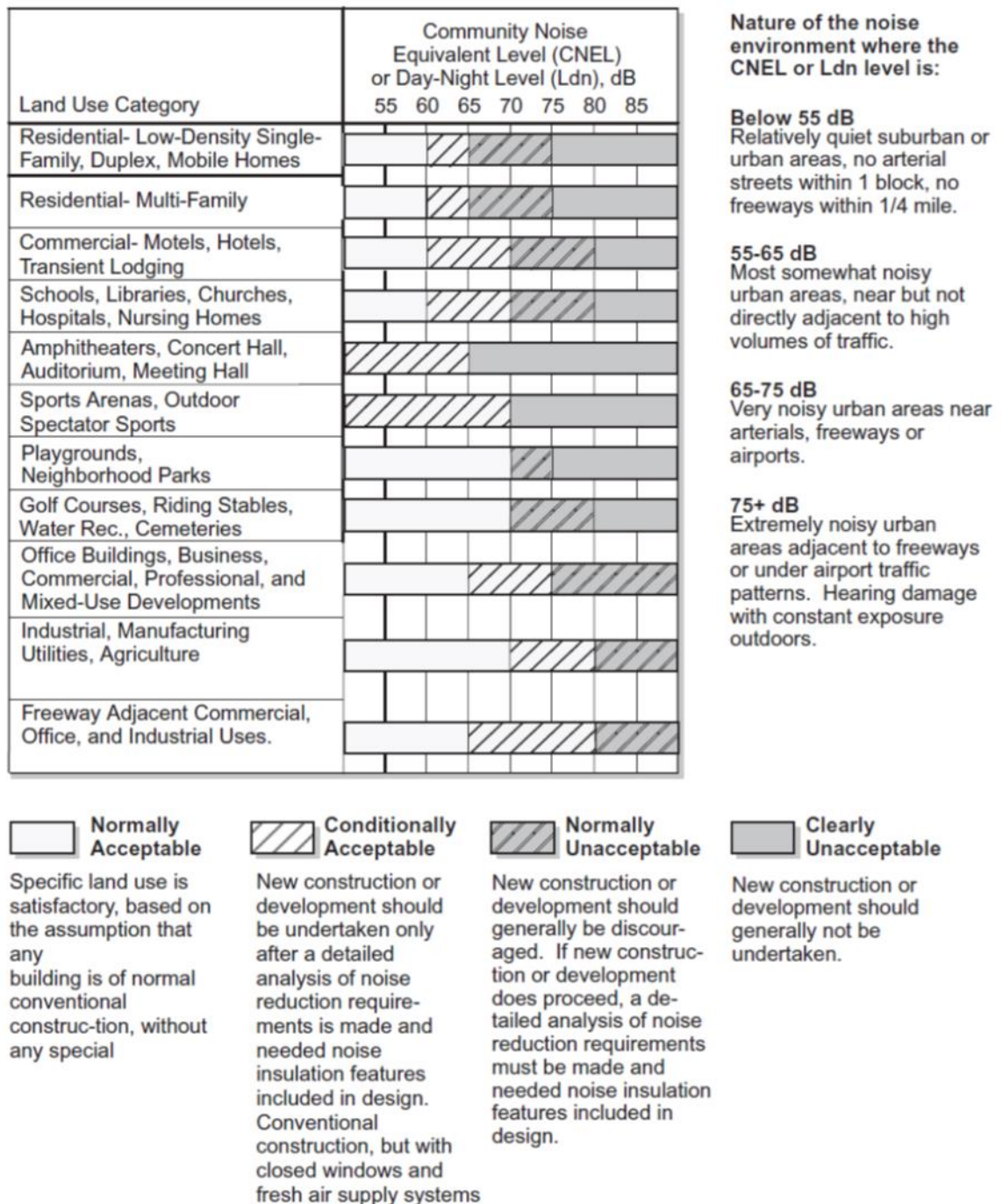
Noise Standards

The City of Perris has established guidelines for acceptable community noise levels that are based upon the CNEL rating scale to insure that noise exposure is considered in any development. These CNEL-based standards are articulated in the Noise Element of the General Plan.

Figure 8 shows the noise compatibility guidelines for various land uses. These guidelines would apply in usable outdoor space such as patios, yards, spas, etc. The guidelines indicate that an exterior noise level of 60 dB CNEL is considered to be a “normally acceptable” noise level for single family, duplex, and mobile homes involving normal conventional construction, without any special noise insulation requirements. Exterior noise levels up to 65 dB CNEL are typically considered “conditionally acceptable”, and residential construction should only occur after a detailed analysis of the noise reduction

³⁹ Noise Impact Analysis, TTM 37803, Giroux & Associates, June 11, 2020.

Figure 8
Noise Compatibility Guidelines – Perris General Plan



requirements is made and needed noise attenuation features are included in the project design (such as setbacks, no windows open, or solid walls).

An interior CNEL of 45 dB is mandated by the State of California Noise Insulation Standards (CCR, Title 24, Part 6, Section T25 28) for single-family, multiple family dwellings, and hotel and motel rooms. Since normal noise attenuation within residential structures with closed windows is 20-30 dB, an exterior noise exposure of 65-75 dB CNEL allows the interior standard to be met without any specialized structural attenuation (dual paned windows, etc.), but with closed windows and fresh air supply systems or air conditioning to maintain a comfortable living environment.

Noise standards applicable to those sources not preempted from local control (i.e., not from traffic on public streets, airplanes, trains, etc.) are contained in Section 7.34.060 of the Perris Municipal Code. Section 7.34.060 of the Code defines construction noise as follows:

- It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the city. (Code 1972, § 7.34.060; Ord. No. 1082, § 2(part), 2000)

Section 16.22.030 of the Municipal Code provides the following requirement for noise impact projects:

- Residential projects, or portions thereof, which are exposed to a community noise equivalent level (CNEL) of 60 dB or greater are considered to be impacted by excessive noise. Such projects shall be required to include noise isolation design and construction such that the exterior and interior noise standards of the city's noise element of its general plan are not exceeded.

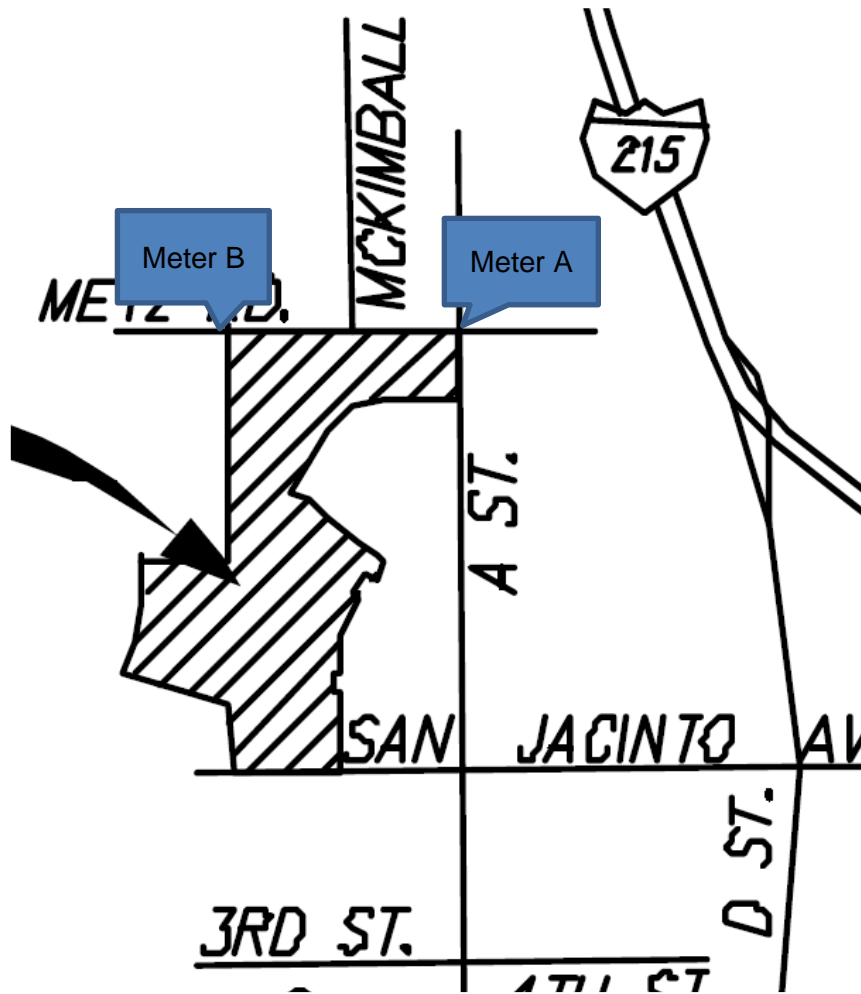
Baseline Noise Levels

Baseline noise measurements were taken to document the existing noise levels on the site due to activities on the site and the immediate project vicinity. Three short term (15-minute) noise measurements were conducted as shown in Figure 9. The existing noise levels are shown in Table 9. The measured noise levels provide a basis to calculate the noise levels that project residents would be exposed to with the existing noise generating activities in the area. As shown, all measured noise levels show low levels of ambient noise.

Table 9
Short-Term Measured Noise Levels (dBA)

Meter	Location	Leq	Lmax	Lmin
A	Metz Road and "A" Street	49	67	35
B	Metz Road and Delines Road	48	41	36

Figure 9
Noise Monitor Locations



Standards of Significance

Noise impacts are considered significant if they expose persons to levels in excess of standards established in local general plans or noise ordinances. The exterior noise standard for the City of Perris residential use is 60 dBA CNEL in usable recreational space such as backyards, decks, patios, etc. If required, noise attenuation through setback and project perimeter barriers is anticipated to be used to reduce traffic noise to the 65 dBA CNEL goal. An inability to achieve this goal through the application of reasonable mitigation measures would be considered a significant impact.

Impacts may also be significant if they create either a substantial permanent noise level increase or a temporary noise level increase. The term "substantial" is not quantified in CEQA guidelines. In most environmental analyses, "substantial" means a level that is clearly perceptible to humans. In practice, this is at least a +3 dB increase. Some agencies, such as Caltrans, require substantial increases to be +10 dB or more if noise standards are not exceeded by the increase. For purposes of this analysis, the following City noise thresholds are used to determine potential project noise impacts:

1. If construction activities create a noise level of 80 dBA Leq at sensitive receptor locations⁴⁰.
2. If operational activities, including on-site equipment or off-site traffic the generates the following permanent increases in noise levels:
 - Less than 3 dBA, not discernable, less than significant
 - Between 3 dBA and 5 dBA: less than significant if noise levels at sensitive receptors remain below 65 dBA CNEL; significant if the noise increase would meet or exceed 65d BA CNEL.
 - 5 dBA or greater: significant

Sensitive Receptors

The closest noise sensitive land uses to the project site are described below.

- North: There are residences north of Metz Road. Metz Road is proposed to be 50 feet wide upon project completion. The closest existing residence is 25 feet north of Metz Road and upon project completion there would be a minimal 75-foot separation between the northern project boundary and the closest residence north of the project.
- West: Although the property west of the project is zoned for residential use there are no residences west of the site and the land is vacant.
- South: The project is bound on the south by San Jacinto Avenue. San Jacinto Avenue would ultimately be 91 feet wide upon project completion. The existing homes south of the site have a minimum 10-foot setback from San Jacinto Avenue. Therefore, upon project completion there would be a minimum 100 feet of

⁴⁰ City of Perris Municipal Code Section 7.34.060.

separation between the project boundary and the closest residences south of the project.

East: There are several proposed lots adjacent to the site along the eastern perimeter. These homes take access from A Street (Lots 8-24). Existing homes to the east that are adjacent to these lots are all single story and take access from Roadrunner Way. Separating the buildable site pads from the property line is a 20-foot-wide drainage easement with a 2/1 slope. Very little construction equipment can operate within the 2/1 drainage easement. The homes on Roadrunner Way are minimally 10 feet from the property line. Property within a 10-foot lot line setback would not be considered outdoor recreational space. The project lots adjacent to Roadrunner Way are 100 to 150 feet deep. Rear yards will be at least 20 feet from the top of slope to maximize usable outdoor space. Therefore, other than minimal grading, construction of the closest project structure will minimally be 50 feet from the closest existing home off Roadrunner Way. Existing homes adjacent to Lots 8-24 will likely experience the highest project related construction noise levels.

Construction Noise Significance

Construction noise is regulated by the Perris Municipal Code. Sec. 7.34.060, Construction noise, of the Code states, "It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA in residential zones in the city.

Construction Noise Impacts

The existing noise levels on the site and the noise levels in the immediate vicinity of the site would increase temporarily during project construction. Short-term construction noise would be generated during grading, construction of the proposed residential units, paving and the construction of other site improvements. Noise would also be generated by construction workers commuting to the site, the delivery of materials and supplies to the site and the operation of on-site electrical construction equipment, etc.

Temporary construction noise impacts vary markedly due to the noise level range of the various types of construction equipment, its activity level and the distance from the equipment to the closest noise sensitive land use. Short-term construction noise impacts typically occur in discrete phases dominated by large, earth-moving equipment that would be used for site demolition and grading operations to construction and paving equipment that generates less noise.

In 2006, the Federal Highway Administration (FHWA) published the Roadway Construction Noise Model that includes a national database of construction equipment reference noise emissions levels. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power during a construction phase. The usage factor is a key input variable that is

used to calculate the average Leq (Equivalent Continuous Sound Pressure Level) noise levels.

Table 10 identifies the highest (Lmax) noise levels that is typically associated with each type of construction equipment that would be used by the project and then adjusts the noise level for distance to the closest sensitive receptor to the project and the extent of the use of the equipment (usage factor), which is represented as Leq. The table is organized by construction activity and lists the equipment that is associated with each activity. Table 10 also shows the noise level for each individual piece of equipment at a reference 50-foot distance.

Table 10
Construction Equipment Noise Levels

Phase Name	Equipment	Usage Factor ¹	Max Noise @ 50 feet (dB) ²	Average Noise Level @ 50 feet (dB)
Grading	Grader	40%	85	81
	Scraper	40%	84	80
	Dozer	40%	85	82
	Excavator	40%	81	77
	Loader/Backhoe	37%	78	74
Construction	Crane	16%	81	73
	Loader/Backhoe	37%	78	74
	Welders	46%	74	71
	Generator Set	50%	81	78
	Forklift	20%	75	69
Paving	Paver	50%	77	74
	Paving Equipment	40%	76	72
	Roller	20%	80	74

Source: FHWA's Roadway Construction Noise Model, 2006

1. Estimates the fraction of time each piece of equipment is operating at full power during a construction operation
2. The Lmax values presented are the actual measured values summarized in the Roadway Noise Model User Guide (FHWA 2006) unless the actual is unavailable in which case the equipment specifications were used.

After adjusting for the distance of the closest residents north, east and south of the site to the project, the resulting exterior noise levels to the closest off-site noise sensitive land uses are shown in Table 11.

Table 11
Maximum Construction Noise Equipment Levels at Off-Site Noise Sensitive Uses
(dBA Leq)

Phase Name	Equipment	Noise Level at Residential Receptors		
		Northern	Southern	Eastern
Grading	Grader	78	75	81
	Scraper	77	74	80
	Dozer	79	76	8279
	Excavator	74	71	77
	Loader/Backhoe	71	68	74
Construction	Crane	70	67	73
	Loader/Backhoe	71	68	74
	Welders	68	65	71
	Generator Set	75	72	78
	Forklift	66	63	69
Paving	Paver	71	68	74
	Paving Equipment	69	66	72
	Roller	71	68	74

The existing residents north and south of the project could experience construction noise levels of approximately 76-79 dBA Leq, respectively. Homes to the east could experience noise levels slightly above the City threshold of 80 dBA Leq when a grader or dozer operates less than 50 feet from the project boundary. At 75 feet from the project boundary, the noise level to the residents east of the site would be less than the 80 dBA Leq noise threshold.

The interior construction noise levels to the residences closest to the project would be approximately 25-30 dBA lower, assuming the windows of the residences are closed. Since the homes are older and may not have dual paned windows a 25 dBA noise reduction was assumed for the interior noise analysis. As a result, the closest residences adjacent to the site could experience an interior noise level as high as 55 dBA during construction activities.

For indoor noise environments, the highest noise level that allows relaxed conversation with 100 percent intelligibility throughout a room is 45 dBA. Speech interference is considered to be highly intrusive when normal conversation is precluded at 3 feet, which occurs when ambient noise levels substantially exceed 65 dBA. An interior noise level of 54 dBA at indoor locations would maintain a moderately acceptable interior noise environment with closed windows. In some cases, this noise reduction could be maintained only on a temporary basis, since it requires that windows remain closed at all times assuming homes have air conditioning.

The potential for construction-related noise impacts to nearby residential receptors would depend on the location and proximity of the construction activities on the project site to the receptors. Because the project site is large, most of the construction equipment would operate at much greater setbacks than the worst-case examples provided in Table 11.

The calculated noise levels shown in Table 11 would only occur when heavy equipment operates at the property line closest to the adjacent residents closest to the project.

The following measure is recommended to reduce potential exterior construction noise levels to less than significant.

Mitigation Measure No. 16 All heavy equipment operating on the project site, including graders and dozers, shall maintain a minimum distance of 75 feet from the shared property line with the existing residents east of the site for lots 8-24. Grading within 75 feet of the shared property line shall be conducted with smaller equipment such as a loader/backhoe or bobcat.

Blasting Noise

The project would require some explosive blasting of the existing rocks on the site prior to the start of grading. The location of most of the required blasting would not be adjacent to any of the existing residential units closest to the site, with the exception of possible blasting in the southern portion of the site. While the size of the explosive charges has not been determined at this time, instantaneous sound levels from typical construction blasting has been documented as approximately 93 to 94 dBA at a distance of 50 feet (Hoover and Keith, 1981). This noise level is only a few decibels higher than the sound levels that are generated from some of the pieces of construction equipment that would be present on the site, such as bulldozers, excavators, etc.

In comparison with the noise that occurs with the operation of typical construction equipment, sound from blasting would be brief and relatively infrequent. Although some blasting may be conducted at locations on the project site in close proximity to existing residences, most blasting would be conducted at locations several hundred feet from the closest residence.

If blasting occurs, it would consist of a drill and blast method for removal of the rock. The rock blasting would involve drilling blast holes, placing explosive charges in each of the blast holes, detonation, and the removal of spoils. Drilling into the rock is necessary to create bore holes for the blasting materials. The average depth of the rock for the project is estimated to be approximately 6 feet with a range of 1-12 feet.

Rock drills generate airborne noise levels of approximately 81 dB at a distance of 50 feet as shown in the Federal Highway Noise Construction Handbook (11/30/2015). The primary noise source of drill-blast operations is the drilling, not the blasting, due to the short duration of the subsurface-contained blast. When explosive charges detonate in rock, almost all of the available energy from the explosion is used to break and displace the rock mass. However, some blast energy does escape into the atmosphere as a sequence of airborne sound waves (a phenomenon known as "air blast over-pressure"), which are very low frequency and below the human audible range. Very high blast over-pressure levels can rattle or sometimes break windows. However, air-blast over-pressure rarely reaches levels that could cause building damage with modern blasting practices.

Noise from blasting is primarily composed of sound pressures at frequencies below the threshold-of-hearing for humans (16 to 20 Hz). Therefore, blast noise is not typically measured with an A- weighted scale (dBA). Typical acoustical noise analyses conducted for the purpose of monitoring compliance with local noise ordinances almost always use weighted scales that discriminate against low frequency noise. Thus, A-weighted scales would usually record significantly lower levels of noise than linear scaled noise levels. For this reason, blast noise (dB) cannot be compared to local noise ordinances.

The California Department of Transportation (Caltrans) provides guidelines for assessing human response to blasting related activities related to blasting in a publication titled, "Transportation-and-Construction-Induced Vibration Manual." As noted in the Caltrans publication, human response to vibration and overpressures from blasting is difficult to quantify. Furthermore, it is anticipated that ground and air overpressures can be felt at levels that are well below those required to produce any damage to structures. Caltrans provides human response guidelines to blasting ground vibration as shown in Table 12.

Table 12
Human Response to Blasting Ground Vibration and Air Overpressure

Human Response	PPV (in/second)	Airblast (dB)
Barely to distinctly perceptible	0.02-0.10	50-70
Distinctly to strongly perceptible	0.10-0.50	70-90
Strongly perceptible to mildly unpleasant	0.50-1.00	120-140
Distinctly unpleasant to intolerable	1.00-2.00	140-170

A U.S. Bureau of Mines Report of Investigation 8507 (RI 8507) analyzed damage potential at 76 homes potentially affected by 219 production blasts. RI 8507 concluded that gypsum wall board construction was protected from cosmetic damage (minor cracks) at peak particle velocities (ppv) of approximately 0.75 inch/second below 40 Hz and 2.0 inches/second above that frequency.

The Office of Surface Mining Reclamation and Enforcement (OSMRE) published a document titled "Blasting Guidance Manual" that addresses the negative effects of blasting. The OSMRE Guidance Manual includes noise and vibration limits with respect to building damage and human perception. The OSMRE air blast limit for building damage associated with blasting related activities is a 120 dB peak noise level. This air blast limit set forth by the OSMRE is based on the minimal probability of superficial damage to residential type structures, and also takes into consideration subjective human response. Per the OSMRE, if an air blast can be kept at or below 120 dB, then annoyance would be minimal. For the purpose of this analysis, 120 dB is utilized in connection with the analytical evaluation of the potential human annoyance from the project's blasting generated noise level.

The Mining Safety Administration (MSA) offers two options to protect off-site uses from structural damage due to construction blasting. A "scaled distance formula" can be used that establishes maximum charge weight inversely proportional to the square of the blast-receiver separation. This formula is often excessively restrictive such that an alternative protection scheme may be employed. If the secondary approach is used, a geophysical

firm approved by the City of Perris, must monitor pre-blasting structural conditions (stucco, hard-scape, etc.) and noise and vibration levels during blasting activities. The geophysical firm shall ensure that vibration due to blasting during construction is limited to a peak particle velocity of 0.75 inches per second (in/sec) at the nearest sensitive receptor (i.e., residence) and a 120 dB peak noise level.

It is unlikely that noise impacts from rock drilling and blasting could occur simultaneously. For safety, the area needs to be cleared for blasting. However, since it is feasible that noise impacts from either operation could exceed the significance threshold, impacts are potentially significant. Therefore, the following blasting mitigation measures are recommended to reduce blasting impacts to a less than significant level.

Mitigation Measure No. 17 Prior to the issuance of a grading permit, the project developer shall submit a blasting program to the Planning Manager that provides for minimum allowable off-site noise and vibration levels. Any blasting in the vicinity of sensitive land uses shall be designed to reduce vibration and air over pressure, including limiting the size of blasting charges.

Mitigation Measure No. 18 Three days prior to any on-site blasting, the construction manager shall provide advanced notification by mail of each proposed blasting activity to all residences within 1,000 feet of the project site. The notification shall identify the potential noise level, time period of the blasting activities and contact information of the blasting company.

Mitigation Measure No. 19 Site specific noise and vibration levels shall be monitored by a blasting expert for each blasting event. The blasting program shall provide for response and investigation of all complaints. If any blasting complaints are received, blasting shall not resume until the complaint has been resolved, including whether an alternative blasting strategy shall be developed or more detailed and site-specific blasting mitigation is required.

Operational Noise Impacts

The long-term noise impacts from the residential uses at the project site can be derived from the vehicular operations on project area roadways. These concerns were addressed using the California specific vehicle noise curves (CALVENO) in the federal roadway noise model (the FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108). The traffic noise model calculates the Leq noise level for a reference set of input conditions, and then makes a series of adjustments for site-specific traffic volumes, distances, speeds, or noise barriers.

Table 13 summarizes the 24-hour CNEL level at 50 feet from the roadway centerline along area roadway segments. The noise calculations utilize data from the project traffic analysis, prepared by the traffic consultant for this project. Since only peak hour traffic volumes were available, daily ADT was calculated assuming 10 hours per day of peak afternoon traffic. Two traffic years were evaluated; existing conditions ("with project" and

“without project”), and opening year 2021, (“with project” and “without project”). Traffic speeds were obtained from the traffic report for most roadways.

Table 13
Traffic Noise Impact Analysis
(dBA CNEL at 50 feet from centerline)

Segment	Existing No Project	Existing With Project	2021 No Project	2021 With Project	Project Impact Existing*	Project Impact 2021*
San Jacinto/ W of Site Entrance	42.6	42.6	42.6	42.6	0.0	0.0
E of Site Entrance	54.1	57.8	54.3	57.9	3.7	3.6
W of A St	53.5	57.7	53.8	57.8	4.2	4.0
E of A St	47.8	47.8	47.8	47.8	0.0	0.0
Jazz/ S of Entrance	51.1	51.1	51.3	51.3	0.0	0.0
W Metz Rd/ W of Mckimball Rd	52.8	52.8	54.7	54.7	0.0	0.0
Mckimball Rd-A St	53.2	56.9	55.4	58.0	3.7	2.6
E of A St	54.6	54.6	54.9	54.9	0.0	0.0
Mckimball Rd/ N of Site	45.2	45.2	48.0	48.0	0.0	0.0
Nuevo Rd/ W of A St	59.9	59.9	61.8	61.8	0.0	0.0
E of A St	53.7	53.7	53.9	53.9	0.0	0.0
A St/ N of San Jacinto	61.0	61.2	62.9	63.0	0.2	0.1
S of Metz	60.8	61.0	62.8	62.9	0.2	0.1
S of Nuevo	59.9	60.6	62.2	62.6	0.7	0.4
N Site Entrance/	DNE	51.6	DNE	51.6	-	-
S Site Entrance/	DNE	49.9	DNE	49.9	-	-

DNE – does not exist. Bolded numbers are potentially significant noise level increases

* may be off by +/-0.1 due to rounding

Because the area is not built out, project traffic can create a large noise impact when added to the low volume of the existing traffic. As shown in Table 13, there are three roadway segments which could experience potentially significant impacts of more than +3 dBA. Two of the segments are on San Jacinto Avenue, immediately adjacent to the site entrance. The other is on Metz Road also adjacent to the site entrance.

Based on the traffic study there are less than 42 PM peak hour trips on San Jacinto Avenue that extends along the southern project boundary. Although the additional 58 peak hour trips generated by the project would more than double the existing peak hour traffic, the daily CNEL is less than the recommended 65 dBA compatibility threshold and the project related noise level increase would be less than 5 dBA. Therefore, the noise impact is less than significant.

Currently there are 63 PM peak hour trips on Metz Road that extends along the northern project boundary. The project is estimated to generate an additional 86 peak hour trips to this roadway. Since a doubling in traffic volumes creates a +3 dBA impact the project would generate a +3.7 dBA noise level increase. However, by 2021, due to growth in the project area there would be an estimated 105 PM vehicle trips on this roadway and the addition of 86 project trips would be diluted and the noise level of the project would decrease to +2.6 dBA. However, the overall traffic noise level would be less than 65 dBA CNEL and the project related contribution would be less than 5 dBA. Therefore, the noise level increase due to the project would be less than significant.

Therefore, the noise levels on the area roadways that would serve the project due to project generated traffic would be less than significant.

The project would not have any significant temporary (construction) or permanent (operational) noise level impacts.

- 13b. Less Than Significant.** There are no existing sources of excessive groundborne vibration or noise, such as trains, located within the project vicinity that would expose people to excessive noise levels (Perris 2009, p. 16). In addition, there are no heavy truck routes adjacent to the site that impact the site due to ground borne vibration.

Construction Activity Vibration

Construction activities generate ground-borne vibration when heavy equipment travels over unpaved surfaces or when it is engaged in soil movement, such as grading. The effects of ground-borne vibration include discernable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. Vibration related problems generally occur due to resonances in the structural components of a building because structures amplify groundborne vibration. Within the “soft” sedimentary surfaces of much of Southern California, ground vibration is quickly damped. Groundborne vibration is almost never annoying to people who are outdoors (FTA 2006).

Groundborne vibrations from construction activities rarely reach levels that can damage structures. Vibration thresholds have been adopted for major public works construction projects, but these relate mostly to structural protection (cracking foundations or stucco) rather than for human annoyance.

A vibration descriptor commonly used to determine structural damage is the peak particle velocity (ppv) and defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in in/sec. The range of vibration levels is shown in Table 14.

Table 14
Human Response to Transient Vibration

Average Human Response	ppv (in/sec)
Severe	2.00
Strongly perceptible	0.90
Distinctly perceptible	0.24
Barely perceptible	0.03

Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2013.

Over the years, numerous vibration criteria and standards have been suggested by researchers, organizations, and governmental agencies. However, there are no California Department of Transportation (Caltrans) or Federal Highway Administration standards for vibration.

According to Caltrans, the threshold for structural vibration damage for modern structures is 0.5 in./sec for intermittent sources, which include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers and vibratory compaction equipment. The American Association of State Highway and Transportation Officials (AASHTO) (1990) identifies maximum vibration levels for preventing damage to structures from intermittent construction or maintenance activities for residential buildings in good repair with gypsum board walls to be 0.4–0.5 in./sec. The damage threshold criterion of 0.2 in./sec is appropriate for fragile buildings. For the purpose of this vibration analysis because some of the area residential units adjacent to the site can be older, the 0.2 in./sec damage threshold for older fragile buildings is used as the evaluation criteria. Below the level of 0.2 in./sec. there is virtually no risk of building damage. Table 15 below shows the predicted vibration levels at varying distances that are typically generated by various types of construction equipment.

Table 15
Estimated Vibration Levels During Project Construction

Equipment	PPV at 10 ft. (in/sec)	PPV at 15 ft. (in/sec)	PPV at 25 ft. (in/sec)	PPV at 50 ft. (in/sec)	PPV at 100 ft. (in/sec)
Large Bulldozer	0.352	0.191	0.089	0.031	0.011
Loaded trucks	0.300	0.163	0.076	0.027	0.010
Jackhammer	0.138	0.075	0.035	0.012	0.004
Small Bulldozer	0.012	0.006	0.003	0.001	<0.001

Source: FHWA Transit Noise and Vibration Impact Assessment

The closest residence to the project where grading would occur has a minimum 50-foot setback. As shown in Table 18, the vibration level of a large bulldozer at 50 feet is 0.031 in./sec. However, if heavy grading equipment such as a bulldozer operates within 10-feet of the shared project boundary with the residents east of the site the vibration levels could exceed recommended vibration levels. Implementation of Mitigation Measure No. 13 that restricts the operation of heavy equipment within 75-feet of the east project boundary would reduce potential vibration level impacts to the closest residents east of the site to less than significant.

Blasting Vibration

With respect to blast-induced vibration, because of the controlled nature of any required blasting, charges required would likely be relatively small if there were any nearby vibration-sensitive uses, such as residential land uses. When explosive charges detonate in rock, almost all of the available energy from the explosion is used in breaking and displacing the rock mass. However, a small portion of the energy is released in the form of vibration waves that radiate away from the charge location. The strength, or “amplitude,” of the waves is reduced as the distance from the charge increases. The rate of amplitude decay depends on local geological conditions, but can be estimated with a reasonable degree of consistency, which allows regulatory agencies to control blasting operations by means of relationships between distance and explosive quantity.

As discussed previously, the MSA offers two options to protect off-site uses from structural damage due to construction blasting. A “scaled distance formula” can be used that establishes maximum charge weight inversely proportional to the square of the blast-receiver separation. This formula is often excessively restrictive such that an alternative protection scheme may be employed. If the secondary approach is used, a geophysical firm approved by the City of Perris, must monitor pre-blasting structural conditions (stucco, hard-scape, etc.) and noise and vibration levels during blasting activities. The geophysical firm shall ensure that vibration due to blasting during construction is limited to a peak particle velocity of 0.75 inches per second (in/sec) at the nearest sensitive receptor (i.e., residence) and a 120 dB peak noise level. The blasting mitigation measures identified above are recommended to reduce blasting impacts to a less than significant level.

- 13c. No Impact.** As discussed in Section “9e” above, the project is not located within an APZ of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. As a result, the project is not subject to Airport Land Use Commission review and would not be impacted by operations at the airport. In addition, the project is located approximately one and a half miles north and outside of the Influence Area of the Perris Valley Airport. As a result, the project would not be impacted by activities at the Perris Valley Airport.

5.14. POPULATION AND HOUSING: Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

References: US Census Bureau 2016, SCAG 2015

Explanation of Checklist Answers

- 14a. Less Than Significant Impact.** According to the US Census Bureau, the City’s population as of July 1, 2018 was 79,133 (US Census Bureau 2018). The Southern California Association of Governments (SCAG) estimate the population of Perris is expected to increase to 116,700 by the year 2020 (SCAG 2015, p. 27), although that is far above current City development conditions. The project provides 145 single-family detached homes and based on the average number of persons per household in the City of Perris⁴¹ would generate approximately 654 residents and represents a 0.82% increase in the city’s 2018 population.

The project site is designated for residential use by the Perris General Plan. The General Plan land use designation for the site and the zoning for the site is R-6,000 – Residential

⁴¹ 4.51 persons/household, 2013-2017, U.S. Census Bureau, <https://www.census.gov/quickfacts/fact/table/perriscitycalifornia,US/HSD310217>

6,000. The General Plan and zoning for the site allows low-density residential development up to 7 dwelling units per acre. The project would have a density of 2.69 dwelling units per acre. Because the project is consistent with the existing land use and zoning designations for the site, the population growth associated with the project would not represent a substantial unplanned increase in local or regional population. The project would also be served by the existing infrastructure in the immediate vicinity of the project site. Therefore, the impact of the project would be a less than significant level.

- 14b. No Impact.** The project site is currently vacant. Therefore, because there are no structures or housing on the site, the project would not displace any existing housing and would not necessitate construction of replacement housing elsewhere.

5.15. PUBLIC SERVICES:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2005b, Google Earth, DTA

Explanation of Checklist Answers

- 15a. Less Than Significant Impact.** The City of Perris contracts with the Riverside County Fire Department for fire protection services. Fire Station # 1 is located at 210 W. San Jacinto Avenue, approximately three quarters of a mile east of the project site and would provide first response in the event of a fire emergency. Fire Station #2 is located approximately 4.5 miles northeast of the site and would also serve the project. The City of Perris Ordinance No. 1182 establishes a developer impact fee to mitigate the cost of public facilities needed to offset the impact of developing new facilities to support fire services. The project would be required to comply with Ordinance No. 1182 and pay the applicable fire fee to offset any potential impact to the fire department. Therefore, payment of the applicable fire fee as required by Ordinance No. 1182 would reduce potential impacts to the Perris Fire Department to a less than significant level. In addition, all water facilities that serve the project would be required by the city to be sized to provide adequate fire protection per the requirements of the City of Perris Building and Safety Department.

- 15b. Less Than Significant Impact.** The City of Perris contracts with the Riverside County Sheriff for police services. The Perris police station is located at 137 North Perris Boulevard, approximately one and a half miles east of the project site. City of Perris

Ordinance No. 1182 establishes a developer impact fee to mitigate the cost of public facilities needed to offset the impact of developing new facilities to support police services. The project would be required to comply with Ordinance No. 1182 and pay the applicable police fee to offset any potential impact to the fire department. The payment of the applicable police fee as required by Ordinance No. 1182 would reduce potential impacts to the Perris Police Department to a less than significant level.

- 15c. Less Than Significant Impact.** The project is located within the Perris Elementary School District (K-6) and the Perris Union High School District (7-12). The Enchanted Hills Elementary school, which is located approximately 2.5 miles southwest of the project, would serve students grades K-6 that are generated by the project. Enchanted Hill Elementary school has a capacity of 500 students and a current enrollment of 485 students. Based on a student generation factor of 0.3945 students/dwelling unit, the project would generate approximately 57 students and exceed the current capacity of Enchanted Hills Elementary school. If required, the District would add portable classrooms at the school to accommodate the additional students generated by the project. Students would be bused to the school and the District would have to add two bus routes to transport students from the site to the school.⁴²

Students grades 7-8 would attend Pinacate Middle School that is located approximately two miles south of the project. Pinacate Middle School has a student capacity of 1,400 students and a current enrollment of 1,108 students. Student's grades 9-12 would attend Perris High School that is located approximately three miles northeast of the site. Perris High School has a capacity of 2,600 students with a current enrollment of 2,181 students. The project is estimated to generate approximately 33 middle and high school students. Both Pinacate Middle School and Perris High School have the capacity to accommodate the students generated by the project without impacting the schools.⁴³

As required by Government Code Section 65995, the project would be required by state law pay the required developer fee towards the cost to offset impacts from the students that would be generated by the project. Currently the developer fee for residential units in the Perris Elementary School District is \$1.95 per square foot and \$2.04 per square foot in the Perris Union High School District. The project developer would be required to pay the applicable school fee in place at the time the developer acquires building permits for the construction of the proposed residential units. Payment of the required developer fee would reduce the impact of the project to the District to a less than significant level.

- 15d. Less Than Significant Impact.** Project residents would increase the demand for parks. The project does not propose any parkland within the project boundary. On July 11, 2017, the Perris City Council adopted Resolution 5141 that imposes development impact fees on new residential development pursuant to the Mitigation Fee Act (Government Code Section 66000, *et seq.*) and Perris Municipal Code Section 19.68.020 to fund the public improvements necessary. Per Ordinance No. 1182 the city's Development Impact Fees include development fees for parks. The project developer would be required to pay the applicable park fee prior to the issuance of building permits. The park fee would be used by the city to acquire and develop new parkland in Perris that could be used by city

⁴² Victor Guzman, Director of Facilities, Maintenance and Operations, Perris Elementary School District, email dated November 4, 2019.

⁴³ Xochitl Molina, Facilities Department, Perris Union High School District, letter dated October 29, 2019.

residents. Payment of the city required park fee would reduce park impacts to a less than significant level.

- 15e. Less Than Significant Impact.** The project residents would increase the demand for library and other public services. The City of Perris contracts with the Riverside County Public Library System and provides library services at Cesar E. Chavez Library located at 163 E. San Jacinto Boulevard. The project is subject to development impact fees through Resolution 5141 and Ordinance No. 1182 that would be used to provide new library facilities or expand existing library facilities subsequent to increased demand. Through payment of the applicable developer fees required by Ordinance No. 1182 potential impacts to library services and other government services would be a less than significant level.

The nearest emergency medical service available to the project is the Riverside County University Health System Medical Center located at 26520 Cactus Avenue in Moreno Valley, which is approximately 11 miles northeast of the Project. Healthcare facilities are provided in response to market demand. Therefore, the project would not result in the demand for the construction of new or expanded medical facilities. The project would not have any significant public facility impacts.

5.16. RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: DTA

Explanation of Checklist Answers

- 16a. Less Than Significant Impact.** The City of Perris has 24 park and recreational facilities that serve city residents. The closest park to the project is Metz Park and is located at 215 Metz Road, approximately one-half mile east of the project. Metz Park is 17.8 acres in size and provides baseball/softball field, soccer field and restrooms. The project would incrementally increase the use of Metz Park and other park and recreational facilities in Perris.

The city adopted a desired park ratio of 5,000 acres per 1,000 residents. To assist the city towards meeting this adopted ratio, the city adopted Resolution 5141 effective September 9, 2017 that requires new residential development to pay a Residential Development Impact Fee prior to the issuance of a building permit. The project developer would be required to pay the applicable Development Impact Fee at the time residential building permits are issued. In accordance with Resolution 5141 the fee would be used

to acquire and develop parks and recreational facilities. Payment of the required fee by the project developer would reduce recreational impacts to a less than significant level.

- 16b. Less Than Significant Impact.** See response to section "16a." above. The project does not propose the construction of any recreational facilities or propose the expansion of any existing recreational facilities. As noted above, the project developer would pay the required Development Impact Fee required by the city at the time building permits are issued and the fee would be used by the city to acquire and develop additional park and recreational facilities in the future. Therefore, the payment of the city required Development Impact Fee would reduce potential impacts associated with the construction or expansion of recreational facilities to a less than significant level.

5.17. TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: Perris 2011, Perris 2012, RTA

A traffic impact analysis was prepared for the project⁴⁴ and a copy is provided in Appendix I to this IS/MND.

Explanation of Checklist Answers

- 17a. Less Than Significant With Mitigation.** The project is estimated to generate approximately 1,369 vehicle trips a day, including 108 AM and 144 PM trips as shown in Table 16.

Table 16
Project Trip Generation

Land Use	Units ²	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Single-Family ¹	DU	28	80	108	90	54	144	1,369
Notes: 1) ITE = Institute of Transportation Engineers, <u>Trip Generation Manual</u> , 10th Edition, 2017; 210 = Land Use Code 2) DU = Dwelling Units								

⁴⁴ Traffic Impact Analysis, Tentative Tract Map 37803, City of Perris, Riverside County, California, LSA, April 2020.

The following six (6) intersections were studied for the traffic analysis:

1. "A" Street / Harvill Avenue (County of Riverside);
2. Project Driveway / W Metz Road (City of Perris/County of Riverside);
3. Project Driveway / W San Jacinto Avenue (City of Perris);
4. "A" Street / Nuevo Road (City of Perris);
5. "A" Street / W Metz Road (City of Perris); and
6. "A" Street / W San Jacinto Avenue (City of Perris).

Traffic counts were taken at the six intersections in September 2019 to determine the existing level of service (LOS) of each intersection. As shown in Table 17, three of the seven intersections operate at LOS A, LOS B, LOS C and LOS D, which are considered acceptable by the City. Two intersections operate at LOS F in both the AM and PM peak hours, which is considered unacceptable by the City, and one intersection operates at an acceptable LOS C in the AM peak hour and an unacceptable LOS E in the PM peak hour.

Table 17
Existing Intersection Levels of Service at Study Area Intersections

Study Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
		Delay (sec.)	LOS	Delay (sec.)	LOS
1. "A" Street / Harvill Avenue	AWSC	>100	F	0.808	B
2. Project Driveway / W Metz Road	OWSC	9.3	A	8.9	A
3. Project Driveway / W San Jacinto Avenue	OWSC	8.4	A	9.1	A
4. "A" Street / Nuevo Road	AWSC	36.4	E	10.7	B
5. "A" Street / W Metz Road	TWSC	41.5	E	14.7	B
6. "A" Street / W San Jacinto Avenue	TWSC	26.5	D	13.6	B

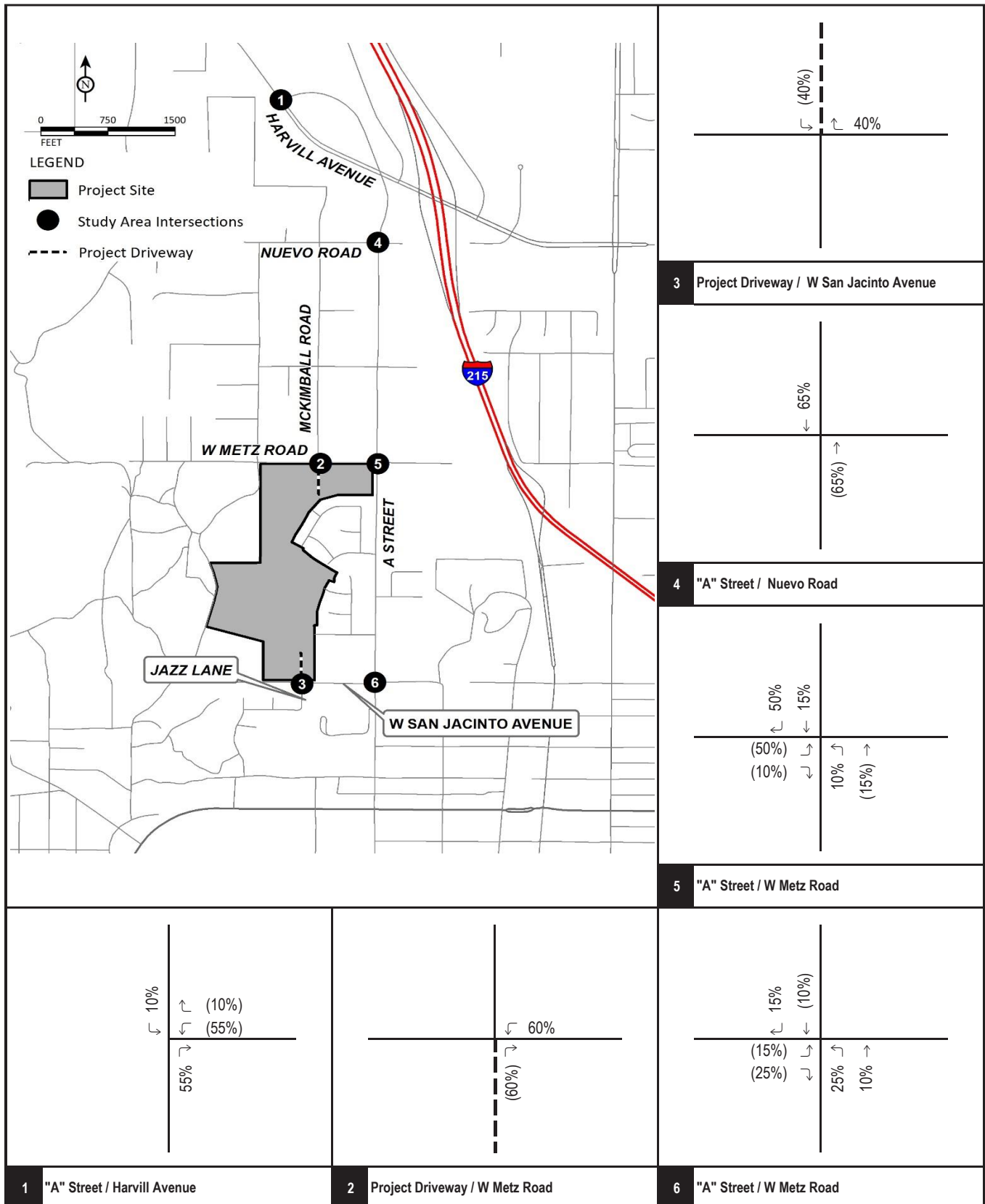
OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; AWSC = All-Way Stop Control; LOS = Level of Service; Delay = Average control delay in seconds (For OWSC and TWSC intersections, reported delay is for worst-case movement).

¹ This intersection operates as a TWSC intersection under with project conditions.

The distribution and assignment of traffic trips generated by the project were assigned to the area transportation system is shown in Figures 10 and 11.

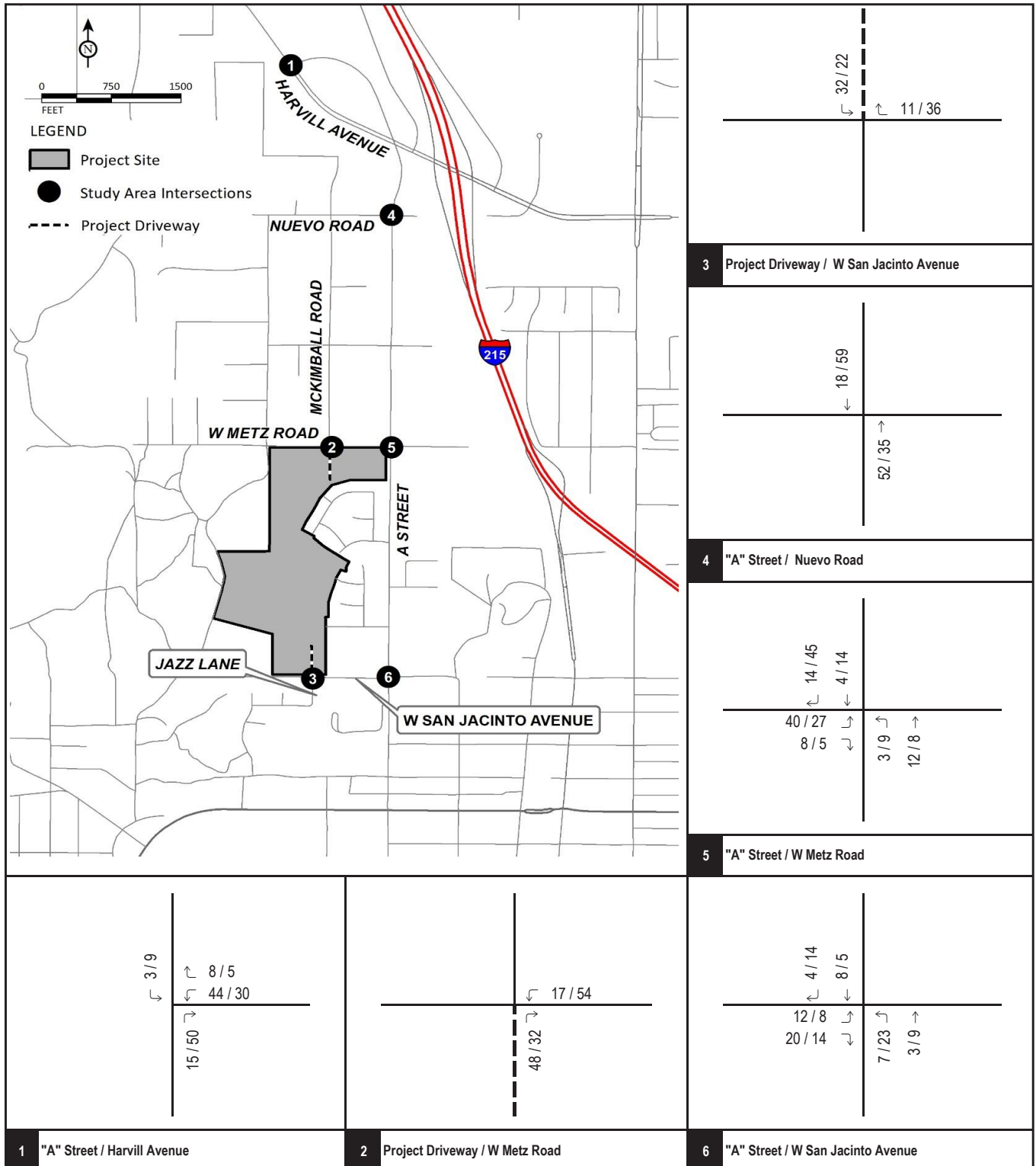
Table 18 shows the six studied intersections with both project and cumulative traffic. As shown in Table 18, the project along with cumulative traffic would impact four of the six studied intersections. Although the four impacted intersections currently operate at an unacceptable levels of service (LOS E, F), the traffic generated by the project along with cumulative project traffic would further impact these intersections to unacceptable levels. The four impacted intersections include:

- "A" Street / Harvill Avenue - LOS F, AM peak hour
- "A" Street / Nuevo Road - LOS F, AM peak hour
- "A" Street / W Metz Road - LOS F, AM peak hour
- "A" Street / W San Jacinto Avenue - LOS F, AM peak hour



Source: LSA Associates, Inc.

Figure 10
Project Trip Distribution



Source: LSA Associates, Inc.

Figure 11
Project Trip Assignment

Table 18
Cumulative (2021) Intersection Level of Service

				Without Project						With Project						A.M. Peak Hour	P.M. Peak Hour	
				A.M. Peak Hour			P.M. Peak Hour			A.M. Peak Hour			P.M. Peak Hour			Increase	Increase	
				Delay			Delay			Delay			Delay			in Delay	in Delay	Significant
Intersection	Jurisdiction	Control	LOS Standard	(sec.)	LOS		(sec.)	LOS		(sec.)	LOS		(sec.)	LOS		(sec.)	(sec.)	Impact
"A" Street / Harvill Avenue	County of Riverside	AWSC	D	>100	F	*	50.0	E	*	>100	F	*	67.9	F	*	16.7	17.9	Yes
Project Driveway / W Metz Road	City of Perris/County of Riverside	OWSC ¹	D	9.5	A		9.1	A		10.0	B		10.0	B		0.5	0.9	No
Project Driveway / W San Jacinto Avenue	City of Perris	OWSC ¹	D	8.4	A		8.4	A		9.1	A		9.1	A		0.7	0.7	No
"A" Street / Nuevo Road	City of Perris	AWSC	D	>100	F	*	18.3	C		>100	F	*	25.0	C		18.7	6.7	Yes
"A" Street / W Metz Road	City of Perris	TWSC	D	>100	F	*	24.5	C		>100	F	*	21.6	D		176.9	4.8	Yes
"A" Street / W San Jacinto Avenue	City of Perris	TWSC	D	44.1	E	*	29.5	D		90.3	F	*	27.8	D		46.2	4.6	Yes

OWSC = One-Way Stop Control;
 TWSC = Two-Way Stop Control;
 AWSC = All-Way Stop Control;
 LOS = Level of Service

Delay = Average control delay in seconds (for OWSC and TWSC intersections, reported delay is for worst case movement).

1. This intersection operates as a TWSC intersection under with project conditions.

Signal Warrants

A peak hour signal warrant analysis was conducted for the four impacted intersections that include "A" Street/Harvill Avenue, "A" Street/Nuevo Road, "A" Street/W Metz Road and "A" Street/W San Jacinto Avenue. The peak hour signal warrant analysis concludes that a traffic signal is warranted at the four studied signal warrant intersections.

The following mitigation measures are recommended to mitigate the traffic impact by the project to the four impacted intersections. The project would not have any significant project or cumulative traffic impacts with implementation of the recommended mitigation measures.

Mitigation Measure No. 20 Prior to the issuance of the first occupancy permit, the project developer shall pay its fair share to install a traffic signal and the addition of a westbound right-turn lane at "A" Street/Harvill Avenue.

Mitigation Measure No. 21 Prior to the issuance of the first occupancy permit, the project developer shall pay its fair share to install a traffic signal at "A" Street/Nuevo Road and restripe the northbound lanes to include a left-turn lane. There is adequate width available to add a northbound left-turn lane while having enough lane width for the southbound departure lane. In addition, the southbound departure lane shall continue to align with the southbound approach lane after restriping.

Mitigation Measure No. 22 Prior to the issuance of the first occupancy permit, the project developer shall pay its fair share to install a traffic signal at "A" Street/W Metz Road.

Mitigation Measure No. 23 Prior to the issuance of the first occupancy permit, the project developer shall pay its fair share to install a traffic signal at "A" Street/W San Jacinto Avenue.

17b. Less Than Significant Impact. The Riverside County Transportation Commission (RCTC) developed a Congestion Management Program (CMP) for the area that includes the project site. Pursuant to federal metropolitan transportation planning and programming requirements, the development, establishment and implementation of a CMP is fully integrated into the regional planning process pursuant to 23 CFR, S450.320. Therefore, the congestion management in the project vicinity is guided both by the Southern California Council of Government (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the RCTC CMP. The project is in compliance with the RTP/SCS and RCTC CMP.

17c. Less Than Significant Impact. All proposed streets and intersections within the project would be required to meet City street standards, including standards for safe

turning movements and site distances. Because the project would meet all city street design standards it would not have any street design hazards.

5.18. TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) 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:				
i) 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

References: N/A

Explanation of Checklist Answers:

18ai. Less Than Significant Impact. As discussed in Section “5a” above, the project site is vacant and there are no buildings on the site. In addition, a records search did not identify any recorded historical resources on the site. Therefore, the project would have not have any significant historical resource impacts.

18aii. Less Than Significant With Mitigation. The City as the lead agency, contacted two Native American tribes in compliance with Assembly Bill 52. While both tribes requested consultation with the City, one letter was received by the City two weeks after the deadline to request consultation and the second tribe has not responded to the City’s request for a date for consultation.

Although no Native American resources were identified during the site survey by the cultural consultant during their site survey on January 17 and January 20, 2020, there is the potential for Native American resources to exist on the site. Mitigation measures 13 and 14 identified previously in the Cultural Resources section are recommended to mitigate potential impacts to Native American resources uncovered on the site during project construction.

5.19. UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

References: EMWD 2017a, EMWD 2017b, Perris 2009, Perris 2011, MWD 2016, CalRecycle 2016a, CalRecycle 2016b

Explanation of Checklist Answers:

19a. Less Than Significant Impact. Eastern Municipal Water District (EMWD) would provide sanitary sewer service to the project. The project is estimated to generate approximately 34,075 gallons of wastewater a day⁴⁵ would be treated at the 300-acre Perris Valley Regional Water Reclamation Facility (PVRWRF) south of Case Road and west of the I-215 Freeway. The PVRWRF currently treats approximately 13.8 million gallons per day (mgd) with a current capacity of 22 mgd.

Waste Discharge Requirements are issued by the Santa Ana RWQCB under the provisions of the *California Water Code* (Division 7 Water Quality, Article 4 Waste Discharge Requirements). These requirements regulate the discharge of wastes that are not made to surface waters, but may impact the region's water quality by affecting underlying groundwater basins. Operational discharge flows treated at the PVRWRF

⁴⁵ Traci Sigwalt, Development Services Technician, Eastern Municipal Water District, February 4, 2020.

would be required to comply with waste discharge requirements identified for the facility. The project would not discharge wastewater into the domestic sewer system in a way that would cause the PVRWRF to exceed requirements, as determined by the Santa Ana RWQCB's Water Discharge Requirements. The EMWD's compliance with conditions, permits, and discharge requirements would further ensure that wastewater treatment requirements would not be exceeded and the project would have a less than significant level impact to wastewater treatment.

- 19b. Less Than Significant Impact.** The project would be served by existing city water lines in San Jacinto Avenue and Metz Road adjacent to the site. The project would connect with existing water mains in both roadways for potable water service. The project would also connect with existing sewer mains in San Jacinto Avenue and Metz Road for sewer service. All on- and off-site water and sewer lines would be constructed underground within paved roadways and would not result in any environmental impacts. Further, project compliance with all applicable City of Perris conditions relative to the design and construction of new water and sewer infrastructure and/or connections to existing water infrastructure would ensure that no significant impacts would result from the construction and operation of the project.

A Water Supply Assessment (WSA) was not required because the project applicant proposes less than 500 residential units. The City of Perris issued a Will Serve letter on February 3, 2020 indicating that the city would provide water and sewer service to the project with the provisions the service is contingent upon the developer completing the necessary arrangements in accordance with the City of Perris rules and regulations.⁴⁶ Therefore, the project would not require construction of new water supply or water treatment facilities or the expansion of existing facilities. The project would have a less than significant level environmental impacts related to new or expanded water treatment facilities.

- 19c. Less Than Significant Impact.** The amount and rate of storm water runoff generated from the project site would be altered by the project. The project would increase the amount of stormwater runoff from the site with the construction of impermeable surfaces including houses, streets, sidewalks, etc. The project applicant proposes to construct two on-site detention basins to collect all on-site runoff and meter to the detained runoff into the existing underground storm drain collection system in San Jacinto Road and Metz Road that are adjacent to the site. The runoff that would be discharged from the two proposed detention basins into the existing storm drains would be the same quantity that is currently discharged from the site. Therefore, the stormwater discharged from the site would not significantly impact the capacity of the existing storm drain system that serve the site and would not require the expansion or construction of new storm drain facilities. The project would not have any significant storm drain impacts.

- 19d. Less Than Significant Impact.** The project is located within the EMWD service area, which would supply water to the project through the city. In compliance with Sections 10910–10915 of the *California Water Code* (commonly referred to as “Senate Bill [SB] 610” according to the enacting legislation), a Water Supply Assessment (WSA) was not required because the project applicant proposes less than 500 residential units.

⁴⁶ Joyce Lee, City of Perris, letter dated February 3, 2020.

Determination of Supply Reliability for Project

The EMWD adopted its 2015 Urban Water Management Plan (UWMP), which details the reliability of the EMWD's current and future water supply. EMWD has four sources of water supply: imported water from the Metropolitan Water District of Southern California (MWD), local groundwater, desalinated groundwater, and recycled water. On average from 2010 through 2015, the EMWD's water supply portfolio averaged approximately 57 percent imported water, 10 percent groundwater, 4 percent desalinated groundwater, and 29 percent recycled water (EMWD 2017a, p. 4). EMWD's supply reliability is primarily established through the MWD, of which EMWD is a member agency. In the 2015 UWMP for the MWD, the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct (CRA) was assessed by the MWD. The MWD determined that its water sources would continue to provide a reliable supply to its member agencies during normal, single-dry, and multiple-dry years during the UWMP planning horizon. Unprecedented shortages are addressed in the Water Shortage Contingency Analysis and Catastrophic Supply Interruption Planning portions of the MWD's UWMP (EMWD 2017a, p. 7).

EMWD Will Serve Determination

In January 2020, the City of Perris issued Will Serve letters stating that the city is willing to provide water and sewer service to the project. The provisions of service are contingent upon the project developer completing the necessary arrangements in accordance with city rules and regulations.

Conclusion

The City of Perris has stated it would be able to provide adequate water supply to meet the potable water demand for the project. New projects, including the proposed project, which are located within the city may be required to help fund new water supply sources; however, the extent of funding would be determined by the EMWD and may take the form of a new component of connection fees or a separate charge. Details on funding would be developed with the plan of service for the proposed project. Therefore, because the EMWD has sufficient supply to serve the project and because the project developer would be required by EMWD to pay all applicable fees, the project impact to water supply would be a less than significant level.

- 19e. Less Than Significant Impact.** The project would increase the amount of wastewater generated within the EMWD's service area. The Perris Valley Regional Water Reclamation Facility (PVRWRF) treats approximately 14 million gallons per day (mgd) of wastewater and has capacity of 22 mgd. The project is estimated to generate approximately 79,750⁴⁷ gallons per day of wastewater and represents less than 0.04 percent of the PVRWRF wastewater treatment capacity.

Since wastewater generated by the project represents less than 0.04 percent of the treatment capacity of EMWD's wastewater treatment plant, the project would not have a

⁴⁷ Based on a sewer generation rate of 250 gallons/day/unit.

significant impact on EMWD's ability to treat project generated wastewater and would not contribute significantly to require construction or operation of new or expanded wastewater facilities.

- 19f. Less Than Significant Impact.** Trash, recycling, and green waste service in the City of Perris is provided by CR&R Waste Services. In addition to normal trash collection, the County of Riverside also sponsors several hazardous waste collection events throughout the year. Solid waste generated by the project would be transported to the Perris Transfer Station and Materials Recovery Facility located at 1706 Goetz Road, where recyclable materials are separated from solid wastes. Recyclable materials are sold in bulk and transported for processing and transformation for other uses. Solid waste generated by the project would be transported to either (1) the Badlands Landfill on Ironwood Avenue in Moreno Valley, which has a permitted daily capacity of 4,800 tons per day (tpd) or (2) the El Sobrante Landfill on Dawson Canyon Road in Corona, with a permitted daily capacity of 16,054 tpd (CalRecycle 2016a, 2016b).

Construction-Related Solid Waste

Based on the U.S. Environmental Protection Agency's (EPA's) construction waste generation factor for single family residential of 3.71 pounds per square foot, the project is estimated to generate approximately 592 tons of construction-related solid waste during project construction prior to diversion.⁴⁸ However, the 2016 CalGreen Code requires that 65 percent of construction waste be diverted from landfills. The disposal of construction-related solid waste associated with the proposed project would not exceed the permitted capacity of the Badlands or El Sobrante landfills that would serve the project and the potential impact would be a less than significant level.

Operational Solid Waste

Throughout the life of the project, it is estimated the project would generate approximately 580 pounds of solid waste a day, or 106 tons/year before diversion.⁴⁹ This represents a small percentage of the daily capacity of either the Badlands or El Sobrante landfills that would serve the project. The solid waste generated by the project would not have any significant solid waste impacts to area landfills.

- 19g. Less Than Significant Impact.** Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The proposed Project would be required to coordinate with CR&R Waste Services to develop a collection program for recyclables, such as paper, plastics, glass and aluminum, in accordance with local and State programs, including the California Solid Waste Reuse and Recycling Act of 1991. Additionally, the project would be required to comply with applicable practices enacted by the City under the California Integrated Waste Management Act of 1989 (AB 939) and any other applicable local, State, and federal solid waste management regulations. AB 939 requires all counties to prepare a County

⁴⁸ EPA, Estimating 2003, Building Related Construction and Demolition Materials Amounts, Table 2-1. Summary of Residential Construction Job Site C&D Materials Survey an average of 2,200 square feet/unit.

⁴⁹ <http://www.calrecycle.ca.gov/>. Residential - 4 pounds/day/unit.

Integrated Waste Management Plan. The County of Riverside adopted its *Countywide Integrated Waste Management Plan* (CIWMP) in 1998. The CIWMP includes the Countywide Summary Plan; the Countywide Siting Element; and the Source Reduction and Recycling Elements, the Household Hazardous Waste Elements, and Non-disposal Facility Elements for Riverside County and each city in Riverside County. The project would be required by the city to comply with all regulatory requirements regarding solid waste. Therefore, solid waste impacts would be a less than significant level.

5.20. WILDFIRE	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Explanation of Checklist Answers:

20a. Less Than Significant Impact. Based on review of Cal Fire's Fire Hazard Severity Zones map, the north and northwest portion of the site is located in a Local Responsibility Area Very High Fire Hazard Severity Zone.⁵⁰ Off-site, the area of the city that is west and northwest of the project is also located in the same Very High Fire Hazard Severity Zone. However, the project is not located in State Responsibility Area Fire Hazard Severity Zone.⁵¹

In 2016 the City of Perris adopted Ordinance No. 1336 that modified the 2016 California Fire Code. Specifically, Ordinance No. 1336 modified Chapter 49 Requirements for Wildland-Urban Interface Fire Areas of the Fire Code to add Section 4908 Fuel Modification Requirements for New Construction. Section 4908 states, "All new buildings to be built or installed in hazardous fire areas shall comply with the following:

⁵⁰ <https://osfm.fire.ca.gov/media/5921/perris.pdf>

⁵¹ https://osfm.fire.ca.gov/media/6752/fhszs_map60.pdf

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.
2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.
 - 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the City of Perris Vegetation Management Guidelines.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

Because the project applicant proposes new construction, it would have to meet and comply with the fuel modification requirements per Ordinance No. 1336. The project's compliance with Ordinance No. 1336 would reduce potential emergency response impacts to a less than significant level.

20b. Less Than Significant Impact. As discussed in Section "20a." above, the north and northeast portion of the project site as well as the area west and northwest of the project are in a Very High Fire Hazard Severity Zone. As discussed in Ordinance No. 1336, "The City is subject to extremely strong winds, commonly referred to as the "Santa Ana Winds", which reach speeds in excess of 80 miles per hour. These climatic conditions are conducive to the spread of fire. For example, during July, August, and September, temperatures often exceed 100 degrees Fahrenheit. During the same months, humidity is usually less than 40% and humidity measurements less than 10% are not uncommon. These conditions contribute to an increased likelihood of fire. Moreover, minor fires have a greater tendency of spreading rapidly due to such conditions.⁵² Along with Santa Ana winds, on-site slopes and other factors could exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As noted in Section "20a" above, the project's compliance with Ordinance No. 1336 would reduce potential wildfire impacts to a less than significant level. However, similar to and like existing residents adjacent to the project, project residents could be exposed to pollutant concentrations from a wildfire due to prevailing winds.

20c. Less Than Significant Impact. The project would be required to meet fuel modification requirements per Ordinance No. 1336 that requires the installation and maintenance of fuel modifications, vegetation management, to reduce fire risks to project residents. However, Ordinance No. 1336 does not require the project to install and maintain any roads, fuel breaks, emergency water sources, power lines or other utilities to protect the

⁵² Ordinance No. 1336, page 2.

project. The project's compliance with Ordinance No. 1336 would reduce potential wildfire impacts to a less than significant level.

- 20d. Less Than Significant Impact.** As discussed in Section "20a" above, a portion of the north and northwest area of the project site is located in a Local Responsibility Area Very High Fire Hazard Severity Zone. While the project does have some slope, there is no significant topographic relief on or adjacent to the site that would expose structures or project occupants to significant risks due to downslope, downstream flooding, or landslides as a result of runoff, post-fire slope instability, or drainage changes. Project compliance with Ordinance No. 1336 would reduce potential post-fire risks to a less than significant level.

5.21. MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
Does the project:				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Explanation of Checklist Answers

- 20a. Less Than Significant With Mitigation.** As discussed in Section "4a" above, the project would have potential impacts to MSHCP plant and animal species. As a result, mitigation measures are recommended to reduce potential significant biological impacts to a less than significant level.

The project site is vacant and there are no buildings, including historical buildings, on the site. Thus, the project would not impact any periods of California history. No cultural resources were discovered on the site during a site reconnaissance and there are no recorded sites on the site. However, there are 93 cultural resources recorded within one mile of the site. Therefore, there is a potential for cultural resources to exist on the site and be uncovered during project grading and construction. As a result, a

mitigation measure is recommended to reduce potential cultural resources impacts to a less than significant level.

- 20b. Less Than Significant With Mitigation.** The project traffic report states that the project would have cumulative traffic impacts to four area intersections. The four intersections include "A" Street/Harvill Avenue, "A" Street/Nuevo Road, "A" Street/W Metz Road and "A" Street/W. San Jacinto Avenue. As such, mitigation measures are recommended in Section "17a" to reduce potential project and cumulative traffic impacts to a less than significant level. The project would potentially have impacts to aesthetics, biological resources, cultural resources, noise and traffic, however mitigation measures are recommended to reduce impacts to a less than significant level. The project would not have any significant impacts to other environmental disciplines, including agriculture and forestry resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources or utility and service systems. Because the project would not have any significant impacts that cannot be mitigated to a level of less than significant, the project would not have any significant cumulative project impacts.
- 20c. Less Than Significant With Mitigation.** The project would potentially have significant traffic impacts to four intersections that could indirectly impact the public. Therefore, mitigation measures are recommended to reduce potential project traffic impacts at the four intersections to a less than significant level. The project would not have any other potentially significant environmental impacts to human beings either directly or indirectly.

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SECTION 6.0 REFERENCES

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