



CITY OF MORENO VALLEY

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE CACTUS & BRADSHAW RESIDENTIAL PROJECT (TTM 37858)



**TTM 37858 Project - Case Numbers PEN20-0172 (Tentative
Tract Map), PEN20-0174 (General Plan Amendment),
PEN20-0175 (Change of Zone), PEN20-0173 (Conditional
Use Permit)**

October 13, 2022

Lead Agency
CITY OF MORENO VALLEY
14177 Frederick Street
Moreno Valley, CA 92552

Prepared By
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TABLE OF CONTENTS

MITIGATED NEGATIVE DECLARATION	1
BACKGROUND INFORMATION AND PROJECT DESCRIPTION:	1
ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:	27
DETERMINATION (To be completed by the Lead Agency):	27
EVALUATION OF ENVIRONMENTAL IMPACTS:	28
ISSUES & SUPPORTING INFORMATION SOURCES:	29
I. AESTHETICS	29
II. AGRICULTURE AND FOREST RESOURCES	33
III. AIR QUALITY	34
VI. ENERGY	47
VII. GEOLOGY AND SOILS.....	49
VIII. GREENHOUSE GAS EMISSIONS	55
IX. HAZARDS AND HAZARDOUS MATERIALS	57
X. HYDROLOGY AND WATER QUALITY – Would the project:	61
XI. LAND USE AND PLANNING	67
XII. MINERAL RESOURCES – Would the project:	68
XIII. NOISE	69
XIV. POPULATION AND HOUSING	74
XV. PUBLIC SERVICES	75
XVI. RECREATION.....	77
XVII. TRANSPORTATION	78
XVIII. TRIBAL CULTURAL RESOURCES	81
XIX. UTILITIES AND SERVICE SYSTEMS	84
XX. WILDFIRE	86
XXI. MANDATORY FINDINGS OF SIGNIFICANCE	88
DOCUMENT PREPARERS AND CONTRIBUTORS	90

TABLES

Table AES-1: Project Consistency with Residential Single-Family 10 (RS10) District Development Standards.....	30
Table AES-2: Consistency with Land Use Element Goals and Policies Related to Scenic Quality	30
Table AQ-1: SCAQMD Regional Daily Emissions Thresholds	35
Table AQ-2: Construction Emissions Summary	36
Table AQ-3: Summary of Peak Operational Emissions.....	36
Table AQ-4: Localized Significance Summary of Construction	37
Table AQ-5: Localized Significance Summary of Operations.....	38
Table E-1: Estimated Construction Equipment Diesel Fuel Consumption.....	47
Table E-2: Estimated Construction Vehicle Trip Related Fuel Consumption.....	48
Table E-3: Estimated Annual Operational Energy Consumption.....	48
Table GHG-1: Greenhouse Gas Emissions	56
Table WQ-1: Total Retail Water Supply (AFY).....	62

Table N-1: City of Moreno Valley Maximum Continuous Sound Levels	69
Table N-2: Existing Ambient Noise Level Measurements.....	70
Table N-3: Construction Noise Levels at the Nearest Sensitive Receptor.....	70
Table N-4: Project Traffic Noise Contributions	71
Table N-5: Proposed Homes Interior Noise Levels from Cactus Avenue	72
Table N-5: Typical Vibration Source Levels for Construction Equipment	72
Table T-1: Project Trip Generation	79

FIGURES

Figure 1. Regional Location	8
Figure 2. Local Vicinity	10
Figure 3. Aerial	12
Figure 4. General Plan Designation	14
Figure 5. Zoning Designations	16
Figure 6: Conceptual Site Plan.....	18
Figure 7: Wall and Fence Plan	22
Figure 8: Landscape Plan	20

MITIGATION MONITORING AND REPORTING PROGRAM (Separate Document)

APPENDICES (Separate Documents)

A	CalEEMod Emissions Summary
B	Habitat Assessment and Focused Burrowing Owl Surveys and MSHCP Consistency
C	Phase I Cultural Resources Investigation and Paleontological Overview
D	Preliminary Soil Investigation
E	Phase I Environmental Site Assessment
F	Preliminary Hydrology Report
G	Preliminary Project Specific Water Quality Management Plan
H	Noise Impact Analysis
I	Trip Generation and VMT Screening Analysis



INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) FOR CACTUS & BRADSHAW RESIDENTIAL PROJECT (TTM 37858)

MITIGATED NEGATIVE DECLARATION

Project Name: Cactus & Bradshaw Residential Project (TTM 37858)

Findings: It is hereby determined that, based on the information contained in the attached Initial Study, the project would not have a significant adverse effect on the environment.

Mitigation measures necessary to avoid the potentially significant effects on the environment are included in the attached Initial Study, which is hereby incorporated and fully made part of this Mitigated Negative Declaration. The City of Moreno Valley has hereby agreed to implement each of the identified mitigation measures, which would be adopted as part of the attached Mitigation Monitoring and Reporting Program.

BACKGROUND INFORMATION AND PROJECT DESCRIPTION:

1. **Project Case Number(s):** PEN20-0172 (Tentative Tract Map), PEN20-0174 (General Plan Amendment), PEN-0175 (Change of Zone), PEN20-0173 (Conditional Use Permit)
2. **Project Title:** Cactus & Bradshaw Residential Project (TTM 37858)
3. **Public Comment Period:** October 13, 2022, through November 2, 2022
4. **Lead Agency:** City of Moreno Valley
Mindy Davis, Planning Department
14177 Frederick Street
Moreno Valley, California 92552
(951) 413-3209
mindyd@moval.org
5. **Documents Posted At:** <http://www.moval.org/cdd/documents/about-projects.html>
6. **Prepared By:** Konnie Dobрева, JD
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2355 Main Street, Suite 100, Irvine, California 92614
(949) 794-1180
7. **Project Sponsor:**
Applicant/Developer
RC Hobbs Company
1428 Chapman Avenue
Orange, CA 92866

8. **Project Location:** The project site is located on approximately 4.81 acres at the northeast corner of the intersection of Bradshaw Circle and Cactus Avenue in the eastern portion of the City of Moreno Valley (project site). The City of Moreno Valley (City) encompasses approximately 52 square miles of land within Riverside County and is bounded by the City of Riverside to the east; the City of Perris and Lake Perris State Recreation Area to the south; the Badlands mountain range and City of Beaumont to the east; and the Box Springs Mountains range and the City of Redlands (within San Bernardino County) to the north. See Figure 1, *Regional Location*.

Regional access to the project site is provided by State Route 60 (SR-60) and Interstate 215 (I-215). Local access to the project site is provided by Moreno Brach Drive and Cactus Avenue. The project site is located within the U.S. Geological Survey (USGS) Sunnymead 7.5 Minute Series Topographic Quadrangle.

9. **General Plan Designation:** Residential (5 du/ac)

Residential 5: The primary purpose of areas designated Residential 5 is to provide for single-family detached housing on standard sized suburban lots at a density of 5 dwelling units per acre.

10. **Specific Plan Name and Designation:** N/A

11. **Existing Zoning:** Residential 5 District (R5)

Residential 5 District: The primary purpose of the R5 district is to provide for residential development on common sized suburban lots. This district is intended as an area for development of single-family residential and mobile home subdivisions at a maximum allowable density of 5 dwelling units per acre, as indicated in Section 9.03.020 of the Moreno Valley Municipal Code (MVMC).

12. **Surrounding Land Uses and Setting:**

	Land Use	General Plan	Zoning
Project Site	Vacant	Residential: 5 max du/ac (R5)	Residential 5 (R5) District
North	Single-Family Residential	Residential: Max. 5 du/ac (R5)	Residential 5 (R5) District
South	Single-Family Residential	Residential: Max. 10 du/ac (R10)	Suburban Residential (SP 193 ML)
East	Vacant/Undeveloped	Commercial (C) Residential/Office (R/O)	Residential Single-Family 10 (RS10) District
West	Vacant/Undeveloped, Single-family Residential	Residential: Max. 10 du/ac (R10)	Commercial (CC) Residential 15 District (R15)

13. **Description of the Site and Project:**

Environmental Setting

Existing Project Site

The approximately 4.81-acre project site consists of three parcels (APNs 478-090-018, 478-090-024, and 478-090-025) and is comprised of vacant and graded lots. Vehicular access to the site is provided by Bradshaw Circle and Cactus Avenue as shown on Figure 2, *Local Vicinity*, and Figure 3, *Aerial*. The perimeter of the site is partially secured by a chain-link fence along the perimeter of the site.

Existing vegetation at the project site consists of a dense cover of grasses as well as one Palo Verde and one Palm Tree. The topography of the project site is relatively flat with a gentle slope of less than one percent across the site.

Existing Land Use and Zoning Designations

As shown on Figure 4, *General Plan Designation*, the project site currently has a General Plan land use designation of Residential: Max. 5 du/ac (R5). The primary purpose of areas designated Residential 5 is to provide for single-family detached housing on standard sized suburban lots. The maximum allowable density is 5 dwelling units per acre.

As shown on Figure 5, *Zoning Map*, the project site is currently zoned Residential 5 District (R5). The primary purpose of the R5 district is to provide for residential development on common sized suburban lots. This district is intended as an area for development of single-family residential and mobile home subdivisions at a maximum allowable density of five dwelling units per net acre, as indicated in MVMC Section 9.03.020.

Project Description

Introduction

The proposed project would develop 37 single-family residential lots, onsite roadways with sidewalks, drainage infrastructure, and open space lots on the 4.81-acre project site (project). Figure 6, *Conceptual Site Plan*, illustrates the proposed site configuration following project implementation, and Figure 7, *Wall and Fence Plan*, shows the proposed walls and fencing for the project.

As the project proposes a residential density of 7.9 dwelling units per acre, the project requires a General Plan Amendment to change the site's land use designation from Residential: Max. 5 du/ac (R5) to Residential: Max. 10 du/ac (R10) and a Change of Zone from Residential 5 District (R5) to Residential Single-Family 10 (RS10) District. The project also requires approval of a Tentative Tract Map (TTM 37858) and a Conditional Use Permit (CUP) for a Planned Unit Development (PUD).

Project Characteristics

The project proposes a total residential lot area of 136,045 SF. The single-family residences would range in size from 1,864 SF to 2,526 SF with a minimum lot size of 3,095 SF. The project proposes three distinct three- to four-bedroom floor plans, private yards, and two-car garages for the residential lots. In addition to the residential lots, the project proposes lots designated for open space and drainage purposes. Two bioretention drainage basins (Lot A and Lot B) are located along the western portion of the project site and a linear 3-foot-wide drainage ditch (Lot C) is located along the eastern property line. An approximately 10,982 SF recreation – open space lot (Lot D) is located near the center of the residential development, which would include landscaping, walkways, and seating

areas. New walkways are also proposed throughout the residential development. The project would provide private yards within the single-family residential lots. The project would include a total of 15,961 SF of open space.

Architectural Design

The proposed single-family residences would be designed with Spanish, French, and Cottage architectural elements, multi-level rooflines, and an earth tone color scheme. In addition, the residences would incorporate stucco finishes, detailed roof elements, awnings, metal railings, and decorative windows and doors in the exterior design. Enhanced elevations would be incorporated where building sides or rears are visible from streets. The tallest roofline of the two-story residences would be less than 30 feet in height.

The proposed two-story single-family residences would include three different floor plans and two different architectural styles to provide aesthetic variation throughout the community. Plan 1, Plan 2, and Plan 3 homes would include a traditional two-story home design with either Spanish or French architectural elements.

Access and Circulation

Vehicular access to the project site would be provided via two driveways on Bradshaw Circle, which would provide access to the community's internal roadways. The single-family residences would be accessed by private driveways along the internal roadways, as shown on Figure 6, *Conceptual Site Plan*. The project also includes pedestrian paths to provide for non-vehicular onsite circulation and for connection to existing sidewalks and bike lanes adjacent to the proposed project.

The proposed project would provide garage, driveway, and on-street parking. Each residence would have a two or three car garage depending on floor plan and a minimum of two driveway parking spaces.

Landscaping

Landscaping proposed as part of the project would consist of drought-tolerant ornamental trees, shrubbery, and groundcover. Turf would be provided in active use areas in common open spaces. The landscape plan would be consistent with the City's landscape and irrigation design standards, as provided in MVMC Section 9.17.030. Figure 8, *Landscape Plan*, illustrates the proposed landscaping for the project.

Lighting

Outdoor lighting included as part of future development on the project site would be typical of single-family residential PUDs and would consist of wall-mounted lighting as well as pole-mounted lights along the proposed internal roadways. Nighttime lighting would be used as accent/security lighting in the park area. The project's outdoor lighting would be directed downward and shielded to minimize off-site spill. The location of all exterior lighting would comply with lighting standards established in the MVMC.

Infrastructure Improvements

Water and Sewer

The proposed project would install a new 8-inch diameter sewer line and 8-inch diameter water line within the project's proposed onsite private streets and within Bradshaw Circle where these new lines would connect to an existing 21-inch diameter sewer line and 12-inch diameter water line, respectively, within Cactus Avenue.

Drainage

In the existing condition, the topography of the project site is relatively flat with a small elevation change towards Bradshaw Circle. The project site's current surface runoff generally sheet flows to the southwest. In the developed condition, onsite flows would be conveyed to one of two onsite water quality bioretention basins (Lots A and B), and both of these basin lots would connect to a new 24-inch diameter storm drain in Bradshaw Circle that would connect to the existing Storm Drain Line F-4 within Cactus Avenue that is operated by the Riverside County Flood Control and Water Conservation District (RCFC).

Parcel Consolidation

The project would consolidate the three existing parcels (APNs 478-090-018, 478-090-024, and 478-090-025) into one Tentative Tract Map. Existing parcels in the project vicinity would not be impacted by the proposed parcel consolidation.

GENERAL PLAN AND ZONING

As discussed, the project requires a General Plan Amendment to change the designation of the site to Residential: Max. 10 du/ac (R10) and Change of Zone to Residential Single-Family 10 (RS10) District in order to implement the project, which proposes single-family residential uses at a density of 7.9 dwelling units per acre. MVMC Section 9.03.020 states that the primary purpose of the Residential Single-Family 10 (RS10) District is to provide for residential development on small single-family lots with amenities not generally found in suburban subdivisions. The district is intended for subdivisions at a maximum allowable density of ten (10) dwelling units per net acre.

Following approval of the General Plan Amendment and Change of Zone, the project would be consistent with the land use designation and zoning classification associated with the project site.

As a result of project implementation, all other off-site land use designations and zoning classifications in the project vicinity would remain the same as under existing conditions.

CONSTRUCTION DURATION AND ZONING

Construction activities include demolition of the existing structures, pavement, and the existing utility infrastructure; grubbing, grading, excavation and re-compaction of soils; utility and infrastructure installation; building construction; roadway pavement; and architectural coatings. Approximately 8,097 cubic yards of soil is proposed to be exported during grading activities.

Construction activities for the project would occur over 12 months and would begin in 2023 with the opening for project occupancy in 2024. Construction activities would occur in the following stages: site preparation, grading, building construction, architectural coating, and paving. Pursuant to the MVMC Chapter 8.14.040, construction activities would be limited to between the hours of 7:00 a.m. to 8:00 p.m. Monday through Friday, excluding holidays and from 8:00 a.m. to 4:00 p.m. on Saturday, unless written approval is obtained from the City building official or City engineer.

DISCRETIONARY APPROVALS

In accordance with Sections 15050 and 15367 of the *State CEQA Guidelines*, the City is the designated Lead Agency for the proposed project and has principal authority and jurisdiction for CEQA actions and project approval. Responsible Agencies are those agencies that have jurisdiction or authority over one or more aspects associated with the development of a proposed project and/or mitigation. Trustee Agencies are State agencies that have jurisdiction by law over natural resources affected by a proposed project.

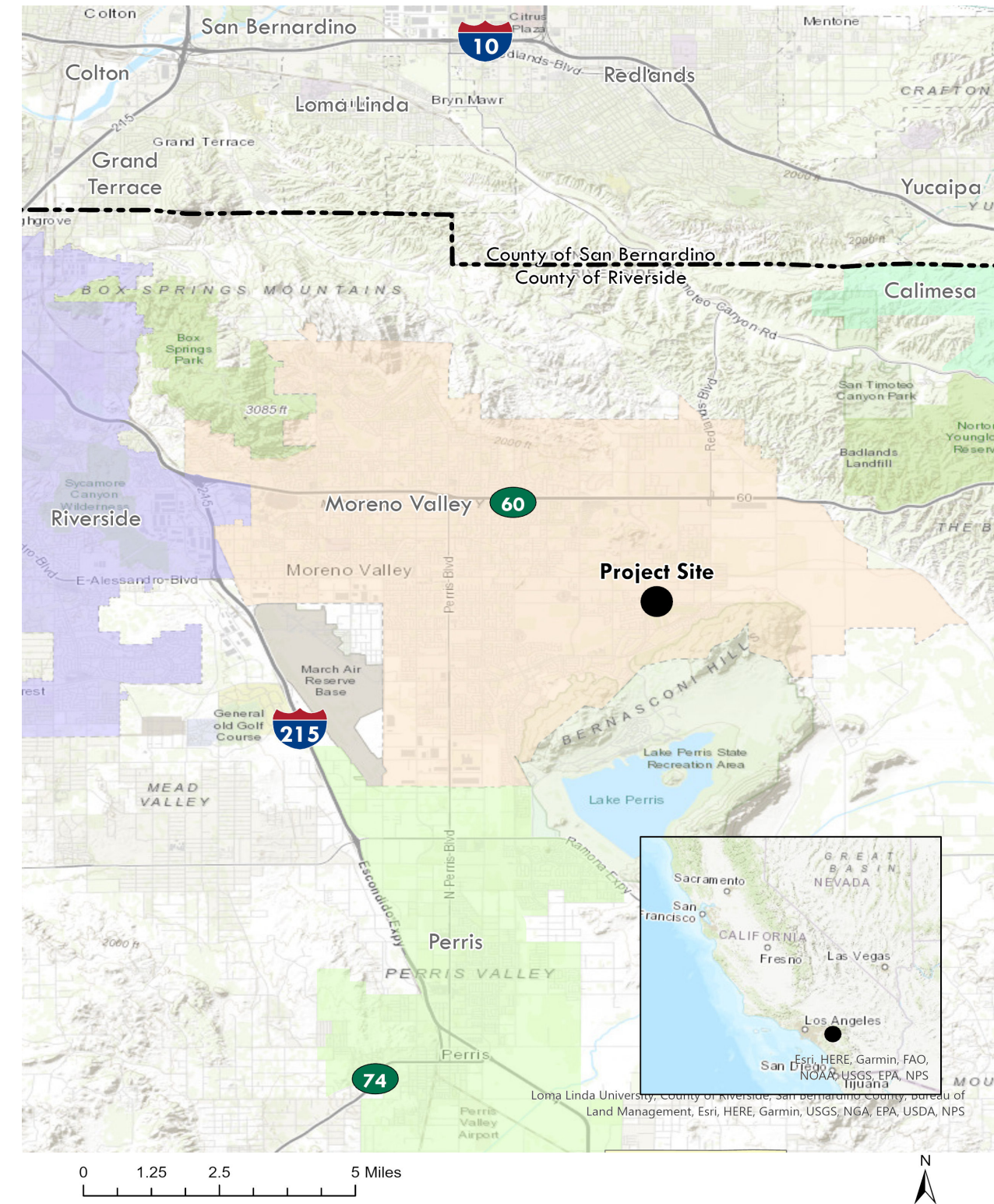
The following discretionary approvals by the City, as Lead Agency, are anticipated to be necessary for implementation of the proposed project:

CITY OF MORENO VALLEY

- General Plan Amendment to change the site's land use designation from Residential: Max. 5 du/ac (R5) to Residential: Max. 10 du/ac (R10)
- Change of Zone from Residential 5 District (R5) to Residential Single-Family 10 (RS10) District
- Approval of Tentative Tract Map (TTM 37858)
- Approval of a Conditional Use Permit (CUP) for a Planned Unit Development (PUD)

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Regional Location

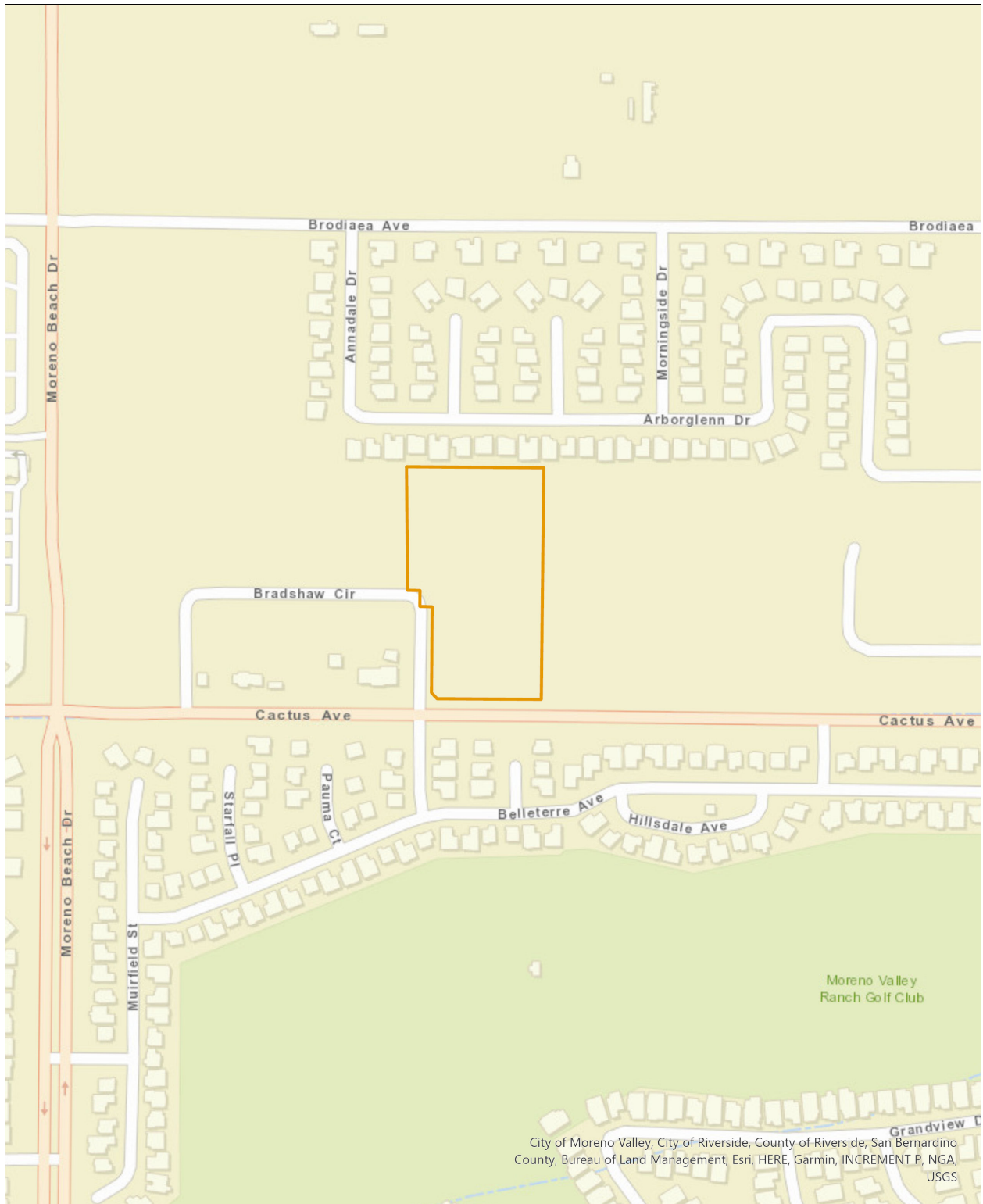


Cactus & Bradshaw Residential Project (TTM 37858)

Figure 1

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Local Vicinity



 Project Site



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Aerial View

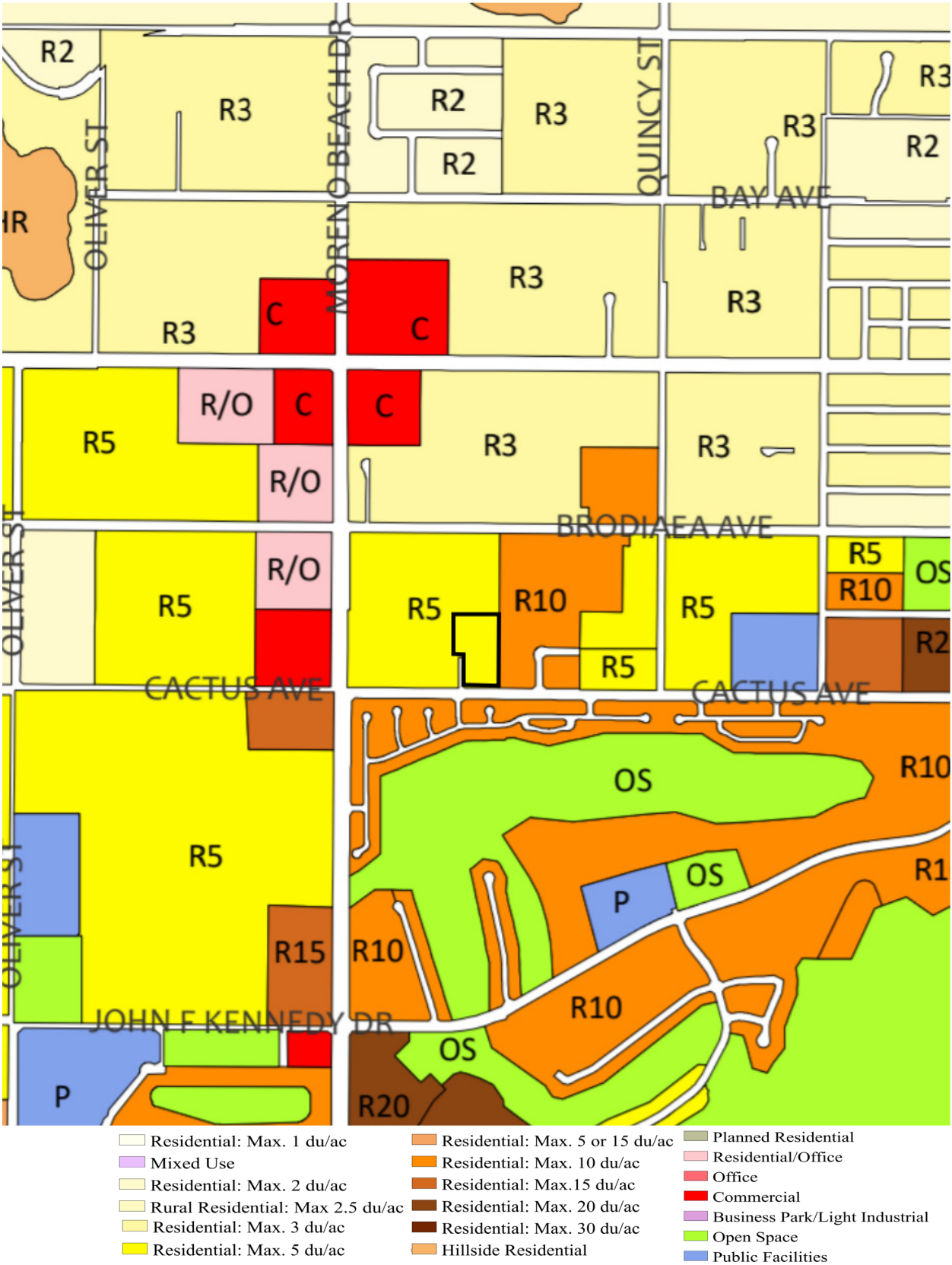


 Project Site



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General Plan Designation



Cactus & Bradshaw Residential Project (TTM 37858)

Figure 4

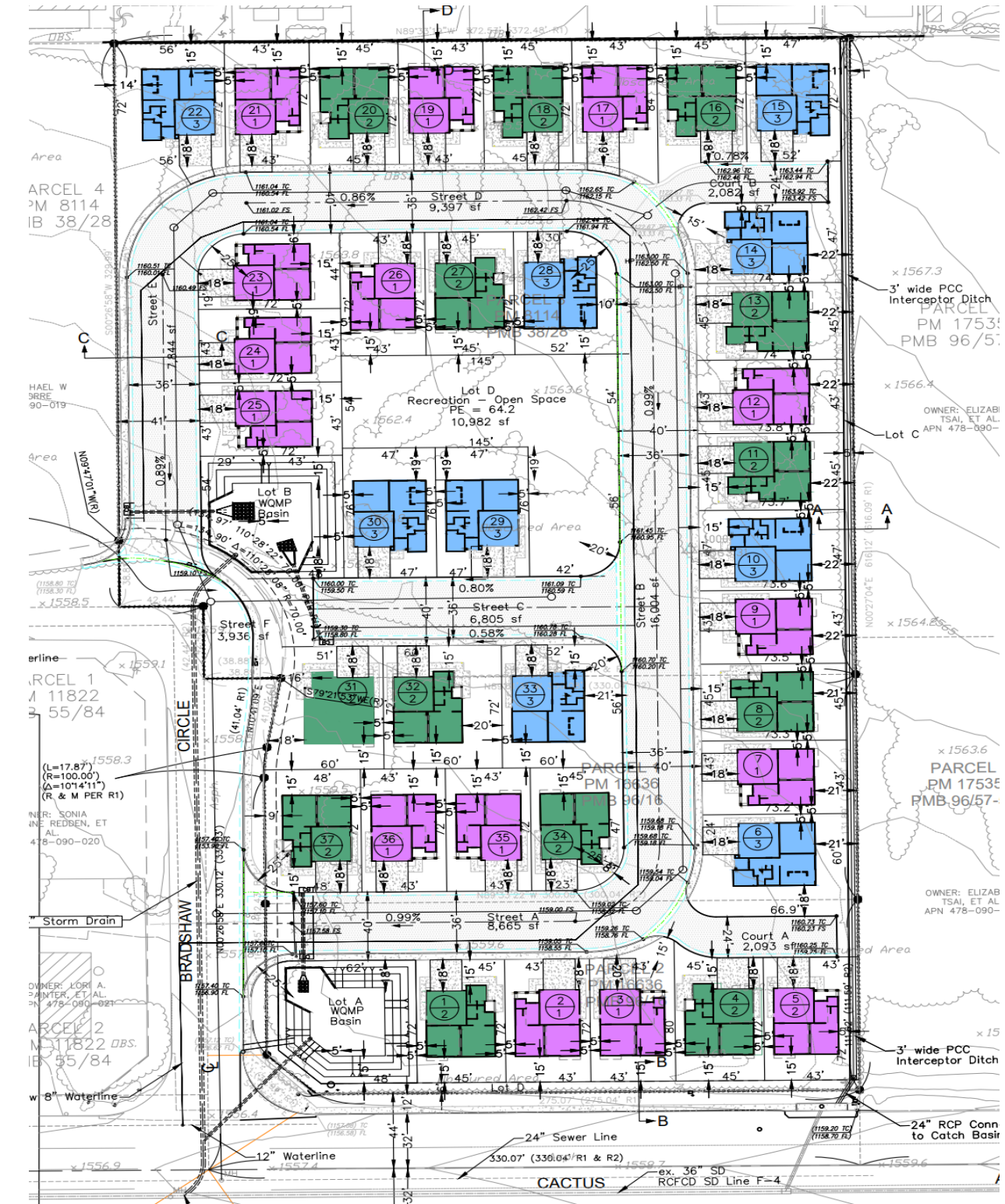
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Zoning Designation



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Conceptual Site Plan

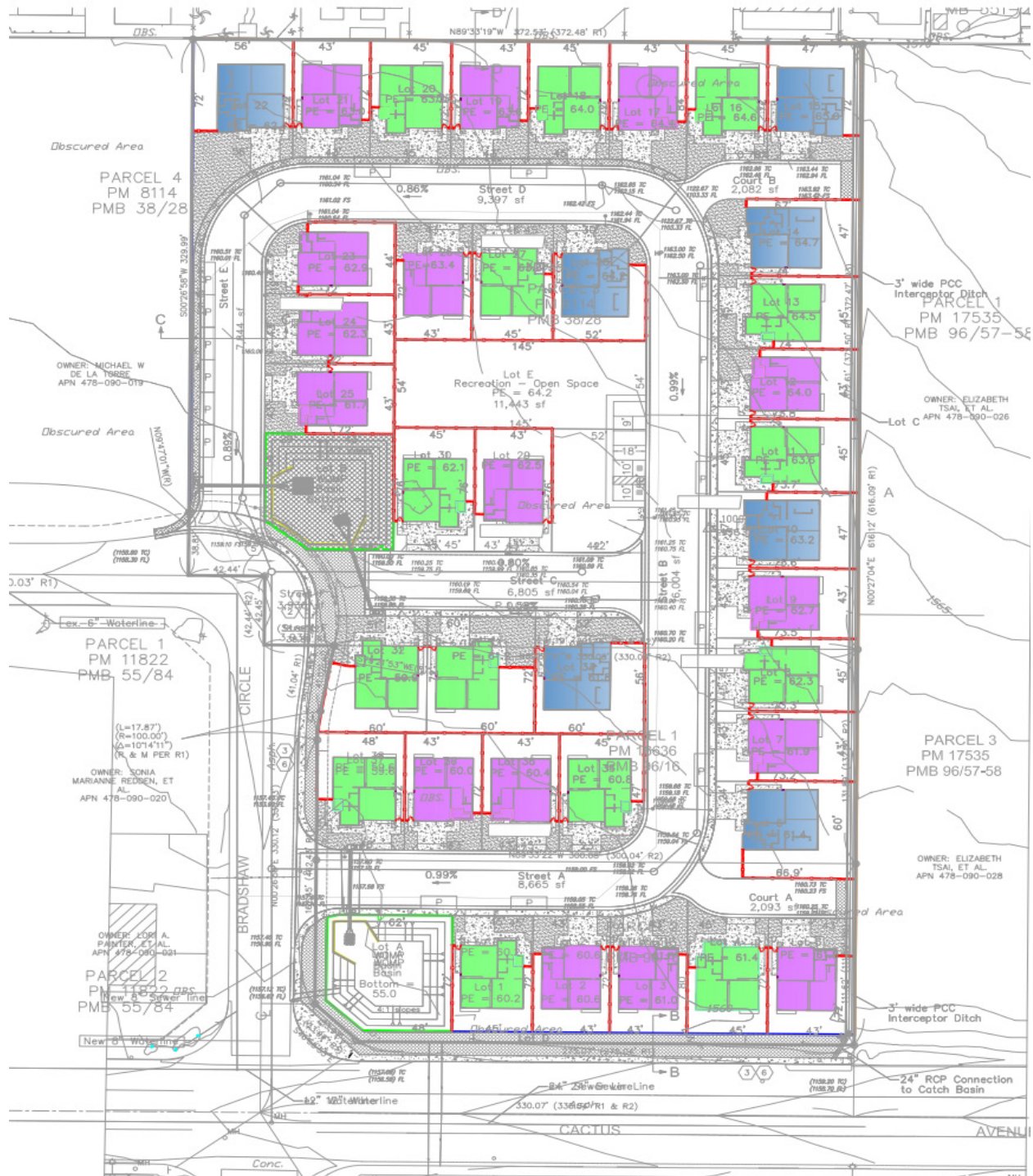


Cactus & Bradshaw Residential Project (TTM 37858)

Figure 6

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Wall and Fence Plan



Wall Plan Key

- 5' High Tan Vinyl Fence
- 6' High Masonry Block Walls
- 5' High Tan Vinyl Gate



- Power Coated Wrought Fencing with Iron Gate
- Combo Retaining/ block wall
- WQMP Basin Walls



Cactus & Bradshaw Residential Project (TTM 37858)

Figure 7

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Landscape Plan



Cactus & Bradshaw Residential Project (TTM 37858)

Figure 8

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14. 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.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

The City sent notices regarding the project to the following California Native American tribes that may have knowledge regarding tribal cultural resources in the project vicinity:

- Agua Caliente Band of Cahuilla Indians
- Cahuilla Band of Indians
- Desert Cahuilla Indians
- Los Coyotes Band of Cahuilla Indians
- Morongo Band of Mission Indians
- Pechanga Band of Luiseño Indians
- Rincon Band of Luiseño Indians
- San Manuel Band of Mission Indians
- Santa Rosa Band of Mission Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseño Indians

The Pechanga Band of Luiseño Indians requested consultation regarding the proposed project. The consulting tribes consider the area sensitive for cultural resources as several sites are located nearby. Although no information for site specific tribal cultural resources was provided (and there are no known tribal cultural resources on or adjacent to the project site), the consulting tribes requested inclusion of mitigation due to the potential of the Project to unearth previously undocumented tribal cultural resources during construction. These mitigation measures are incorporated in this Initial Study.

15. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

None applicable

16. Other Technical Studies Referenced in this Initial Study (Provided as Appendices):

- A. CalEEMod Emissions Summary
- B. Habitat Assessment and Focused Burrowing Owl Surveys and MSHCP Consistency
- C. Phase I Cultural Resources Investigation and Paleontological Overview
- D. Preliminary Soil Investigation
- E. Phase I Environmental Site Assessment
- F. Preliminary Hydrology Report
- G. Preliminary Project Specific Water Quality Management Plan
- H. Noise Impact Analysis
- I. Trip Generation and VMT Screening Analysis

17. Acronyms:

ADA -	American with Disabilities Act
ALUC -	Airport Land Use Commission
ALUCP -	Airport Land Use Compatibility Plan
AQMP -	Air Quality Management Plan
CEQA -	California Environmental Quality Act
CIWMD -	California Integrated Waste Management District
CMP -	Congestion Management Plan
DTSC -	Department of Toxic Substance Control
DWR -	Department of Water Resources
EIR -	Environmental Impact Report
EMWD -	Eastern Municipal Water District
EOP -	Emergency Operations Plan
FEMA -	Federal Emergency Management Agency
FMMP -	Farmland Mapping and Monitoring Program
GIS -	Geographic Information System
GHG -	Greenhouse Gas
GP -	General Plan
HCM	Highway Capacity Manual
HOA -	Homeowners Association
IS -	Initial Study
LHMP -	Local Hazard Mitigation Plan
LOS -	Level of Service
LST -	Localized Significance Threshold
MARB -	March Air Reserve Base
MARB/IPA-	March Air Reserve Base/Inland Port Airport
MSHCP -	Multiple Species Habitat Conservation Plan
MVFP -	Moreno Valley Fire Department
MVPD -	Moreno Valley Police Department
MVUSD -	Moreno Valley Unified School District
MWD -	Metropolitan Water District
NCCP -	Natural Communities Conservation Plan
NPDES -	National Pollutant Discharge Elimination System
OEM -	Office of Emergency Services
OPR -	Office of Planning & Research, State
PEIR -	Program Environmental Impact Report
PW -	Public Works

RCEH -	Riverside County Environmental Health
RCFCWCD -	Riverside County Flood Control & Water Conservation District
RCP -	Regional Comprehensive Plan
RCTC -	Riverside County Transportation Commission
RCWMD -	Riverside County Waste Management District
RTA -	Riverside Transit Agency
RTIP -	Regional Transportation Improvement Plan
RTP -	Regional Transportation Plan
SAWPA -	Santa Ana Watershed Project Authority
SCAG -	Southern California Association of Governments
SCAQMD -	South Coast Air Quality Management District
SCE -	Southern California Edison
SCH -	State Clearinghouse
SKRHCP -	Stephens' Kangaroo Rat Habitat Conservation Plan
SWPPP -	Stormwater Pollution Prevention Plan
SWRCB -	State Water Resources Control Board
USFWS -	United States Fish and Wildlife
USGS -	United States Geologic Survey
VM -	Vehicle Miles Traveled
VVUSD -	Valley Verde Unified School District
WQMP -	Water Quality Management Plan
WRCOG -	Western Riverside Council of Government

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture & 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

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

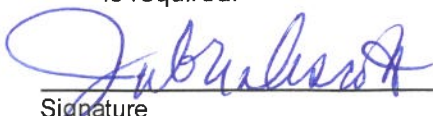
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ 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" 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

Julia Descoteaux
Printed Name

10/12/2022

Date

City of Moreno Valley
For

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS – Except as provided in Public Resources Code §21099 – Modernization of Transportation Analysis for Transit-Oriented Infill Projects – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. A scenic vista can be impacted in 2 ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or “vista” of the scenic resource. Important factors in determining whether the proposed project would block scenic vistas include the project’s proposed height, mass, and location relative to surrounding land uses and travel corridors.</p> <p>The project site is located within a partially developed area of the City and is not within or adjacent to a scenic vista. The site is adjacent to roadways and existing residential land uses. The Moreno Valley General Plan Figure 7-2, Major Scenic Resources identifies the scenic resources within the City that include: Box Springs Mountains, Moreno Peak, Russell Mountains, Reche Mountains, and the Badlands.</p> <p>The site is located approximately one mile south of the Moreno Peak. However, only partial views of the Moreno Peak are present on the project site between the existing single-family residences to the north. The proposed single-family residences would be 30 feet in height and would be the same height as existing single-family residences to the north and south.</p> <p>In addition, Figure 7-2, Major Scenic Resources of the General Plan designates various view corridors throughout the City. The proposed project is not within or adjacent to a designated view corridor. Thus, redevelopment of the project site with single-family residences would not obstruct, interrupt, or diminish a scenic vista; and impacts would not occur.</p>				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. There are no designated state scenic highways in the City. The closest eligible state scenic highway is State Route (SR) 74, which travels east/west and is approximately 11.5 miles to the south of the project site. The closest officially designated state scenic highway is SR 243 from Interstate 10 (I-10) south of the city of Banning limits (Caltrans 2021), which is located approximately 17 miles east of the project site. Neither of the scenic highways discussed above are visible from the project site, therefore, no impacts to state scenic highways would occur from implementation of the proposed project.</p>				
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"/>
<p>Less than Significant Impact. As described previously, the project site is located in a developing portion of Moreno Valley and is adjacent to roadways to the south and west, vacant land to the east, and single-family residences north. Nearby parcels are developed with single-family residential uses. The project site is vacant. The existing character of the site and surrounding area is neither unique nor of special aesthetic value or quality.</p> <p>The project would redevelop the project to provide 37 new single-family residences, which would be similar to the single-family residential uses that are adjacent to the west of the site, to the south of the site beyond the flood control channel, and to the north of the site beyond Finch Avenue.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Zoning. The project site is currently zoned as Residential 5 District (R5). The project includes a zone change to Residential Single-Family 10 (RS10) District to implement the proposed single-family residential uses. MVMC Section 9.03.020 states that the primary purpose of the Residential Single-Family 10 (RS10) District is to provide for residential development on small single-family lots with amenities not generally found in suburban subdivisions. The district is intended for subdivisions at a maximum allowable density of ten (10) dwelling units per net acre.

The proposed development would also require approval of a Conditional Use Permit (CUP) for a Planned Unit Development (PUD), which allows for a development to establish unique criteria for such things as setbacks, lot width and depth, building separation, and lot size. This is allowed in exchange for a higher level of detail and amenities within the project than typically required for standard residential development. The project would be consistent with the standards for approval of a PUD listed in MVMC Section 9.03.060.

As detailed in Table AES-1, the proposed project would be consistent with the development standards for the Residential Single-Family 10 (RS10) District listed in Municipal Code Section 9.03.040 with approval of a PUD. Thus, the proposed project would not conflict with applicable zoning regulations governing scenic quality.

Table AES-1: Project Consistency with Residential Single-Family 10 (RS10) District Development Standards

Standard	Municipal Code Requirement	Proposed Project
Minimum lot size	4,500 acre	3,095 SF*
Lot width	45 ft.	43 ft.*
Lot depth	85 ft.	72 ft.*
Maximum density	10 du/acre	7.9 du/acre
Height limit	30 feet	30 feet/2 stories
* consistent with approval of a PUD		

General Plan. The project site currently has a General Plan land use designation of Residential: Max. 5 du/ac (R5). The proposed project includes a General Plan Amendment to change the designation of the site to Residential: Max. 10 du/ac (R10). According to the General Plan Land Use Element, the Residential: Max. 10 du/ac (R10) General Plan land use designation allows for development of residential uses to a maximum density of 10 dwelling units per acre. The project's proposed density of approximately 7.9 du/ac would be consistent with the maximum allowable density of 10 du/ac with the approval of a PUD. In addition, the project would be consistent with the General Plan Land Use Element goals and policies related to scenic quality, as shown in Table AES-2.

Table AES-2: Consistency with Land Use Element Goals and Policies Related to Scenic Quality

Goal or Policy	Project Consistency
Goal 2.1: A pattern of land uses, which organizes future growth, minimizes conflicts between land uses, and which promotes the rational utilization of presently underdeveloped and undeveloped parcels.	Consistent. The proposed project would redevelop the vacant site with 37 new single-family residences on an existing vacant site in the City, which would promote the rational utilization of a presently undeveloped parcel. Therefore, the project would be consistent with Goal 2.1.
Goal 2.4: A supply of housing in sufficient numbers suitable to meet the diverse needs of future residents and to support healthy economic development without creating an oversupply of any particular type of housing.	Consistent. The proposed project would redevelop the vacant site with 37 new single-family residences, which would assist in meeting the diverse needs of future residents. In addition, the project would provide 3 different plans and architectural styles for the single-family residences, which would support healthy economic development and an oversupply of a particular type of housing would not occur. Therefore, the project would be consistent with Goal 2.4.

ISSUES & SUPPORTING INFORMATION SOURCES:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Policy 2.2.8: The primary purpose of areas designated Residential 10 is to provide for a variety of residential products and to encourage innovation in housing types. Developments within Residential 10 areas are typically expected to provide amenities not generally found in suburban subdivisions, such as common open space and recreational areas. The maximum allowable density shall be 10.0 dwelling units per acre.	Consistent. The proposed project would redevelop the project site with single-family residences at a density of 7.9 dwelling unit per acre, which would be consistent with the maximum allowable density of 10 dwelling units per acre. Therefore, the project would be consistent with Policy 2.2.8.				
Policy 2.2.12: Planned Unit Developments (PUD) shall be encouraged for residential construction in order to provide housing that is varied by type, design, form of ownership, and size. PUD's shall also provide opportunities to cluster units to protect significant environmental features and/or provide unique recreational facilities.	Consistent. As described in the Project Description, the proposed project would provide 3 different plans and 3 different architectural styles for the single-family residences to provide housing that is varied by type, design, and size. In addition, the project would provide sidewalks and landscaping along the streets and within common areas. Therefore, the project would be consistent with Policy 2.2.12.				
Policy 2.2.14: Encourage a diversity of housing types, including conventional, factory built, mobile home, and multiple family dwelling units.	Consistent. As described in the previous response, the proposed project would provide 3 different plans and 3 different architectural styles for the single-family residences to provide a diversity of housing types. Therefore, the project would be consistent with Policy 2.2.14.				
Policy 2.3.1: Within individual residential projects, a variety of floor plans and elevations should be offered.	Consistent. As described in the previous response, the proposed project would provide 3 different plans and 3 different architectural styles for the single-family residences. Therefore, the project would be consistent with Policy 2.3.1.				
Policy 2.3.2: Encourage building placement variations, roofline variations, architectural projections, and other embellishments to enhance the visual interest along residential streets.	Consistent. The proposed residential development would be designed with contemporary architectural elements, multi-level rooflines, and a complementary color scheme. Architectural elements in the exterior design would include stucco finish, stone veneer accents, metal awnings and deck railings, and vinyl window and door trim. The project would be designed with Spanish, French, and Cottage style architectural elements. When complete, the development would be representative of a modern residential community. In addition, landscaping improvements associated with the proposed project are anticipated to improve the existing visual character of the project site and would serve to provide increased visual interest along residential streets. Therefore, the project would be consistent with Policy 2.3.2.				
Policy 2.3.3: Discourage the development of single-family residences with a bulk (building mass) that is out of scale with the size of the parcels on which they are located.	Consistent. The proposed project would construct the proposed single-family residences with 3 different plans designed to conform to the size of the parcel on which they are located. Therefore, the project would be consistent with Policy 2.3.3.				
Policy 2.3.4: Design large-scale small lot single family and multiple family residential projects to	Consistent. The proposed project would construct the proposed single-family residences with private				

ISSUES & SUPPORTING INFORMATION SOURCES:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
group dwellings around individual open space and/or recreational features.		open space, as well as a total of 26,401 SF of open space and/or recreational features. The single-family residences would be grouped around a 11,443 SF community recreation area. Therefore, the project would be consistent with Policy 2.3.4.			
Overall, the proposed project would be consistent with development standards required by the RS10 zoning district with the approval of a CUP for a PUD, the Residential: Max. 10 du/ac (R10) General Plan land use designation, as well as the Land Use Element goals and policies related to scenic quality. Thus, the project would not conflict with applicable zoning and other regulations governing scenic quality. Furthermore, the project would increase the visual cohesion between the project site and the surrounding single-family residential area. Hence, the proposed project would not degrade the visual character of the project site and surrounding area; and impacts would be less than significant.					
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less Than Significant Impact. The project site is undeveloped and has no existing source of nighttime lighting. However, the project site is surrounded by sources of nighttime lighting including streetlights along Cactus Avenue, illumination from vehicle headlights, offsite exterior residential related lighting, and interior illumination passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians. The proposed project would include the provision of street lighting and nighttime lighting for security purposes around all of the residences. Implementation of the proposed project would result in a higher intensity development on the project site than currently exists, which would contribute additional sources to the overall ambient nighttime lighting conditions. However, all outdoor lighting would be hooded, appropriately angled away from adjacent land uses, and would comply with the MVMC Section 9.16.280 that will highlight building features and add emphasis to important spaces and entryways, while limiting glare and light trespass onto adjacent properties. Because the project site is within an urban area with various sources of existing nighttime lighting, and the project would be required to comply with the City's lighting regulations that would be verified by the City's Building and Safety Division during the permitting process, the lighting increase in light that would be generated by the project would not adversely affect day or nighttime views in the area. Overall, lighting impacts would be less than significant. Reflective light (glare) can be caused by sunlight or artificial light reflecting from finished surfaces such as window glass or other reflective materials. Generally, darker or mirrored glass would have a higher visible light reflectance than clear glass. Buildings constructed of highly reflective materials from which the sun reflects at a low angle can cause adverse glare. The proposed project would not use highly reflective surfaces, or glass sided buildings. Although the residences would contain windows, the windows would be separated by stucco and architectural elements, which would limit the potential of glare. In addition, as described previously, onsite lighting would be angled down and shielded, which would avoid the potential on onsite lighting to generate glare. Therefore, the project would not generate substantial sources of glare, and impacts would be less than significant.					
Existing Plans, Programs, or Policies None.					
Mitigation Measures None.					
Sources: 1. Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none">Chapter 2 – Community Development Element – Section 2.3 – Community DesignChapter 7 – Conservation Element – Section 7.8 – Scenic Resources<ul style="list-style-type: none">Figure 6-2 – Major Scenic Resources					
2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none">Section 5.11 – Aesthetics<ul style="list-style-type: none">Figure 4.11-1 – Major Scenic Resources					

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code</p> <ul style="list-style-type: none"> Section 9.10.110 – Light and Glare of the Moreno Valley Municipal Code. Chapter 9.16 – Design Guidelines Section 9.17.030 G – Heritage Trees <p>4. California Department of Transportation, California Scenic Highway Mapping System. 2021. Accessed: at https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (Accessed February 22, 2021).</p>				
<p>II. AGRICULTURE AND FOREST RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board.</p> <p>Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. The project site is identified by the California Department of Conservation Important Farmland Finder as "Farmland of Local Importance" (CDC 2020). The project site is not designated as Prime, Unique, or Farmland of Statewide Importance. Thus, the proposed project would not result in impacts related to conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.</p>				
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"/>
<p>Response: No Impact. The project site has an existing zoning designation of Residential 5 District (R5). The project site is not zoned for agricultural use and is not subject to a Williamson Act contract. Thus, the proposed project would not result in impacts related to conflict with an existing agricultural zoning or Williamson Act contract.</p>				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined 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"/>
<p>Response: No Impact. No forest land exists on or adjacent to the project site. The project site has a zoning designation for residential and is not zoned for forest land or timberland uses. Thus, the proposed project would not result in impacts related to conflict with an existing forest land or timberland zoning.</p>				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. No forest land exists on the project site. Thus, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use, and impacts would not occur.</p>				
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response:</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>No Impact. As described in the responses above, the project area does not include farmland or forest land; thus, implementation of the proposed project would not 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. Impacts would not occur.</p>				
<p>Existing Plans, Programs, or Policies None.</p>				
<p>Mitigation Measure None.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 7 – Conservation Element – Section 7.7 – Agricultural Resources Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.8 – Agricultural Resources <ul style="list-style-type: none"> Figure 4.8-1 – Important Farmlands Title 9 – Planning and Zoning of the Moreno Valley Municipal Code California Department of Conservation, Important Farmland Finder. 2016. Available: https://maps.conservation.ca.gov/dlrp/ciff/ (Accessed February 22, 2021). 				
<p>III. 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:</p>				
<p>a) Conflict with or obstruct implementation of the applicable air quality plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The project site is located in the South Coast Air Basin (SCAB), which is under the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, SCAQMD and SCAG uses regional growth projections to forecast, inventory, and allocate regional emissions from land use and development-related sources.</p> <p>As described in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993), for purposes of analyzing consistency with the AQMP, if a proposed project would result in growth that is substantially greater than what was anticipated, then the proposed project would conflict with the AQMP. On the other hand, if a project's density is within the anticipated growth of a jurisdiction, its emissions would be consistent with the assumptions in the AQMP, and the project would not conflict with SCAQMD's attainment plans. In addition, the SCAQMD considers projects consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.</p> <p>The proposed project is a residential development project on a currently vacant site. The site is located within a residential area of Moreno Valley. The proposed project would develop 37 single-family residences on the site. As further described in Section 14, Population and Housing, would result in the addition of approximately 143 new residents, which would represent a population increase of approximately 0.07 percent and a 0.06 percent increase in residential units within the City. This limited level of growth on a site that has been previously developed would not exceed growth projections and would be consistent with the assumptions in the AQMP.</p> <p>In addition, emissions generated by construction and operation of the proposed project would not exceed thresholds. As described in the analysis below, the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation. Therefore, impacts related to conflict with the AQMP from the proposed project would be less than significant.</p>				
<p>b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially
Significant
Impact

Less Than
Significant with
Mitigation
Incorporated

Less Than
Significant
Impact

No
Impact

Response:

Less Than Significant Impact. The SCAB is in a non-attainment status for federal ozone standards, federal carbon monoxide standards, and state and federal particulate matter standards. Any development in the SCAB, including the proposed project, could cumulatively contribute to these pollutant violations. The methodologies from the SCAQMD CEQA Air Quality Handbook are used in evaluating project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1. Should construction or operation of the proposed project exceed these thresholds a significant impact could occur; however, if estimated emissions are less than the thresholds, impacts would be considered less than significant.

Table AQ-1: SCAQMD Regional Daily Emissions Thresholds

Pollutant	Construction (lbs/day)	Operations (lbs/day)
NOx	100	55
VOC	75	55
PM-10	150	150
PM-2.5	55	55
SOx	150	150
CO	550	550

Source: CalEEMod Emission Summary (Appendix A)

Construction

Construction activities associated with the proposed project would generate pollutant emissions from the following: (1) demolition and removal of the existing onsite improvements and recycling debris; (2) grading and excavation; (3) construction workers traveling to and from project site; (4) delivery and hauling of construction supplies to, and debris from, the project site; (5) fuel combustion by onsite construction equipment; (6) building construction; application of architectural coatings; and paving. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring.

It is mandatory for all construction projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM-10, and PM-2.5 emissions from construction activities. Rule 403 requirements include, but are not limited to: applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12-inches, and maintaining effective cover over exposed areas. Compliance with Rule 403 was accounted for in the construction emissions modeling for the project. In addition, implementation of SCAQMD Rule 1113 that governs the VOC content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling for the project. As shown in Table AQ-2, CalEEMod results indicate that construction emissions generated by the proposed project would not exceed SCAQMD regional thresholds.^{1,2} Therefore, emissions from construction activities would be less than significant.

¹ It should be noted the air quality analysis analyzed 38 dwelling units based on an earlier iteration of the project's site plan. As the project proposes 37 dwelling units, the project-generated emissions calculated in the air quality analysis are therefore highly conservative.

² It should be noted that the air quality analysis was modeled using CalEEMod Version 2020.4 (V2020.4). The latest version of CalEEMod, V2022.1, was run for the project using 11th Edition Trip rates and found that impacts from construction & operation would continue to be less than significant utilizing the latest CalEEMod version.

Table AQ-2: Construction Emissions Summary

Construction Activity	Maximum Daily Regional Emissions ⁽¹⁾ (pounds/day)					
	ROG	NO _x	CO	SO _x	PM-10	PM-2.5
2021						
Site Preparation	5.4	60.8	22.6	0.1	7.5	5.1
Grading	4.1	67.5	20.6	0.1	5.8	3.2
Building Construction	2.2	18.9	18.4	0.0	1.6	1.0
Maximum Daily Emission	5.4	67.5	22.6	0.1	7.5	5.1
2022						
Paving	1.3	9.5	12.9	0.0	0.7	0.6
Architectural Coating	49.1	1.4	2.1	0.0	0.2	0.1
Maximum Daily Emission	49.1	9.5	12.9	0.0	0.7	0.8
2021 to 2022 Maximum Daily Emissions	49.1	67.5	22.6	0.1	7.5	5.1
SCAQMD Significance Thresholds	75	100	550	150	150	55
Emissions Exceed Thresholds?	No	No	No	No	No	No
Notes: ROG = reactive organic gases NO _x = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide SO _x = sulfur oxides PM emissions reflect SCAQMD Rule 403 reductions Source: see CalEEMod model output						

Source: CalEEMod Emission Summary (Appendix A)

Operation

Operation of the 37 single-family residences would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products. However, vehicular emissions would generate a majority of the operational emissions from the project.

Operational emissions associated with the proposed project were modeled using CalEEMod and are presented in Table AQ-3. As shown, the proposed project would result in long-term regional emissions of the criteria pollutants that would be below the SCAQMD's applicable thresholds. Therefore, operation of the project would not result in a cumulatively considerable net increase of any criteria pollutant impacts, and operational impacts would be less than significant.

Table AQ-3: Summary of Peak Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)				
	ROG	NO _x	CO	PM-10	PM-2.5
Area	3.1	0.0	3.3	0.0	0.0
Energy	0.0	0.3	0.1	0.0	0.0
Mobile	0.7	5.4	8.9	2.9	0.8
Total Project Operational Emissions	3.9	5.7	12.3	2.9	0.8
SCAQMD Significance Threshold	55	55	550	150	55

ISSUES & SUPPORTING INFORMATION SOURCES:				Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Exceed Threshold?	No	No	No	No	No	
Notes: NO _x = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter ROG = reactive organic gases PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide Source: see CalEEMod model output Source: CalEEMod Emission Summary (Appendix A)							

c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Response:
Less Than Significant Impact. The SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008) recommends the evaluation of localized NO₂, CO, PM-10, and PM-2.5 construction-related impacts to sensitive receptors in the immediate vicinity of the project site. Such an evaluation is referred to as a localized significance threshold (LST) analysis. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). SCAQMD has developed LSTs that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NO_x, CO, PM-10, and PM-2.5 pollutants for each of the 38 source receptor areas (SRAs) in the SCAB. The project site is located within SRA 24, Perris Valley. The LSTs for this SRA were applied to the project.

Sensitive receptors can include residences, schools, playgrounds, childcare centers, athletic facilities. The nearest sensitive receptors are existing residences are located adjacent to the project site. The distance between the project site boundary and the closest existing residential structure is located north of the project site boundary approximately 10-feet from the property line. Therefore, the distance for sensitive receptors in the LST assessment was set at 25 meters, the shortest distance contained in the SCAQMD LST emission look-up tables (AQ 2020).

Construction

The localized thresholds from the mass rate look-up tables in SCAQMD's *Final Localized Significance Threshold Methodology* document, were developed for use on projects that are less than or equal to 5-acres in size or have a disturbance of less than or equal to 5 acres daily. The project site is approximately 4.81 acres. Therefore, the use of the LSTs for a 5-acre project were used in the Air Quality Assessment (AQ 2020).

Table AQ-4 identifies the localized impacts at the nearest receptor location in the vicinity of the project. As shown, project construction-source emissions would not exceed the applicable SCAQMD LSTs for emissions of any criteria pollutant. Thus, implementation of the project would not result in a localized air quality impact.

Table AQ-4: Localized Significance Summary of Construction

Construction Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO _x	CO	PM-10	PM-2.5
2021				
Site Preparation	60.8	21.9	7.3	5.0
Grading	40.0	16.4	3.3	2.4
Building Construction	17.4	16.6	1.0	0.9
Maximum Daily Emission	60.8	21.9	7.3	5.0
2022				
Paving	9.5	12.2	0.5	0.5
Architectural Coating	1.4	1.4	0.1	0.1
Maximum Daily Emission	9.5	12.2	0.5	0.5

ISSUES & SUPPORTING INFORMATION SOURCES:			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
2021 to 2022 Maximum Daily Emissions	60.8	21.9	7.3	5.0		
SCAQMD Significance Thresholds	224	1,250	10	6		
Emissions Exceed Thresholds?	No	No	No	No		
Notes: NOx = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide PM emissions reflect SCAQMD Rule 403 emission reductions Source: see CalEEMod model output						

Source: CalEEMod Emission Summary (Appendix A)

As described in Response 4.3(b), the proposed project would not significantly increase long-term emissions within the project area. Construction of the proposed project may expose nearby residential sensitive receptors to airborne particulates as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD's standard construction practices (Rules 402 and 403, as included as PPP AQ-1 and PPP AQ-2). Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during construction, and impacts would be less than significant.

Operation

For operational LSTs, onsite passenger car and truck travel emissions were modeled. The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state Ambient Air Quality Standards. As shown on Table AQ-5, operational emissions would not exceed the SCAQMD's localized significance thresholds for any criteria pollutant at the nearest sensitive receptor. Therefore, localized air quality impacts from operational activities would be less than significant.

Table AQ-5: Localized Significance Summary of Operations

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO _x	CO	PM-10	PM-2.5
Area	0.0	3.3	0.0	0.0
Energy	0.3	0.1	0.0	0.0
Mobile	3.2	1.5	0.1	0.0
Total Project Operational Emissions	3.6	5.0	0.1	0.1
SCAQMD Significance Threshold	270	1,577	4	2
Exceed Threshold?	No	No	No	No
Notes: NOx = oxides of nitrogen PM-10 = particulate matter 10 microns or less in diameter PM-2.5 = particulate matter 2.5 microns or less in diameter CO = carbon monoxide Source: see CalEEMod model output				

Source: CalEEMod Emission Summary (Appendix A)

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"/>
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Response:

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>No Impact. The proposed project would not emit other emissions, such as those generating objectionable odors, that would affect a substantial number of people. The threshold for odor is identified by SCAQMD Rule 402, Nuisance, which states:</p> <p><i>A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.</i></p> <p>The type of facilities that are considered to result in other emissions, such as objectionable odors, include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.</p> <p>The proposed project would implement residential development within the project area that does not involve the types of uses that would emit objectionable odors affecting a substantial number of people. In addition, odors generated by non-residential land uses are required to be in compliance with SCAQMD Rule 402, which would prevent nuisance odors.</p> <p>During construction, emissions from construction equipment, architectural coatings, and paving activities may generate odors. However, these odors would be temporary, intermittent in nature, and would not affect a substantial number of people. The noxious odors would be confined to the immediate vicinity of the construction equipment. Also, the short-term construction-related odors would cease upon the drying or hardening of the odor-producing materials. Therefore, impacts associated with other emissions, such as odors, would not adversely affect a substantial number of people and impacts would be less than significant.</p>				
<p><u>Existing Plans, Programs, or Policies</u></p> <p>PPP AQ-1: Rule 402. The project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 402. The project shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.</p> <p>PPP AQ-2: Rule 403. The project is required to comply with the provisions of South Coast Air Quality Management District (SCAQMD) Rule 403, which includes the following:</p> <ul style="list-style-type: none"> • All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions. • The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project are watered, with complete coverage of disturbed areas, at least 3 times daily during dry weather; preferably in the mid-morning, afternoon, and after work is done for the day. • The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 miles per hour or less. <p>PPP AQ-3: Rule 1113. The project is required to comply with the provisions of South Coast Air Quality Management District Rule (SCAQMD) Rule 1113. Only “Low-Volatile Organic Compounds” paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications shall be used.</p>				
<p><u>Mitigation Measure</u> None.</p>				
<p>Sources:</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 5 – Circulation Element Chapter 6 – Safety Element – Section 6.6 – Air Quality Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.3 – Air Quality <ul style="list-style-type: none"> Figure 4.3-1 – South Coast Air Basin Appendix C – Air Quality Analysis, P&D Consultants, July 2003 Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> Section 9.10.050 – Air Quality of the Moreno Valley Municipal Code Section 9.10.150 – Odors of the Moreno Valley Municipal Code Section 9.10.170 – Vibration of the Moreno Valley Municipal Code Moreno Valley Municipal Code Section 12.50.040 – Limitations on Engine Idling Summary of CalEEMod Model Runs and Output for the Moreno Valley Residential Project. March 24, 2020. Prepared by Vince Mirabella (Appendix A). South Coast Air Quality Management District Final Localized Significance Threshold Methodology (SCAQMD 2008). Accessed: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf (Accessed May 26, 2021). 				
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact with Mitigation Incorporated. The project site is vacant and undeveloped and has been previously disturbed. A Biological Habitat Assessment was prepared for the proposed project, which included a literature search to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. General plant and wildlife surveys were also conducted to identify any biological resources on or adjacent to the project site. The project site is within the Western Riverside County MSHCP (Multiple Species Habitat Conservation Plan) Reche Canyon/Badlands Area Plan.</p> <p>The Habitat Assessment identified 8 special-status plant species that to have the potential to occur within the project vicinity; however, only the Woven-Spored Lichen (<i>Texosporium sancti-jacobi</i>) was determined to have a low potential for occurrence and was not observed during surveys. The remaining seven special-status plant species were determined to have no potential and be absent from the project site (Gonzalez 2020).</p> <p>The Habitat Assessment identified 30 special-status wildlife species that to have the potential to occur within the project vicinity, one species (Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)) was assumed to be present. However, wildlife species that are covered and adequately conserved by the MSHCP do not include Stephens' Kangaroo rat. Stephens' Kangaroo rat (SKR) is covered under the SKR Habitat Conservation Plan. As a covered species, participation in the SKR Habitat Conservation Plan would provide "take" for SKR species and no additional mitigation except payment of an SKR fee, included as Mitigation Measure BIO-1, would be required (Gonzalez 2020).</p> <p>It was determined that potentially suitable habitat for burrowing owls (<i>Athene cunicularia</i>) is present onsite. The burrowing owl is a state species of special concern and MSHCP Group 3 species that is commonly found in open, dry grasslands, agricultural and range lands, as well as desert habitats with low-growing vegetation. The burrowing owl resides in burrows primarily created, then abandoned, by species such as California ground squirrels (<i>Spermophilus beecheyi</i>) and coyotes (<i>Canis latrans</i>). Therefore, protocol burrowing owl surveys were conducted to determine the presence and use of the site by burrowing owls.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Burrowing owl habitat assessment surveys and focused surveys were conducted in 2020 according to the Burrowing Owl Survey Instructions for the <i>Western Riverside Multiple Species Habitat Conservation Plan Area</i>. The surveys were completed in three steps; Habitat Assessment (Step 1), Focused Burrow Surveys (Step 2A), and Focused Owl Surveys (Step 2B).</p> <p>In Step 1, habitat within the project area was assessed for burrowing owl presence, use, and potential use. Areas with potential burrowing owl habitat, including pasture and debris piles were surveyed by Gonzales Environmental Consulting, LLC for potential burrows. Biologists walked areas of potential habitat while searching for the presence of burrowing owls, potential and active burrows, and owl sign, such as feathers, pellets, and prey items. The survey area included a 150-meter (500-foot) buffer zone outside of the project site. Step 1 of the survey identified suitable burrowing owl habitat on-site due to the presence of low-growing vegetation.</p> <p>In Step 2A, focused burrow surveys were conducted, which included surveys of natural burrows or suitable debris piles. Transect surveys for burrows, including owl signs, were conducted by walking or being escorted through suitable habitat over the entire survey area. The locations of all potential owl burrows, observed owl sign, and observed burrowing owls were recorded and mapped with a GPS device.</p> <p>In Step 2B, focused burrowing owl surveys consisted of seven site visits covering all project areas and adjacent areas. Surveys were conducted in the morning 1 hour before sunrise to 2 hours after sunrise and 1 hour before sunset to 2 hours after sunset. Upon arrival at the survey area and prior to initiating the walking surveys, surveyors used binoculars and/or spotting scopes to scan all suitable habitats, as well as the location of mapped burrows, owl sign, and owls, including perch locations to ascertain owl presence. A survey for owls and owl sign was then conducted by walking through suitable habitat over the entire project site and within the adjacent 150-meter (500-foot) buffer zone. Results of the Step 2A surveys found no owl burrows on the proposed project site or in adjacent areas. In addition, Step 2B found no burrowing owls on the proposed project site or adjacent to the project site (Gonzalez 2020). Although no impacts to this species are anticipated as a result of construction activities, Mitigation Measure BIO-2 has been included to require a preconstruction burrowing owl survey to be conducted prior to the start of ground disturbance activities. With implementation of Mitigation Measures BIO-2, impacts related to burrowing owls would be less than significant.</p> <p>The Habitat Assessment performed by Gonzales Environmental Consulting, LLC identified suitable habitat and substrate for raptors that are protected under the MSHCP, as well as migratory birds that are protected under the Migratory Bird Treaty Act and Section 3503.5 of the California Department of Fish and Wildlife (CDFW) code (Gonzalez 2020). Mitigation Measure BIO-3 has been included to require a qualified biologist to survey the project impact area for the presence of any active raptor nests seven days prior to the onset of construction activities during the raptor nesting season. Mitigation Measure BIO-4 has been included to require pre-construction nesting bird surveys, as well as recommendations for vegetation removal outside of the nesting bird season. With implementation of Mitigation Measure BIO-3 and Mitigation Measure BIO-4, impacts related to protected bird species would also be reduced to a less than significant level.</p> <p>The Habitat Assessment further describes that the special-status wildlife and plant species with the potential to occur on the project site are covered by compliance with the MSHCP, which requires payment of fees, included as existing Plans, Programs, or Policies "PPP BIO-1".</p> <p>Thus, through adherence to the recommendations provided in the Habitat Assessment, payment of the MSHCP mitigation fees (included as PPP BIO-1), and implementation of pre-construction nesting bird surveys, the project would be fully consistent with the MSCHP, CDFW, and USFWS, and impacts would be less than significant with implementation of MM BIO-1, MM BIO-2, MM BIO-3, and MM BIO-4.</p>				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The project site consists of vacant land that has been heavily disturbed by grading. The assessment done by Gonzales Environmental identified there are no state or federal streambed resources on the project site. In addition,				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>MSHCP Section 6.12 riverine resources are not located on the project site, and as such the project does not require permits from Army Corps of Engineers, California Department of Fish and Wildlife, or the Regional Water Quality Control Board. In addition, the project does not contain any vernal pools, wetland habitats, creeks, or rivers (Gonzalez 2020). Thus, impacts to riparian habitat or other sensitive natural community would not occur from implementation of the proposed project.</p>				
<p>c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. As described in the response above, the project site does not contain any drainages, creeks, rivers, or other wetland areas (Gonzalez 2020). The project site does not contain any jurisdictional areas that would be subject to Section 404 of the Clean Water Act, and the proposed project does not involve any hydrological interruption on any existing water resources. Thus, impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act would not occur from implementation of the proposed project.</p>				
<p>d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact with Mitigation Incorporated. The project site is vacant and undeveloped but is adjacent to roadways, disturbed, and developed land uses. Due to the existing conditions of the project site and the surrounding land uses, the project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (Gonzalez 2020). There are no native wildlife nursery sites. However, as described previously, the site includes areas that are suitable for nesting birds that are protected under the Migratory Bird Treaty Act and Section 3503.5 of the CDFW code. Therefore, Mitigation Measure BIO-4 has been included to require pre-construction nesting bird surveys. With implementation of Mitigation Measure BIO-4, impacts to native wildlife nursery sites would not occur and impacts would be less than significant.</p>				
<p>e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. There are no local biological related policies or ordinances, such as a tree preservation policy or ordinance that is applicable to the proposed project. The project site is adjacent to existing non-native ornamental trees that are on the right-of-way on Cactus Avenue, adjacent to the single-family residential areas to the north, and are not subject to any ordinances. The project site contains non-protected native shrubs and herbs as well as non-native grasses and shrubs and one nonnative palm tree. Therefore, implementation of the proposed project would not conflict with local policies or ordinances protecting trees and no impact would occur.</p>				
<p>f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant Impact. The project site occurs within the Western Riverside County MSHCP. As described previously, the project site is located within the Reche Canyon/Badlands Area Plan of the MSHCP, but is not located within a Criteria Area Cell, Core, or Linkage. Furthermore, a habitat survey and surveys for burrowing owl have been conducted as outlined in response 4(a) and further preconstruction surveys and payment of fees would be conducted prior to construction as required by Mitigation Measures BIO-1 through BIO-4. Additionally, the project is required to pay applicable MSHCP fees prior to grading permit approval as outlined in PPP BIO-1. With implementation of PPP BIO-1 and MMs BIO-1 through BIO-4, development of the project site would not conflict with local, regional, or state resource</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
preservation and/or conservation policies. Therefore, no significant impacts would occur as a result of project implementation.				
<p>Existing Plans, Programs, or Policies</p> <p>PPP BIO-1: MSHCP Development Impact Fees. Prior to issuance of a grading or building permit, the project applicant will be required to pay relevant City of Moreno Valley mitigation fees to the City.</p>				
<p>Mitigation Measures</p> <p>Mitigation Measure BIO-1: Payment of SKR Fees. Prior to the issuance of a grading permit, the project applicant shall pay all relevant Stephen's kangaroo rat mitigation fees.</p> <p>Mitigation Measure BIO-2: Preconstruction Burrowing Owl Surveys. Pursuant to the MSHCP Objective 6, for burrowing owl, a preconstruction burrowing owl survey shall be conducted prior to issuance of a grading permit to verify the presence/absence of the owl on the Project site. Within thirty days of the onset of construction activities, a qualified biologist shall survey within 500 feet of the Project site for the presence of any active owl burrows. Any active burrow found during survey efforts shall be mapped on the construction plans. If no active burrows are found, no further mitigation would be required. Results of the surveys shall be provided to the City of Moreno Valley. If nesting activity is present at an active burrow, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owl in the region normally occurs between March and August. To protect the active burrow, the following restrictions to construction activities shall be required until the burrow is no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any active burrow, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any active burrow, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the active burrow shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active burrow is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will either actively or passively relocate the burrowing owl based on direction from the WRC RCA. The biologist shall then remove the burrow so the burrowing owl cannot return to the burrow. Therefore, based on the described construction activities and implementation of mitigation measures as identified, impacts to BUOW would not be significant.</p> <p>Mitigation Measure BIO-3: Preconstruction Raptor Surveys. Seven days prior to the onset of construction activities during the raptor nesting season (February 1 to June 30), a qualified biologist shall survey within 500 feet of the project impact area for the presence of any active raptor nests (common or special status). Any nest found during survey efforts shall be mapped on the construction plans. If no active nests are found, no further mitigation would be required. Results of the surveys shall be provided to the CDFW. If nesting activity is present at any raptor nest site, the active site shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active as determined by a qualified biologist: (1) clearing limits shall be established within a 500-foot buffer around any occupied nest, unless otherwise determined by a qualified biologist, and (2) access and surveying shall be restricted within 300 feet of any occupied nest, unless otherwise determined by a qualified biologist. Any encroachment into the buffer area around the known nest shall only be allowed if the biologist determines that the proposed activity will not disturb the nest occupants. Construction can proceed when the qualified biologist has determined that fledglings have left the nest. If an active nest is observed during the non-nesting season, the nest site shall be monitored by a qualified biologist, and when the raptor is away from the nest, the biologist will flush any raptor to open space areas. A qualified biologist, or construction personnel under the direction of the qualified biologist, shall then remove the nest site so raptors cannot return to a nest.</p> <p>Mitigation Measure BIO-4: Preconstruction Nesting Bird Surveys. If construction is to occur during the MBTA nesting cycle (February 1-September 15) than a nesting bird survey should be conducted by a qualified biologist. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take and is potentially punishable by fines or imprisonment. Active bird nests should be mapped utilizing a hand-held global positioning system (GPS) and a 300' buffer will be flagged around the nest (500' buffer for raptor nests). Construction should not be permitted within the buffer areas while the nest continues to be active (eggs, chicks, etc.).</p>				
Sources:				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 7 – Conservation Element – Section 7.1 – Biological Resources Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.9 – Biological Resources <ul style="list-style-type: none"> Figure 4.9-1 – Planning Area Biological Geographic Sections Figure 4.9-2 – Planning Area Vegetation Community Figure 4.9-3 – Project Site Location within the MSHCP Area Figure 4.9-4 – Reche Canyon/Badlands Area Plan Appendix E – Biological Resources Study, Appendix E Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> Section 9.17.030 G – Heritage Trees Moreno Valley Municipal Code Chapter 8.60 – Threatened and Endangered Species Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), http://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/ Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP), Governing Documents RCHCA, CA Habitat Assessment & Focused Surveys for Burrowing Owl. June 17, 2020. Prepared by Gonzalez Environmental Consulting, LLC (Appendix B). 				
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant. According to the <i>State CEQA Guidelines</i>, a historical resource is defined as something that meets one or more of the following criteria:</p> <ol style="list-style-type: none"> Listed in, or determined eligible for listing in, the California Register of Historical Resources; Listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); Identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or Determined to be a historical resource by the project's Lead Agency. <p>As described previously, the project site is currently vacant. Historic aerial photographs and maps of the project site showed no development in the general vicinity of the project area until after 1976. All improvements, therefore, are less than 45 years of age and considered modern and of no historical consequence (McKenna 2020). Therefore, the project would not cause a substantial adverse change in the significance of a historical resource, and no impact would occur.</p>				
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"/>
<p>Response: Less than Significant Impact with Mitigation Incorporated. The Phase I Cultural Resources Investigation and Paleontological Overview prepared for the project site included an archaeological records search that was completed at the University of California, Riverside, Eastern Information Center (UCR-EIC). The UCR-EIC is the countywide clearing house/repository for all archaeological and cultural studies completed within the Riverside County. All pertinent data was researched, including previous studies for a one mile radius surrounding the project area and the identification of recorded resources within one mile. In addition, the research included review of the current listings (federal, state, and local) for evaluated resources and reviewed historic maps. The records search indicated that the nearest recorded resources are located more than one-half mile from the project site. There are no known significant cultural resources within the project area and any future development will not adversely impact any significant resources (McKenna 2020).</p> <p>As required for compliance with CEQA guidelines and the data requirements of the Office of Historic Preservation (OHP), an intensive field survey was conducted to adequately identify, describe, report, and, if possible, evaluate any cultural resources identified within the project area boundaries. This intensive field survey was conducted on March 7, 2020. No evidence of any prehistoric archaeological sites, prehistoric isolates, historic archaeological sites and/or historic isolates was found within the project area boundaries. In addition, no historic landscape or suggestion of ethnic resources or</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>associations were found. Overall, the property was clear of any evidence of surface cultural resources and the potential for buried resources was determined to be extremely low to nonexistent (McKenna 2020).</p> <p>Based on the negative findings presented above, there are no known cultural resources, significant or not, within or adjacent to the project area. In addition, as discussed previously, based on the results of the cultural resources search and survey, evidence of surface cultural resources and the potential for buried resources was determined to be extremely low to nonexistent (McKenna 2020). Nevertheless, due to archaeological sensitivity in the City and project vicinity, Mitigation Measures CR-1 through CR-5 would be implemented by the project and require archaeological monitoring, a Cultural Resource Monitoring Plan (CRMP), measures for inadvertent finds, and Archeology Reports. With implementation of Mitigation Measures CR-1 through CR-5, impacts to archaeological resources would be less than significant.</p>				
c) Disturb any human remains, including those interred outside of formally dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant Impact with Mitigation Incorporated. The project site has not been previously used as a cemetery. Thus, human remains are not anticipated to be uncovered during project construction. In addition, procedures of conduct following the discovery of human remains on non-federal lands have been mandated by California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, which has been included as Mitigation Measure CR-6. Specifically, California Health and Safety Code Section 7050.5 requires that if human remains are discovered, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of death, and made recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Thus, with compliance with Mitigation Measure CR-6, no impacts would occur.</p>				
<p><u>Existing Plans, Programs, or Policies</u> None.</p>				
<p><u>Mitigation Measures</u></p> <p>Mitigation Measure CR-1: Archaeological Monitoring. Prior to the issuance of a grading permit, the Developer shall retain a professional archaeologist to conduct monitoring of all ground disturbing activities. The Project Archaeologist shall have the authority to temporarily redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction. The Project Archaeologist, in consultation with the Consulting Tribe(s) including the Pechanga Band of Indians, the contractor, and the City, shall develop a CRMP as defined in Mitigation Measure CR-2. The Project archeologist shall attend the pre-grading meeting with the City, the construction manager and any contractors and will conduct a mandatory Cultural Resources Worker Sensitivity Training to those in attendance. The archaeological monitor shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed.</p> <p>Mitigation Measure CR-2: Cultural Resource Monitoring Plan (CRMP). The Project Archaeologist, in consultation with the Consulting Tribe(s), the contractor, and the City, shall develop a CRMP in consultation pursuant to the definition in AB52 to address the details, timing and responsibility of all archaeological and cultural activities that will occur on the project site. A consulting Tribe is defined as a Tribe that initiated the AB 52 tribal consultation process for the Project, has not opted out of the AB52 consultation process, and has completed AB 52 consultation with the City as provided for in Cal Pub Res Code Section 21080.3.2(b)(1) of AB52. Details in the Plan shall include:</p> <ol style="list-style-type: none"> Project description and location Project grading and development scheduling; Roles and responsibilities of individuals on the Project; The pre-grading meeting and Cultural Resources Worker Sensitivity Training details; The protocols and stipulations that the contractor, City, Consulting Tribe (s) and Project archaeologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items.</p> <p>g. Contact information of relevant individuals for the Project;</p> <p>Mitigation Measure CR-3: The City shall verify that the following note is included on the Grading Plan: “If any suspected archaeological resources are discovered during ground –disturbing activities and the Project Archaeologist or Native American Tribal Representatives are not present, the construction supervisor is obligated to halt work in a 100-foot radius around the find and call the Project Archaeologist and the Tribal Representatives to the site to assess the significance of the find.”</p> <p>Mitigation Measure CR-4: Inadvertent Finds. If potential historic or cultural resources are uncovered during excavation or construction activities at the project site that were not assessed by the archaeological report(s) and/or environmental assessment conducted prior to Project approval, all ground disturbing activities in the affected area within 100 feet of the uncovered resource must cease immediately and a qualified person meeting the Secretary of the Interior's standards (36 CFR 61), Tribal Representatives, and all site monitors per the Mitigation Measures, shall be consulted by the City to evaluate the find, and as appropriate recommend alternative measures to avoid, minimize or mitigate negative effects on the historic, or prehistoric resource. Further ground disturbance shall not resume within the area of the discovery until an agreement has been reached by all parties as to the appropriate mitigation. Work shall be allowed to continue outside of the buffer area and will be monitored by additional archeologist and Tribal Monitors, if needed. Determinations and recommendations by the consultant shall be immediately submitted to the Planning Division for consideration, and implemented as deemed appropriate by the Community Development Director, in consultation with the State Historic Preservation Officer (SHPO) and any and all Consulting Native American Tribes as defined in Mitigation Measure CR-1 before any further work commences in the affected area. If the find is determined to be significant and avoidance of the site has not been achieved, a Phase III data recovery plan shall be prepared by the Project Archeologist, in consultation with the Tribe, and shall be submitted to the City for their review and approval prior to implementation of the said plan.</p> <p>Mitigation Measure CR-5: Archeology Report - Phase III and IV. Prior to final inspection, the developer/permit holder shall prompt the Project Archeologist to submit two (2) copies of the Phase III Data Recovery report (if required for the Project) and the Phase IV Cultural Resources Monitoring Report that complies with the Community Development Department's requirements for such reports. The Phase IV report shall include evidence of the required cultural/historical sensitivity training for the construction staff held during the pre-grade meeting. The Community Development Department shall review the reports to determine adequate mitigation compliance. Provided the reports are adequate, the Community Development Department shall clear this condition. Once the report(s) are determined to be adequate, two (2) copies shall be submitted to the Eastern Information Center (EIC) at the University of California Riverside (UCR) and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).</p> <p>Mitigation Measure CR-6: Human Remains. If human remains are discovered, no further disturbance shall occur in the affected area until the County Coroner has made necessary findings as to origin. If the County Coroner determines that the remains are potentially Native American, the California Native American Heritage Commission shall be notified within 24 hours of the published finding to be given a reasonable opportunity to identify the “most likely descendant”. The “most likely descendant” shall then make recommendations, and engage in consultations concerning the treatment of the remains (California Public Resources Code 5097.98). (GP Objective 23.3, CEQA).</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 7 – Conservation Element – Section 7.2 – Cultural and Historical Resources Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.10 – Cultural Resources <ul style="list-style-type: none"> Figure 4.10-1 – Locations of Listed Historic Resource Inventory Structures Figure 4.10-2 – Location of Prehistoric Sites Figure 4.10-3 – Paleontological Resource Sensitive Areas Appendix F – Cultural Resources Analysis, Study of Historical and Archaeological Resources for the Revised General Plan, City of Moreno Valley, Archaeological Associates, August 2003. 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. Moreno Valley Municipal Code Title 7 – Cultural Preservation 5. Cultural Resources Inventory for the City of Moreno Valley, Riverside County, California, prepared by Daniel F. McCarthy, Archaeological Research Unit, University of California, Riverside, October 1987 (<i>This document cannot be provided to the public due to the inclusion of confidential information pursuant to Government Code Section 6254.10.</i>) 6. Phase I Cultural Resources Investigation and Paleontological Overview for Tentative Tract Map No. 37858, City of Moreno Valley, Riverside County, California. March 18, 2020. Prepared by McKenna et al. (Appendix C).				

VI. ENERGY – Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. The project site is currently vacant. The Southern California Gas Company provides natural gas to the surrounding area. Additionally, Southern California Edison currently provides electricity services to the surrounding area. The proposed project would install onsite electrical and natural gas infrastructure that would connect to the existing offsite lines.

Construction

During construction of the proposed project, energy would be consumed in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project sites, construction worker travel to and from the project sites, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction activities related to the proposed building and the associated infrastructure would not be expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in southern California. In addition, the extent of construction activities that would occur is limited to a 12-month period, and the demand for construction-related electricity and fuels would be limited to that time frame.

Construction contractors are required to 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 as part of the City's construction permitting process. In addition, compliance with existing CARB idling restrictions would reduce fuel combustion and energy consumption. The energy modeling shows that project construction electricity usage over the 12-month construction period is estimated to use 14,517 gallons of diesel fuel, as shown in Table E-1.

Table E-1: Estimated Construction Equipment Diesel Fuel Consumption

Activity	Equipment	Project Number	Project Hours per day	Default Horsepower	Default Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Site Preparation	Rubber Tired Dozer	3	8	247	0.4	10	23,712	0.020461	485
	Crawler Tractor	4	8	212	0.43	10	29,171	0.022173	647
Grading	Excavators	1	8	158	0.38	30	28,819	0.019763	570
	Graders	1	8	187	0.41	30	18,401	0.021143	389
	Rubber Tired Dozers	1	8	247	0.4	30	23,712	0.020461	485
	Crawler Tractor	3	8	212	0.43	30	65,635	0.022173	1,455
Building Construction	Crane	1	7	231	0.29	200	93,786	0.014896	1,397
	Forklifts	3	8	89	0.2	200	85,440	0.019105	1,632
	Tractors/Loaders/Backhoes	3	7	97	0.37	200	150,738	0.023965	3,612
	Welders	1	8	46	0.45	200	33,120	0.023965	794
	Generator Set	1	8	84	0.74	200	99,456	0.023965	2,383
Paving	Pavers	2	8	130	0.42	20	17,472	0.021525	376

ISSUES & SUPPORTING INFORMATION SOURCES:						Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Paving Equipment	2	8	132	0.36	20	15,206	0.018334	279
	Rollers	2	8	80	0.38	20	9,728	0.019412	189
Architectural Coating	Air Compressor	1	6	78	0.48	20	4,493	0.023965	108
TOTAL								14,517	

Source: CalEEMod Emission Summary (Appendix A)

Table E-2 shows that construction workers would use approximately 5,278 gallons of fuel to travel to and from the project site, and haul trucks and vendor trucks would use approximately 5,254 gallons of diesel fuel.

Table E-2: Estimated Construction Vehicle Trip Related Fuel Consumption

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	2,902	0
Vendor Trucks	2,352	0
Worker Vehicles	0	5,278
Construction Vehicles Total	5,254	5,278

Source: CalEEMod Emission Summary (Appendix A)

Overall, construction activities would comply with all existing regulations, and would therefore not be expected to use fuel in a wasteful, inefficient, and unnecessary manner. Thus, impacts related to construction energy usage would be less than significant.

Operation

Once operational, the project would generate demand for electricity, natural gas, as well as gasoline for motor vehicle trips. Operational use of energy includes the heating, cooling, and lighting of the residences, water heating, operation of electrical systems and plug-in appliances, and outdoor lighting, and the transport of electricity, natural gas, and water to the residences where they would be consumed. This use of energy is typical for urban development, no additional energy infrastructure would be required to be built to operate the project, and no operational activities would occur that would result in extraordinary energy consumption.

The proposed project would be required to meet the current Title 24 energy efficiency standards. The City's administration of the Title 24 requirements includes review of design components and energy conservation measures that occurs during the permitting process, which ensures that all requirements are met. Typical Title 24 measures include insulation; use of energy-efficient heating, ventilation and air conditioning equipment (HVAC); solar-reflective roofing materials; energy-efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; and incorporation of skylights, etc. In complying with the Title 24 standards, impacts to peak energy usage periods would be minimized, and impacts on statewide and regional energy needs would be reduced. As detailed in Table E-3, operation of the proposed project is estimated to result in the annual use of approximately 47,536 gallons of fuel, approximately 348,659 kilowatt-hour (kWh) of electricity, and approximately 1,223,850 thousand British thermal units (kBTU) of natural gas. Thus, operation of the project would not use large amounts of energy or fuel in a wasteful manner, and operational energy impacts would be less than significant.

Table E-3: Estimated Annual Operational Energy Consumption

Operational Source (value per year)		
Energy Source	Annual VMT	Gallons of Gasoline Fuel
Transportation – Project	1,283,482	47,536 ⁽¹⁾

ISSUES & SUPPORTING INFORMATION SOURCES:		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact														
<table border="1"> <tr> <td colspan="2"></td> </tr> <tr> <td></td> <td>Thousands Kilowatt-Hours</td> </tr> <tr> <td>Electricity – Project</td> <td>348,659</td> </tr> <tr> <td colspan="2"></td> </tr> <tr> <td></td> <td>Thousands British Thermal Units</td> </tr> <tr> <td>Natural Gas – Project</td> <td>1,223,850</td> </tr> <tr> <td colspan="2"> Note: ⁽¹⁾ Based on an average fleet fuel consumption rate of 27 mile/gallon based on EMFAC2017 fuel use and CalEEMod fleet miles. Source: see Fuel Usage Spreadsheet and CalEEMod output Source: CalEEMod Emission Summary (Appendix A) </td> </tr> </table>					Thousands Kilowatt-Hours	Electricity – Project	348,659				Thousands British Thermal Units	Natural Gas – Project	1,223,850	Note: ⁽¹⁾ Based on an average fleet fuel consumption rate of 27 mile/gallon based on EMFAC2017 fuel use and CalEEMod fleet miles. Source: see Fuel Usage Spreadsheet and CalEEMod output Source: CalEEMod Emission Summary (Appendix A)					
	Thousands Kilowatt-Hours																		
Electricity – Project	348,659																		
	Thousands British Thermal Units																		
Natural Gas – Project	1,223,850																		
Note: ⁽¹⁾ Based on an average fleet fuel consumption rate of 27 mile/gallon based on EMFAC2017 fuel use and CalEEMod fleet miles. Source: see Fuel Usage Spreadsheet and CalEEMod output Source: CalEEMod Emission Summary (Appendix A)																			
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														
Response: No Impact. The proposed project would be required to meet the CalGreen energy efficiency standards in effect during permitting of the project. The City's administration of the requirements includes review of design components and energy conservation measures during the permitting process, which ensures that all requirements are met. In addition, the project would not conflict with or obstruct opportunities to use renewable energy, such as solar energy. As discussed, the project proposes to use photovoltaic (PV) solar panels on each of the residences to offset their energy demand in accordance with Title 24. As such, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would not occur.																			
Existing Plans, Programs, or Policies PPP GHG-1: CalGreen Compliance , provided in Section 8, <i>Greenhouse Gas Emissions</i> .																			
Mitigation Measures None.																			
Sources: 1. Moreno Valley General Plan, adopted July 11, 2006 • Chapter 7 – Conservation Element – Section 7.6 – Energy Resources 2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. Summary of CalEEMod Model Runs and Output for the Moreno Valley Residential Project. March 24, 2020. Prepared by Vince Mirabella (Appendix A). 5. City of Moreno Valley Energy Efficiency and Climate Action Strategy. Accessed at: http://www.moval.org/pdf/efficiency-climate112012nr.pdf (Accessed May 27, 2021).																			
VII. GEOLOGY AND SOILS – Would the project:																			
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:																			
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to https://www.conservation.ca.gov/cgs/Documents/SP_042.pdf		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>														

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Response: No Impact. The project site is not located within a designated Alquist-Priolo Earthquake Fault Zone or County of Riverside Fault zone. As described by the Preliminary Soil Investigation prepared for the proposed project, the nearest known active fault zone is the San Jacinto fault zone located approximately 2.78 miles from the project site (GEO 2020). Thus, the proposed project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map, and impacts would not occur.</p>				
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The project site is located within a seismically active region of Southern California. As mentioned previously, the San Jacinto Fault is located approximately 2.78 miles from the site (GEO 2020). Thus, moderate to strong ground shaking can be expected at the site. The amount of motion can vary depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located closer to an earthquake epicenter, that consists of poorly consolidated material such as alluvium, and in response to an earthquake of great magnitude.</p> <p>Structures built in the City are required to be built in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]), included in the Municipal Code as Chapter 8.20. In addition, PPP GEO-1 has been included to provide provisions for earthquake safety based on factors including occupancy type, the types of soils onsite, and the probable strength of the ground motion. Compliance with the CBC would include the incorporation of: 1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; 2) proper building footings and foundations; and 3) construction of the building structures so that it would withstand the effects of strong ground shaking. Because the proposed project would be constructed in compliance with the CBC, the proposed project would result in a less than significant impact related to strong seismic ground shaking.</p>				
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, located within approximately 50 feet of the ground surface, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. During the loss of stress, the soil acquires “mobility” sufficient to permit both horizontal and vertical movements. Soil properties and soil conditions such as type, age, texture, color, and consistency, along with historical depths to ground water are used to identify, characterize, and correlate liquefaction susceptible soils.</p> <p>Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Lateral spreading is a form of seismic ground failure due to liquefaction in a subsurface layer.</p> <p>According to the Preliminary Soil Investigation for the proposed project, the site is located within an area of moderate liquefaction potential. Liquefaction is a process in which strong ground shaking causes saturated soils to lose their strength and behave as a fluid. The potential for and magnitude of lateral spreading is dependent upon many conditions, including the presence of a relatively thick, continuous, potentially liquefiable sand layer and high slopes. Subsurface information obtained from the Preliminary Soil Investigation indicates that after compaction onsite soils, indicated settlement of saturated sands is 0 inches and unsaturated sands is 1.14 inches. Based on currently available procedures, the site does not appear to be susceptible to lateral spread during a moderate seismic event. In addition, the Preliminary Soil Investigation determined that groundwater, seepage or wet soils were not encountered in exploratory borings drilled to a maximum depth of 50 feet (GEO 2020).</p> <p>In addition, as described previously, structures built in the City are required to be built in compliance with the CBC, as included in the City’s Municipal Code as Chapter 8.20 (and herein as PPP GEO-1), which implements specific requirements for seismic safety, excavation, foundations, retaining walls and site demolition. Compliance with the CBC, as included as PPP GEO-1, would require specific engineering design recommendations be incorporated into grading plans and building specifications as a condition of construction permit approval to ensure that project structures would withstand the effects of seismic ground movement, including liquefaction and settlement. Compliance with the</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
requirements of the CBC and City's municipal code for structural safety (included as PPP GEO-1) would reduce hazards from seismic-related ground failure, including liquefaction and settlement to a less than significant level.				
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquakes induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.</p> <p>As described above, the project site is located in a seismically active region subject to strong ground shaking. However, the project site is flat and does not contain any hills or any other areas that could be subject to landslides. In addition, the local vicinity is flat and does not contain any hills. Therefore, the project would not cause potential substantial adverse effects related to slope instability or seismically induced landslides.</p>				
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Construction of the project has the potential to contribute to soil erosion and the loss of topsoil. Grading and excavation activities that would be required for the proposed project would expose and loosen topsoil, which could be eroded by wind or water.</p> <p>The City's Municipal Code Section 8.21.170 implements all applicable requirements of the State Water Resources Control Board (SWRCB) and the Santa Ana Regional Water Quality Control Board (SARWQCB), and all projects in the City are required to conform to the permit requirements. This includes installation of Best Management Practices (BMPs) in compliance with the NPDES permit, which establishes minimum stormwater management requirements and controls that are required to be implemented for the proposed project. To reduce the potential for soil erosion and the loss of topsoil, a Stormwater Pollution Prevention Plan (SWPPP) is required by the Regional Water Quality Control Board (RWQCB) regulations to be developed by a QSD (Qualified SWPPP Developer). The SWPPP is required to address site-specific conditions related to specific grading and construction activities such as, potential sources of erosion and sedimentation loss of topsoil during construction, and identification of erosion control BMPs to reduce or eliminate the erosion and loss of topsoil, such as use of silt fencing, fiber rolls, or gravel bags, stabilized construction entrance/exit, hydroseeding. With compliance with the City's Municipal Code, RWQCB requirements, and the BMPs in the SWPPP that are required to be prepared to implement the project (included as PPP WQ-1), construction impacts related to erosion and loss of topsoil would be less than significant.</p> <p>In addition, the proposed project includes installation of landscaping, such that during operation of the project substantial areas of loose topsoil that could erode would not exist. In addition, as described in Section 10, <i>Hydrology and Water Quality</i>, the onsite drainage features that would be installed by the project have been designed to slow, filter, and slowly discharge stormwater into the offsite drainage system, which would also reduce the potential for stormwater to erode topsoil during project operations. Furthermore, implementation of the project requires City approval of a site specific Water Quality Management Plan (WQMP), which would ensure that the City's Municipal Code, RWQCB requirements, and appropriate operational BMPs would be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil to occur. As a result, potential impacts related to substantial soil erosion or loss of topsoil would be less than significant.</p>				
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. As described above, the project site is flat, and does not contain nor is adjacent to any slope or hillside area. The project would not create slopes. Thus, on or off-site landslides would not occur from implementation of the project.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Lateral spreading, a phenomenon associated with seismically induced soil liquefaction, is a display of lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. It is typically exemplified by the formation of vertical cracks on the surface of liquefied soils, and usually takes place on gently sloping ground or level ground with nearby free surface such as drainage or stream channel. According to the Preliminary Soil Investigation, subsurface information indicates that high slopes are not anticipated. In addition, based on currently available procedures, the site does not appear to be susceptible to (lateral spread) ground surface disruption during a moderate seismic event (GEO 2020). Thus, the soils are not susceptible to lateral spreading and impacts related to liquefaction and lateral spreading would be less than significant.</p> <p>Differential settlement or subsidence could occur if buildings or other improvements are built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause building damage over time. Seismic settlement in dry soils generally occurs in loose sands and silty sands, with cohesive soils being less prone to significant settlement. The Preliminary Soil Investigation determined that overexcavation and recompaction of loose surficial soils are anticipated to provide adequate and uniform support for the proposed structures (GEO 2020). Project design and implementation would comply with the recommendations of the required Preliminary Soil Investigation prepared for the project site, which would ensure impacts related to settlement and subsidence would be less than significant.</p> <p>In summary, with implementation of the recommendations in the project's Preliminary Soil Investigation, potentially significant impacts related to unstable soils or geologic units that would become unstable as a result of the project, resulting in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse, would be reduced to a less than significant level, and no mitigation would be required.</p>				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experiences, such as southern California, have a higher potential of expansive soils than areas with higher rainfall and more constant soil moisture.</p> <p>The Preliminary Soil Investigation performed an evaluation of the potential for expansive soils at the site, which determined that the expansion potential of onsite near surface silty sands is expected to be very low (EI<20) (GEO 2020). However, as described previously, compliance with the CBC, included as PPP GEO-1, would require specific engineering design recommendations be incorporated into grading plans and building specifications as a condition of construction permit approval to ensure that project structures would withstand the effects of related to ground movement, including expansive soils. Thus, impacts would be less than significant.</p>				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. The project would not use septic tanks or alternative methods for disposal of wastewater into subsurface soils. Furthermore, the proposed project would connect to existing public wastewater infrastructure. Therefore, the project would not result in any impacts related to septic tanks or alternative wastewater disposal methods.</p>				
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"/>
<p>Response: Less than Significant Impact with Mitigation Incorporated. The Phase 1 Cultural and Paleontological Resources Assessment prepared for the project included a locality search through the Natural History Museum of Los Angeles County (LACM) to identify any previously identified paleontological resources near the project site.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The Phase 1 Cultural and Paleontological Overview determined that the project area consists of surficial deposits of younger Quaternary deposits overlying older Quaternary deposits. The younger deposits are not conducive to yielding paleontological specimens. However, the deeper, older alluvial deposits may, in fact, yield such resources. The project area should be considered sensitive for buried paleontological resources (McKenna 2020).</p> <p>Therefore, based on the results of the Phase I Paleontological Resources Assessment, the project area is considered to have high sensitivity for the potential to impact paleontological resources during construction activities at or below 5 feet in undisturbed sedimentary deposits. McKenna recommends preparation of a Paleontological Resources Impact Mitigation Plan (PRIMP) prior to construction excavation. Thus, Mitigation Measure PAL-1 has been included to require preparation of a PRMP and that a professional paleontologist be hired to oversee monitoring. With implementation of Mitigation Measure PAL-1, impacts to paleontological resources would be less than significant.</p>				
<p>Existing Plans, Programs, or Policies</p> <p>PPP GEO-1: California Building Code. The project is required to comply with the California Building Code as included in the City's Municipal Code Chapter 8.20 to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer specifications for the project are required to be incorporated into grading plans and specifications as a condition of project approval.</p> <p>PPP WQ-1: Stormwater Pollution Prevention Plan, provided in Section 10, <i>Hydrology and Water Quality</i>.</p> <p>PPP WQ-2: Water Quality Management Plan, provided in Section 10, <i>Hydrology and Water Quality</i>.</p>				
<p>Mitigation Measures</p> <p>Mitigation Measure PAL-1: Paleontological Resources. A paleontologist selected from the roll of qualified paleontologists maintained by the City shall be retained to provide spot-check monitoring services for the project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. The PRIMP shall require paleontological spot-check monitoring of excavation that exceeds depths of 5 feet. The PRIMP shall state that the project paleontologist shall re-evaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations deeper than 5 feet have been completed.</p> <p>In the event that paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered.</p> <p>Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 6 – Safety Element – Section 6.5 – Geologic Hazards <ul style="list-style-type: none"> Figure 5-3 – Geologic Faults & Liquefaction Chapter 7 – Conservation Element – Section 7.4 -- Soils Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.6 – Geology and Soils <ul style="list-style-type: none"> Figure 4.6-1 – Geology Figure 4.6-2 – Seismic Hazards 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ol style="list-style-type: none"> 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. Moreno Valley Municipal Code Chapter 8.21 – Grading Regulations 5. Local Hazard Mitigation Plan, City of Moreno Valley Fire Department, adopted October 4, 2011, amended 2017, http://www.moval.org/city_hall/departments/fire/pdfs/haz-mit-plan.pdf <ul style="list-style-type: none"> • Chapter 4 – Earthquake <ul style="list-style-type: none"> - Figure 3-1 – Right-Lateral Strike -Slip Fault - Figure 3-1.1 – Moreno Valley Geologic Faults and Liquefaction 2016 - Figure 3-1.2 – Moreno Valley Area Ground Shaking Map • Chapter 8 – Landslide <ul style="list-style-type: none"> - Figure 7-1 – Moreno Valley Slope Analysis 2016 6. Emergency Operations Plan, City of Moreno Valley, March 2009, http://www.moval.org/city_hall/departments/fire/pdfs/mv-eop-0309.pdf <ul style="list-style-type: none"> • Threat Assessment 1 – Major Earthquakes <ul style="list-style-type: none"> - Figure 8 – Types of Faults - Figure 9 – Earthquake Faults - Figure 11 – Comparison of Richter Magnitude and Modified Mercalli Intensity - Figure 12 – Magnitude 4.5 or Greater Earthquake Map - Figure 13 – Geologic Faults and Liquefaction 7. Phase I Cultural Resources Investigation and Paleontological Overview for Tentative Tract Map No. 37858, City of Moreno Valley, Riverside County, California. March 18, 2020. Prepared by McKenna et al. (Appendix D). 8. Preliminary Soil Investigation, Infiltration Test and Liquefaction Evaluation Report, Proposed Residential Development Site (41 Lots), Cactus Avenue and Bradshaw Circle (APN 478-090-018, -024 and -025), City of Moreno Valley, California. January 21, 2020. Prepared by Soil Exploration Company, Inc. (Appendix E). 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
<p>GHG Thresholds</p> <p>The City of Moreno Valley has not adopted a numerical significance threshold to evaluate greenhouse gas (GHG) impacts. SCAQMD does not have approved thresholds; however, it does have draft thresholds that provides a tiered approach to evaluate GHG impacts, which includes the following:</p> <ul style="list-style-type: none"> • Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. • Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions. • Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant: <ul style="list-style-type: none"> ○ Residential and Commercial land use: 3,000 MTCO₂e per year ○ Industrial land use: 10,000 MTCO₂e per year ○ Based on land use type: residential: 3,500 MTCO₂e per year; commercial: 1,820 MTCO₂e per year; or mixed use: 3,000 MTCO₂e per year <p>The SCAQMD's draft threshold uses the Executive Order S-3-05 year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 ppm, thus stabilizing global climate. Therefore, for purposes of examining potential GHG impacts from implementation of the proposed project, and to provide a conservative analysis of potential impacts, the Tier 3 screening level for all land use projects of 3,000 MTCO₂e was selected as the significance threshold (AQ 2020).</p> <p>In addition, SCAQMD methodology for project's construction are to average them over 30-years and then add them to the project's operational emissions to determine if the project would exceed the screening values listed above (AQ 2020).</p> <p>Climate Action Plan</p> <p>The City of Moreno Valley adopted an Energy Efficiency and Climate Action Strategy document in 2012. The Energy Efficiency and Climate Action Strategy is a policy document which identifies ways that the City can reduce energy and water consumption and GHG emissions as an organization (its employees and the operation of its facilities) and outlines the actions that the City can encourage and community members can employ to reduce their own energy and water consumption and GHG emissions. The project involves the construction and operation of 37 single-family residences that would fall under the scope of these policies.</p>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response:</p> <p>Less Than Significant Impact. Construction activities produce GHG emissions from various sources, such as site excavation, grading, utility engines, heavy-duty construction vehicles onsite, equipment hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew.</p> <p>In addition, operation of the proposed residences would result in area and indirect sources of operational GHG emissions that would primarily result from vehicle trips, electricity and natural gas consumption, water transport (the energy used to pump water), and solid waste generation. GHG emissions from electricity consumed by the residences would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

The estimated operational GHG emissions that would be generated from implementation of the proposed project are shown in Table GHG-1.³ Additionally, in accordance with SCAQMD recommendation, the project's amortized construction related GHG emissions are added to the operational emissions estimate in order to determine the project's total annual GHG emissions.

Table GHG-1: Greenhouse Gas Emissions

Activity	Annual GHG Emissions (MTCO ₂ e)
Project Operational Emissions	0
Area	150
Energy	585
Mobile	24
Waste	16
Water	775
Total	
Project Construction Emissions	15
Project Construction and Operation	790
Significance Threshold	3,000
Project Exceeds Threshold?	No

Source: CalEEMod, Appendix A

As shown on Table GHG-1, the combined construction and operation of the project would result in a total increase in GHG emissions of 790 MTCO₂e per year, which would not exceed the significance threshold of 3,000 MTCO₂e per year.⁴ Therefore, impacts related to greenhouse gas emissions would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?



Response:

No Impact. The proposed project would redevelop the site with single-family residences that would comply with state programs that are designed to be energy efficient. The proposed project would comply with all mandatory measures under the California Title 24, California Energy Code, and the CalGreen Code, which would provide efficient energy and water consumption. The City's administration of the requirements includes review of the energy conservation measures during the permitting process, which ensures that all requirements are met. In addition, the project includes photovoltaic (PV) solar panels to offset the energy demand. Therefore, the proposed project would not conflict with existing plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gas.

Existing Plans, Programs, or Policies

PPP GHG-1: CalGreen Compliance. The project is required to comply with the CalGreen Building Code as included in the City's Municipal Code to ensure efficient use of energy. CalGreen specifications are required to be incorporated into building plans as a condition of building permit approval.

³ It should be noted the GHG analysis analyzed 38 dwelling units based on an earlier iteration of the project's site plan. As the project proposes 37 dwelling units, the project-generated emissions calculated in the GHG analysis are therefore highly conservative.

⁴ It should be noted that the air quality analysis was modeled using CalEEMod Version 2020.4 (V2020.4). The latest version of CalEEMod, V2022.1, was run for the project using 11th Edition Trip rates and found that GHG impacts from construction & operation would continue to be less than significant utilizing the latest CalEEMod version.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Mitigation Measures None.				
Sources: <ol style="list-style-type: none"> 1. Moreno Valley General Plan, adopted July 11, 2006 2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. California's 2017 Climate Change Scoping Plan, prepared by the California Air Resources Board, November 2017, https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, (Accessed May 27, 2021) 5. Summary of CalEEMod Model Runs and Output for the Moreno Valley Residential Project. March 24, 2020. Prepared by Vince Mirabella (Appendix A). 6. City of Moreno Valley Energy Efficiency and Climate Action Strategy. Accessed at: http://www.moval.org/pdf/efficiency-climate112012nr.pdf (Accessed May 27, 2021) 				
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: <p>Less Than Significant Impact. A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that regulatory agencies have a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the home, workplace, or environment. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.</p> <p>Construction The proposed construction activities would involve the routine transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking during construction activities. In addition, hazardous materials would routinely be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state regulations that are implemented by the City during building permitting for construction activities. Construction would also include temporary dewatering during excavation for utility installations if the excavation is deep enough to encounter groundwater. If such excavations are in the vicinity of the impacted groundwater in the northeast portion of the site, the water would either be contained and transported to a licensed off-site treatment facility or treated on site before discharge under a county permit to the sanitary sewer. As a result, construction of the project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.</p> <p>Operation The project involves operation of 37 new single-family residences. Residential uses typically do not present a hazard associated with the accidental release of hazardous substances into the environment because residents are not anticipated to use, store, dispose, or transport large volumes of hazardous materials. Hazardous substances associated with residential uses are typically limited in both amount and use. Project operation would involve the use of potentially hazardous materials (e.g., solvents, cleaning agents, paints, fertilizers, and pesticides) typical of residential uses that, when used correctly and in compliance with existing laws and regulations, would not result in a significant hazard to people in the vicinity of the proposed project. Therefore, impacts associated with the disposal of hazardous materials and/or the potential release of hazardous materials that could occur with the implementation of the proposed project would be less than significant.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. A Phase I ESA was prepared by Robin Environmental Management (REM) in April 2020 for the project site. The purpose of the Phase I analysis was to evaluate the project site for potential Recognized Environmental Concerns (RECs) that may be present, off-site conditions that may impact the subject property, and/or conditions indicative of releases or threatened releases of hazardous substances on, at, in, or to the project site. ASTM defines a Recognized Environmental Condition (REC) as "the presence or likely presence of an hazardous substance or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment."</p> <p>The Phase I ESA was performed in conformance with the scope and limitations of ASTM Practice E-1527-13 with a field survey of the subject site and adjacent properties on April 15, 2020.</p> <p>According to the Phase I, the subject property was not recognized being listed on the following environmental regulatory database record research (NETR database): NPL, RCRA-TSD, CERCLIS, NFRAP, RCRA-G, ERNS, CORRACTS, CORTESE, CALSITES, LUST, UST, and SWF (Phase I 2020). In addition, based on the conducted government records search, there is one Emergency Response Notification System site (the 22520 Cactus Ave site) shown as a potential environmental concern within the vicinity of the project site. However, the Phase I checked the location of 22520 Cactus Avenue site, a Chevron gas station, via internet search and concluded that the 22520 Cactus Avenue site is actually located in the southwestern portion of the City of Moreno Valley, several miles to the west of the subject property, and was misplaced by the conducted government records search as nearby site with environmental concern (Phase I 2020). Thus, there are no records of potential environmental concerns within the vicinity of the project site.</p> <p>Based on site observations, interviews and review of available documents and the database records search, the Phase I concluded that there is no evidence of recognized environmental conditions in connection with the property and no Phase II (subsurface investigation) environmental assessment would be required (Phase I 2020). Thus, the proposed project would not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment and impacts would be less than significant.</p>				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The proposed residential project would not produce hazardous emissions or handle acutely hazardous materials, substances, or wastes. The nearest school to the project site is Ridge Crest Elementary School, which is located approximately 0.3 miles southeast of the project site. Thus, the proposed project is not within one-quarter mile of an existing school. In addition, the proposed project is not anticipated to release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes in significant quantities. Construction activities associated with the proposed project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The amount of hazardous chemicals present during construction is limited and would be contained in compliance with existing government regulations. Residences would not require the use, storage, disposal, or transport of large volumes of hazardous materials that could cause serious environmental damage in the event of an accident. Although hazardous substances would be present and utilized at these residences, such substances are generally present now in the existing development, are typically found in small quantities, and can be cleaned up without affecting the environment. Therefore, impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes within one-quarter mile of an existing or proposed school would be less than significant.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The Phase I Environmental Site Assessment (Phase I 2020) prepared for the project conducted a database search to determine if the project site or any nearby properties are identified as having hazardous materials. The Phase I record search determined that the project site was not recognized being listed on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Phase I 2020). As a result, impacts related to hazards from being located on or adjacent to a hazardous materials site would not occur from implementation of the proposed project.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less than Significant Impact. The project site is not within 2 miles of an airport. The nearest airport is the March Air Reserve Base that is located approximately 5.2 miles west of the project site. According to the March Air Reserve Base Land Use Compatibility Plan, the proposed project is not located in a compatibility zone. Additionally, the residential development would not be of a sufficient height to require modifications to the existing air traffic patterns at the airport and, therefore, would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. Therefore, the proposed project would not result in impacts to an airport land use plan, or where such a plan has not been adopted, and would not result in a safety hazard or excessive noise for people residing or working in the project area. As such, impacts would be less than significant.				
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"/>
Response: Less Than Significant Impact. The proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction Short-term construction activities would occur within the project site and would not restrict access of emergency vehicles to the project site or adjacent areas. In addition, travel along surrounding roadways would remain open and would not interfere with emergency access in the site vicinity. Any temporary lane closures needed for utility connections to Bradshaw Circle or Cactus Avenue, or driveway access construction would be implemented consistent with the recommendations of the California Joint Utility Traffic Control Manual (Caltrans 2014), as incorporated into the construction permits. Thus, impacts related to an emergency response or evacuation plan during construction would be less than significant. Operation Direct access to the project site would be provided from Bradshaw Circle by two driveways. The project is required to provide internal streets and fire suppression facilities (e.g., hydrants and sprinklers) that conform to the California Fire Code requirements, included as Municipal Code Chapter 8.36, as verified through the City's permitting process. As such, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.				
g) 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 type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The project site is not within an area identified as a Fire Hazard Area that may contain substantial fire risk or a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2020). Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and impacts would not occur.				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>Existing Plans, Programs, or Policies</u> None.				
<u>Mitigation Measures</u> None.				
Sources: <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 6 – Safety Element – Section 6.2.8 – Wildland Urban Interface Chapter 6 – Safety Element – Section 6.9 – Hazardous Materials Chapter 6 – Safety Element – Section 6.10 – Air Crash Hazards <ul style="list-style-type: none"> Figure 5-5 – Air Crash Hazards Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.5 – Hazards and Hazardous Materials <ul style="list-style-type: none"> Figure 4.5-1 – Hazardous Materials Sites Figure 4.5-2 – Floodplains and High Fire Hazard Areas Figure 4.5-3 – City Areas Affected by Aircraft Hazard Zones Title 9 – Planning and Zoning of the Moreno Valley Municipal Code March Air Reserve Base (MARB)/March Inland Port (MIP) Airport Land Use Compatibility Plan (ALUCP) on November 13, 2014, (http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700) Local Hazard Mitigation Plan, City of Moreno Valley Fire Department, adopted October 4, 2011, amended 2017, http://www.moval.org/city_hall/departments/fire/pdfs/haz-mit-plan.pdf <ul style="list-style-type: none"> Chapter 5 – Wildland and Urban Fires <ul style="list-style-type: none"> Figure 4-2 – Moreno Valley High Fire Area Map 2016 Chapter 12 – Dam Failure/Inundation <ul style="list-style-type: none"> Figure 12-2 Moreno Valley Evacuation Routes Map 2015 Chapter 13 – Pipeline <ul style="list-style-type: none"> Figure 13-1 – Moreno Valley Pipeline Map 2016 Chapter 14 – Transportation <ul style="list-style-type: none"> Figure 14-1.1 – Moreno Valley Air Crash Hazard Area Map 2016 Chapter 16 – Hazardous Materials Accident <ul style="list-style-type: none"> Moreno Valley Hazardous Materials Site Locations Map 2016 Emergency Operations Plan, City of Moreno Valley, March 2009, http://www.moval.org/city_hall/departments/fire/pdfs/mv-eop-0309.pdf <ul style="list-style-type: none"> Hazard Mitigation and Hazard Analysis Threat Assessment 2 – Hazardous Materials Threat Assessment 3 – Wildfire Threat Assessment 6 – Transportation Emergencies <ul style="list-style-type: none"> Figure 17 – Air Crash Hazards California Department of Forestry and Fire Protection (CAL FIRE). 2020. Fire Hazard Severity Zone Map. Accessed: https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153 (Accessed May 26, 2021). Phase I Environmental Site Assessment, APN 478-090-018, 024, & 025, Moreno Valley, CA. April 30, 2020. Prepared by Robin Environmental Management (REM) (Appendix F). March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. November 13, 2014. Adopted by the Riverside County Airport Land Use Commission (RCALUC). Accessed: http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf (Accessed May 26, 2021). 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Construction Implementation of the proposed project includes site preparation, construction of new buildings, and infrastructure improvements. Grading, stockpiling of materials, excavation, construction of new structures, and landscaping activities would expose and loosen sediment and building materials, which would have the potential to mix with stormwater and urban runoff and degrade surface and receiving water quality.</p> <p>Additionally, construction generally requires the use of heavy equipment and construction-related materials and chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents, and paints. In the absence of proper controls, these potentially harmful materials could be accidentally spilled or improperly disposed of during construction activities and could wash into and pollute surface waters or groundwater, resulting in a significant impact to water quality.</p> <p>Pollutants of concern during construction activities generally include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction, which would have the potential to be transported via storm runoff into nearby receiving waters and eventually may affect surface or groundwater quality. During construction activities, excavated soil would be exposed, thereby increasing the potential for soil erosion and sedimentation to occur compared to existing conditions. In addition, during construction, vehicles and equipment are prone to tracking soil and/or spoil from work areas to paved roadways, which is another form of erosion that could affect water quality.</p> <p>However, the use of BMPs during construction implemented as part of a SWPPP as required by the NPDES General Construction Permit and included as PPP WQ-1 would serve to ensure that project impacts related to construction activities resulting in a degradation of water quality would be less than significant. Furthermore, an Erosion and Sediment Transport Control Plan prepared by a qualified SWPPP developer (QSD) is required to be included in the SWPPP for the project, and typically includes the following types of erosion control methods that are designed to minimize potential pollutants entering stormwater during construction:</p> <ul style="list-style-type: none"> • Prompt revegetation of proposed landscaped areas; • Perimeter gravel bags or silt fences to prevent off-site transport of sediment; • Storm drain inlet protection (filter fabric gravel bags and straw wattles), with gravel bag check dams within paved roadways; • Regular sprinkling of exposed soils to control dust during construction and soil binders for forecasted wind storms; • Specifications for construction waste handling and disposal; • Contained equipment wash-out and vehicle maintenance areas; • Erosion control measures including soil binders, hydro mulch, geotextiles, and hydro seeding of disturbed areas ahead of forecasted storms; • Construction of stabilized construction entry/exits to prevent trucks from tracking sediment on City roadways; • Construction timing to minimize soil exposure to storm events; and • Training of subcontractors on general site housekeeping. <p>Therefore, compliance with the Statewide General Construction Activity Stormwater Permit requirements, included as PPP WQ-1, which would be verified during the City's construction permitting process, would ensure that project impacts related to construction activities resulting in a degradation of water quality would be less than significant.</p> <p>Operation</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact			
<p>The proposed project includes operation of single-family residential uses. Potential pollutants associated with the proposed uses include various chemicals from cleaners, pathogens from pet wastes, nutrients from fertilizer, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. If these pollutants discharge into surface waters, it could result in degradation of water quality.</p> <p>In the existing condition, site drainage sheet flows across the property to the west towards Bradshaw Circle. A portion of the site's drainage, identified as Area 1, flows southerly to Cactus Avenue where it is collected by a series of catch basins within Cactus Avenue, and is ultimately directed into an offsite storm drain. Onsite drainage flows within Area 2 flow offsite towards Bradshaw Circle and Cactus Avenue where the flows are collected by a series of existing catch basins along Cactus Avenue. (Hydrology 2021)</p> <p>In the developed condition, onsite flows would be conveyed to one of two onsite bioretention basins (Lots A and B), and these basins would connect to a new 24-inch diameter storm drain in Bradshaw Circle which would connect to the existing RCFC Storm Drain Line F-4 in Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted. (Hydrology 2021)</p> <p>As described previously, the WQMP is required to be approved prior to the issuance of a building or grading permit. The project's WQMP would be reviewed and approved by the City to ensure it complies with the Santa Ana RWQCB MS4 Permit regulations. In addition, the City's permitting process would ensure that all BMPs in the WQMP would be implemented with the project. Overall, implementation of the WQMP pursuant to the existing regulations (included as PPP WQ-2), would ensure that operation of the proposed project would not violate any water quality standards, waste discharge requirements, or otherwise degrade water quality; and impacts would be less than significant.</p>							
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"/>			
<p>Response: Less Than Significant Impact. EMWD's 2015 Urban Water Management Plan (UWMP) describes that EMWD's local supplies include groundwater, desalinated groundwater, and recycled water.⁵ Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. Groundwater in portions of the West San Jacinto Basin is high in salinity and requires desalination for potable use. EMWD owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. EMWD also owns, operates, and maintains its own recycled water system that consists of four Regional Water Reclamation Facilities and several storage ponds spread throughout EMWD's service area that are all connected through the recycled water system.</p> <p>As detailed on Table WQ-1, the EMWD's 2015 Urban Water Management Plan (UWMP) shows that the anticipated production of groundwater would remain the same between 2020 and 2040, however, the anticipated production of desalinated groundwater would increase by 3,100 acre-feet per year (AFY) between 2020 and 2040. In 2040, groundwater and desalinated groundwater would provide 11.4 percent of the District's water supply.</p>							
Table WQ-1: Total Retail Water Supply (AFY)							
Source	2015	2020	2025	2030	2035	2040	2040 Percentage
Imported Water	56,397	81,197	89,097	100,497	111,597	122,097	61.7%
Groundwater	15,252	12,303	12,303	12,303	12,303	12,303	6.3%
Desalinated Groundwater	7,288	7,000	10,100	10,100	10,100	10,100	5.1%
Recvcled Water	44.150	45.245	48.334	50.017	51.800	53.300	26.9%

⁵ As of May 2021, EMWD's 2020 UWMP has not been adopted.

ISSUES & SUPPORTING INFORMATION SOURCES:					Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Total Retail Supply	123,087	145,745	159,834	172,917	185,800	197,800	100%	
Source: 2015 UWMP								
<p>As detailed in Section 19, <i>Utilities and Service Systems</i>, the supply of water listed in Table WQ-1 would be sufficient during both normal years and multiple dry year conditions between 2020 and 2040 to meet all of the City's estimated needs, including the proposed project. Therefore, the project would not result in changes to the projected groundwater pumping that would decrease groundwater supplies. Thus, impacts related to groundwater supplies would be less than significant.</p> <p>Based on low soil infiltration test results at the project site, onsite bioretention basins are proposed as the preferred method for treating onsite flows. After completion of project construction, the project would convey stormwater drainage into landscaped areas and the two onsite water quality bioretention basins, which would route runoff to a new 24-inch diameter storm drain in Bradshaw Circle that connects to RCFC Storm Drain Line F-4 in Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted (Hydrology 2021). Therefore, impacts related to interference with groundwater recharge would be less than significant.</p>								
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river 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"/>	
<p>Response: Less than Significant Impact.</p> <p>Construction Construction of the project would require grading and excavation of soils, which would loosen sediment and could result in erosion or siltation. However, the project site does not include any slopes, which reduces the erosion potential and the large majority of soil disturbance would be related to excavation and backfill for installation of building foundations and underground utilities.</p> <p>The NPDES Construction General Permit requires preparation and implementation of a SWPPP by a Qualified SWPPP Developer for the proposed construction activities (included as PPP WQ-1). The SWPPP is required to address site-specific conditions related to potential sources of sedimentation and erosion and would list the required BMPs that are necessary to reduce or eliminate the potential of erosion or alteration of a drainage pattern during construction activities.</p> <p>In addition, a Qualified SWPPP Practitioner (QSP) is required to ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The SWPPP would be amended and BMPs revised, as determined necessary through field inspections, in order to protect against substantial soil erosion, the loss of topsoil, or alteration of the drainage pattern. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP (per PPP WQ-1) would prevent construction-related impacts related to potential alteration of a drainage pattern or erosion from development activities. With implementation of the existing construction regulations that would be verified by the City during the permitting approval process, impacts related to alteration of an existing drainage pattern during construction that could result in substantial erosion, siltation, and increases in stormwater runoff would be less than significant.</p> <p>Operation After completion of project construction, impervious area would increase on the project site. However, the impervious areas would not be subject to erosion and the pervious areas would be landscaped with groundcovers that would inhibit erosion.</p> <p>As discussed previously, in the existing condition, site drainage sheet flows across the property to the west towards Bradshaw Circle. A portion of the site's drainage, identified as Area 1, flows southerly to Cactus Avenue where it is collected by a series of catch basins within Cactus Avenue, and is ultimately placed into an offsite storm drain. Onsite</p>								

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>drainage flows within Area 2 flow offsite towards Bradshaw Circle and Cactus Avenue, where the flows are collected by a series of existing catch basins along Cactus Avenue (Hydrology 2021).</p> <p>In the developed condition, onsite flows would be conveyed to one of two onsite bioretention basins (Lots A and B), and these basins would connect to a new 24-inch diameter storm drain in Bradshaw Circle which would connect to the existing RCFC Storm Drain Line F-4 in Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted. (Hydrology 2021).</p> <p>Additionally, the MS4 permit requires new development projects to prepare a WQMP (included as PPP WQ-2) that is required to include BMPs to reduce the potential of erosion and/or sedimentation through site design and structural treatment control BMPs. A Preliminary WQMP has been completed and included as Appendix H. As part of the permitting approval process, the proposed drainage and water quality design and engineering plans would be reviewed by the City's Engineering Division to ensure that the site-specific design limits the potential for erosion and siltation. Overall, the proposed drainage system and adherence to the existing regulations would ensure that project impacts related to alteration of a drainage pattern and erosion/siltation from operational activities would be less than significant.</p>				
<p>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The project site does not include, and is not adjacent to, a stream or river. Implementation of the project would not alter the course of a stream or river.</p> <p>Construction Construction of the project would require grading and excavation of soils. These activities could temporarily alter the existing drainage pattern of the site and change runoff flow rates. However, as described previously, implementation of the project requires a SWPPP (included as PPP WQ-1) that would address site specific drainage issues related to construction of the project and include BMPs to eliminate the potential of flooding or alteration of a drainage pattern during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP (per PPP WQ-1) as verified by the City through the construction permitting process would prevent construction-related impacts related to potential alteration of a drainage pattern or flooding on or off-site from development activities. Therefore, construction impacts would be less than significant.</p> <p>Operation As described previously, the proposed project would result in an increase of impervious surfaces that would result in an increase of stormflows. The project would maintain the existing drainage pattern and convey runoff to bioretention basins which connect to a new 24-inch diameter storm drain in Bradshaw Circle, which then connects to the existing RCFC Storm Drain Line F-4 in Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted. (Hydrology 2021) Moreover, as part of the permitting approval process, the proposed preliminary drainage design and engineering plans would be reviewed by the City's Engineering Division to ensure that the proposed drainage would accommodate the appropriate design flows. Overall, the proposed drainage system and adherence to the existing MS4 permit regulations would ensure that project impacts related to alteration of a drainage pattern or flooding from operational activities would be less than significant.</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. As described previously, the project site does not include, and is not adjacent to, a stream or river. Implementation of the project would not alter the course of a stream or river.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Construction As described in the previous response, construction of the proposed project would require grading and excavation activities that could temporarily alter the existing drainage pattern of the site and could result in increased runoff and polluted runoff if drainage is not properly controlled. However, implementation of the project requires a SWPPP (included as PPP WQ-1) that would address site specific pollutant and drainage issues related to construction of the project and include BMPs to eliminate the potential of polluted runoff and increased runoff during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP (per PPP WQ-1) as verified by the City through the construction permitting process would prevent construction-related impacts related to increases in run-off and pollution from development activities. Therefore, impacts would be less than significant.</p> <p>Operation As described previously, the proposed project would result in an increase of impervious surfaces that would generate increased runoff. However, the project would manage the increased flow with bioretention basins that route runoff to a new 24-inch diameter storm drain in Bradshaw Circle which then connects to the existing RCFC Storm Drain Line F-4 on Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted. (Hydrology 2021)</p> <p>Moreover, as part of the permitting approval process, the proposed preliminary drainage design and engineering plans would be reviewed by the City's Engineering Division to ensure that the proposed drainage would accommodate the appropriate design flows. The proposed project would increase the impervious surface area on the project site compared to the existing condition, and the proposed project would convey and treat all potential stormwater runoff from the project site. Therefore, the project would not create or contribute additional runoff water to the downstream storm drain system that would exceed the storm drain system's capacity, and impacts would be less than significant.</p>				
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Map 06065C0770G, the project site is designated as zone X, meaning it is in an area of minimal flood hazard (FEMA 2020). As detailed in the previous responses, implementation of the project would result in an increase of impermeable surfaces on the site. The project would maintain the existing drainage pattern, and drainage would be conveyed to onsite bioretention basins that would route runoff to a new 24-inch diameter storm drain in Bradshaw Circle which would connect to the existing RCFC Storm Drain Line F-4 in Cactus Avenue. The project would result in a net incremental increase of 0.49 cubic feet per second of flow to the storm drain in Cactus Avenue; however, the storm drain would be able to accommodate this increase without impact nor would offsite properties be impacted. (Hydrology 2021). Therefore, the project would not result in impeding or redirecting flood flows by the addition of the impervious surfaces. As detailed previously, the City's permitting process would ensure that the drainage system specifications adhere to the existing MS4 permit regulations, and compliance with existing regulations would ensure that impacts would be less than significant.</p>				
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"/>
<p>Response: No Impact. According to the Federal Emergency Management Agency (FEMA) Map 06065C0770G, the project site not within a flood zone (FEMA 2020). Thus, the project site is not located within a flood hazard area that could be inundated with flood flows and result in release of pollutants. Impacts related to flood hazards and pollutants would not occur from the project.</p> <p>Tsunamis are generated ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. The proposed project is approximately 43 miles from the ocean shoreline. Based on the distance of the project site to the Pacific Ocean, the</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>project site is not at risk of inundation from tsunamis. Therefore, the proposed project would not risk release of pollutants from inundation from a tsunami. No impact would occur.</p> <p>Seiche is a phenomenon that occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. The project site is not located adjacent to any water retention facilities. For this reason, the project site is not at risk of inundation from seiche waves. Therefore, the proposed project would not risk release of pollutants from inundation from seiche. No impact would occur.</p>				
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"/>
<p>Response: Less Than Significant Impact. As described previously, use of BMPs during construction implemented as part of a SWPPP as required by the NPDES Construction General Permit and PPP WQ-1 would serve to ensure that project impacts related to construction activities resulting in a degradation of water quality would be less than significant. Thus, construction of the project would not conflict or obstruct implementation of a water quality control plan.</p> <p>Also, as described previously, new development projects are required to implement a WQMP (per PPP WQ-2) that would comply with the Santa Ana RWQCB MS4 Permit regulations. The WQMP and applicable BMPs are verified as part of the City's permitting approval process, and construction plans would be required to demonstrate compliance with these regulations. Therefore, operation of the proposed project would not conflict or obstruct with a water quality control plan.</p> <p>In addition, as detailed previously, the EMWD manages basin water supply and the anticipated production of groundwater would remain steady from 2025 through 2040 (as shown in Table WQ-1). As described previously and further detailed in Section 19, <i>Utilities and Service Systems</i>, the City's supply of water listed in Table WQ-1 would be sufficient during both normal years and multiple dry year conditions between 2020 and 2040 to meet all of the City's estimated needs, including the proposed project. Therefore, the project would be consistent with the groundwater management plan and would not conflict with or obstruct its implementation. Thus, impacts related to water quality control plan or sustainable groundwater management plan would be less than significant.</p>				
<p>Existing Plans, Programs, or Policies PPP WQ-1: Stormwater Pollution Prevention Plan. Prior to grading permit issuance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a Qualified SWPPP Developer (QSD) in accordance with the City's Municipal Code Chapter 8.10 and the Santa Ana Regional Water Quality Control Board National Pollution Discharge Elimination System (NPDES) Storm Water Permit Order No. R4-2012-0175 (MS4 Permit). The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other NPDES regulations to limit the potential of erosion and polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by the City of Moreno Valley staff or its designee to confirm compliance.</p> <p>PPP WQ-2: Water Quality Management Plan. Prior to grading permit issuance, the project applicant shall have a Water Quality Management Plan (WQMP) approved by the City for implementation. The project shall comply with the City's Municipal Chapter 8.10 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the project.</p>				
<p>Mitigation Measures None.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 6 – Safety Element – Section 6.7 – Water Quality <ul style="list-style-type: none"> Figure 5-4 – Flood Hazards Chapter 7 – Conservation Element – Section 7.5 – Water Resources 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> - Figure 6-1 Water Purveyor Service Area Map <ol style="list-style-type: none"> 2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> • Section 5.5 – Hazards and Hazardous Materials <ul style="list-style-type: none"> - Figure 4.5-2 – Floodplains and High Fire Hazard Areas • Section 5.7 – Hydrology and Water Quality <ul style="list-style-type: none"> - Figure 4.7-1 – Storm Water Flows and Major Drainage Facilities - Figure 4.7-2 – Groundwater Basins 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> • Section 9.10.080 – Liquid and Solid Waste 4. Moreno Valley Municipal Code Chapter 8.12 – Flood Damage Prevention 5. Moreno Valley Municipal Code Chapter 8.21 – Grading Regulations 6. Eastern Municipal Water District (EMWD) Groundwater Reliability Plus, http://gwrplus.org/ 7. Eastern Municipal Water District (EMWD) 2015 Urban Water Management Plan 8. Preliminary Hydrology Report. April 15, 2020; Revised May 21, 2021. Prepared by Robert M. Beers (Appendix G). 9. Project Specific Water Quality Management Plan. June 2020. Prepared by Adkan Engineers (Appendix H). 10. FEMA Flood Map Service Center. 2021. Available at: https://msc.fema.gov/portal/search (Accessed May 26, 2021). 				
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The project site is currently vacant and is surrounded by a roadway to the south followed by single-family residences; single-family residences to the north; vacant land to the east; and single-family residences and commercial uses to the west. The proposed project would redevelop the site to provide 37 single-family residential units, which are consistent with the existing single-family residences to the north, west, and south of the site. Therefore, the change of the project site from a vacant site to single-family residential would not physically divide an established community. In addition, the project would not change roadways or install any infrastructure that would result in a physical division. Thus, the proposed project would not result in impacts related to physical division of an established community.				
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less Than Significant Impact. As described previously, the project site is currently vacant. The project would redevelop the project site to provide 37 new single-family residences, which would be similar to the single-family residential uses that are located adjacent to the west of the site, to the south of the site beyond Cactus Avenue, and to the north of the site.				
General Plan The project site currently has a General Plan land use designation of has a land use designation of Residential: Max. 5 du/ac (R5), which does not have the purpose of avoiding or mitigating an environmental effect. The proposed project includes a General Plan Amendment to change the land use designation of the site to Low Residential: Max. 10 du/ac (R10), which would allow the proposed single-family residences at a density of 10 units per gross acre. The General Plan Land Use Element states that the Residential: Max. 10 du/ac (R10) designation allows for allows for development of residential uses to a maximum density of 10 dwelling units per acre. As the project would develop residences at a density of 7.9 units per gross acre, it would be consistent with the proposed land use designation, and the proposed change in land use would be less than significant.				
Zoning				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>The project site is currently zoned Residential 5 District (R5). The primary purpose of the R5 district is to provide for residential development on common sized suburban lots. This district is intended as an area for development of single-family residential and mobile home subdivisions at a maximum allowable density of five DUs per net acre, as indicated in Section 9.03.020 of the Municipal Code. implement the proposed single-family residential uses. As described previously, the project would develop single-family residences at a density of 7.9 units per gross acre and would require a zone change to Residential Single-Family 10 (RS10) District. In addition, the project is requesting approval of a Conditional Use Permit (CUP) for a Planned Unit Development (PUD), which allows for a development to establish unique criteria for such things as setbacks, lot width and depth, building separation, lot size, etc. This is allowed in exchange for a higher level of detail and amenities within the project than typically required for standard residential development. Thus, the proposed project would not conflict with any applicable zoning regulations adopted for the purpose of avoiding or mitigating an environmental effect.</p>				
<p>Existing Plans, Programs, or Policies None.</p>				
<p>Mitigation Measures None.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 2 – Community Development Element – Section 2.1 – Land Use <ul style="list-style-type: none"> Figure 1-1 – Neighboring Lands Uses Figure 1-2 – Land Use Map Chapter 8 – 2014 – 2021 Housing Element Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.12 – Population and Housing <ul style="list-style-type: none"> Attachments #1 - #10 – Housing Sites Inventory Exhibits A1 – A11, C, D, and E – Maps of Housing Sites Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 				
<p>XII. MINERAL RESOURCES – Would the project:</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. The project site is located in Mineral Resource Zone 3 (MRZ-3), according to the Mineral Land Classification Map provided by the California Department of Conservation. The MRZ-3 zone within the Significant Mineral Aggregate Resource Area (SMARA) Study Area is defined as areas containing mineral deposits which the significance cannot be evaluated from available data.</p> <p>The City's General Plan EIR states that no locally, regionally, or statewide significant mineral resources are located within the City. Therefore, development of the site would not result in the loss of availability of a known mineral resource that would be of value to the region, and impacts would not occur.</p>				
<p>b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. As described in the previous response, the City's General Plan EIR states that no locally, regionally, or statewide significant mineral resources are located within the City. Therefore, implementation of the project would not result in the loss of locally important mineral resources, and impacts would not occur.</p>				
<p>Existing Plans, Programs, or Policies</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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None.

Mitigation Measures

None.

Sources:

1. Moreno Valley General Plan, adopted July 11, 2006
 - Chapter 7 – Conservation Element – Section 7.9 – Mineral Resources
2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006
 - Section 5.14 – Mineral Resources
3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code
 - Section 9.02.120 – Surface Mining Permits
4. Moreno Valley Municipal Code Section 8.21.020 A 7 – Permits Required
5. The Surface Mining and Reclamation Act of 1975 (SMARA, Public Resources Code, Sections 2710-2796), <https://www.conservation.ca.gov/dmr/lawsandregulations>
6. California Department of Conservation. 2020. Mineral Land Classification. Accessed: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc> (Accessed May 26, 2021).

XIII. NOISE – Would the project result in:

City of Moreno Valley Municipal Code

Sound level limits: Chapter 11.80.03 of the City's Municipal Code establishes maximum noise levels permitted within the city, which are listed in Table N-1:

Table N-1: City of Moreno Valley Maximum Continuous Sound Levels

Duration per Day (Continuous Hours)	Sound Level [dBA]
8	90
6	92
4	95
3	97
2	100
1.5	102
1	105
.5	110
.25	115

Source: City of Moreno Valley Municipal Code

Sensitive Receptor Noise Levels: Chapter 11.80.30 of the City's Municipal Code establishes the permissible noise level that may be received at nearby sensitive uses (e.g., residential). For noise-sensitive residential properties 200 feet from the source, the exterior noise level shall not exceed 60 dBA during daytime hours (8:00 a.m. to 10:00 p.m.) and shall not exceed 55 dBA during the nighttime hours (10:01 p.m. to 7:59 a.m.) (Municipal Code, Chapter 11.80).

Construction Noise: Section 8.14.082.E of the City's Municipal Code also provides construction noise standards, which state that Any construction within the city shall only be completed between the hour of seven a.m. to eight p.m. Monday through Friday, excluding holidays, unless written approval is obtained from the city building official or city engineer.

Sensitive Receptors

The nearest existing sensitive receptors to the project site are the single-family homes located approximately 20 feet north of the project site. There are also single-family homes located approximately 75 feet to the west of the project site.

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

The nearest school to the project site is Ridge Crest Elementary School, which is located approximately 0.3 miles southeast of the project site.

Existing Ambient Noise Levels

To identify the existing ambient noise levels in the project area, noise level measurements were taken on and adjacent to the project site on March 20, 2020. As shown on Table N-2, the average noise levels in the project area range from 58.8 dBA to 88.8 dBA. Table N-2 also shows that the both the daytime and nighttime noise levels at the nearby sensitive receptors currently exceeds the City's residential noise standards of 60 dBA Leq during the daytime and 55 dBA Leq during the nighttime.

Table N-2: Existing Ambient Noise Level Measurements

Site No.	Site Description	Average (dBA Leq)		1-hr Average (dBA Leq/Time)		Average (dBA CNEL)
		Daytime	Nighttime	Minimum	Maximum	
A	Located on a fence near the southwest corner of the project site, approximately 70 feet north of the Cactus Avenue centerline.	58.8	81.7	47.0 3:02 a.m.	62.2 3:55 p.m.	62.4
B	Located on a fence near the southeast corner of the project site, approximately 50 feet north of the Cactus Avenue centerline.	62.3	88.8	47.8 3:37 a.m.	66.8 3:54 p.m.	64.9

Source: NOI 2020

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?



Response:

Less Than Significant Impact.

Construction

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, construction of the 37 single-family residences, paving of the onsite driveways and parking areas, and application of architectural coatings. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are the single-family residences located approximately 20 feet north of the project site.

Table N-3 shows that the highest noise from construction would occur during the site preparation and grading phases when noise levels are anticipated to reach 80 dBA Leq at the nearest sensitive receptors (residences), which is below the City's 8-hour noise threshold of 90 dBA (Municipal Code Chapter 11.80.03). In addition, the project would comply with the allowable construction times pursuant to the City's Municipal Code, the construction-related noise levels would not exceed any standards. Therefore, construction noise impacts would be less than significant.

Table N-3: Construction Noise Levels at the Nearest Sensitive Receptor

Construction Phase	Construction Noise Level (dBA Leq) at:
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ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	Nearest Homes to the North ¹	Nearest Homes to the West ²	Nearest Homes to the South ³
Site Preparation	81	77	71
Grading	81	78	71
Building Construction	74	75	68
Paving	69	76	65
Painting	71	69	60
City's Noise Threshold⁴	90	90	90
Exceed Thresholds?	No	No	No

¹ The nearest home is located as near as 20 feet north of the project site. In order to account for the existing 6-foot high wall on the north property line, 5 dB of shielding was added to the RCNM Model.

² The nearest home is located as near as 75 feet west of the project site.

³ The nearest home is located as near as 100 feet south of the project site. In order to account for the existing sound wall on the south side of Cactus Avenue, 5 dB of shielding was added to the RCNM Model.

⁴ City Noise Threshold obtained from Section 11.80.030(B) of the Municipal Code.

Source: NOI 2020

Operation

Development of the proposed project would generate approximately 28 trips during the a.m. peak hour, 38 trips during the p.m. peak hour, for a total of 359 daily trips.⁶ The noise generated from these vehicular trips has been identified through a comparison of noise generated by traffic volumes with and without the project, provided in Table N-3.

Table N-4: Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor ¹			Increase Threshold ²
		Existing	Existing Plus Project	Project Contribution	
Cactus Avenue	East of Moreno Beach Drive	61.7	62.1	0.4	+2 dBA

Source: NOI 2020

Objective 6.5 of the City's General Plan Noise Element requires the City to minimize noise impacts from significant noise generators including roadway noise impacts. However, neither the General Plan nor the CEQA Guidelines define what constitutes a "substantial permanent increase to ambient noise levels." Therefore, thresholds from the FTA *Transit Noise and Vibration Impact Assessment* (2018) have been utilized, which identifies noise impacts by comparing the existing noise levels and the future noise levels with the proposed project. Based on the FTA guidance, a substantial increase in ambient noise from vehicular traffic could occur when the noise levels at noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA CNEL and the project creates an increase of 3 dBA CNEL or greater noise level increase; or when noise levels range from 60 to 65 dBA CNEL and the project creates 2 dBA CNEL or greater noise level increase.

As shown in Table N-4 above, the project traffic would result in a maximum increase of 0.4 dBA, which is below the noise increase thresholds. Therefore, impacts related to operational noise would be less than significant.

Roadway Noise to Interior of Proposed Homes

The exterior noise level at the façade of the first and second floors were calculated based on using the Federal Highway Administration's Traffic Noise Prediction Model. As shown on Table N-5, with a "windows open" condition where the proposed homes to not have HVAC to provide cooling, the interior noise levels of the lots fronting Cactus Avenue would be above the City's dBA CNEL residential interior noise standard.

⁶ It should be noted the traffic and noise analyses analyzed 38 dwelling units based on an earlier iteration of the project's site plan. As the project proposes 37 dwelling units, the project-generated trip generation calculated in the traffic analysis, which are incorporated into the noise analysis are therefore highly conservative as well as the calculated operational noise results of noise analysis.

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially
Significant
Impact

Less Than
Significant with
Mitigation
Incorporated

Less Than
Significant
Impact

No
Impact

Table N-5: Proposed Homes Interior Noise Levels from Cactus Avenue

Lot Number	Roadway	Floor	Exterior Noise Level at Building Façade (dBA CNEL)	Interior Noise Levels (dBA CNEL)	
				Windows Open Unmitigated ¹	Windows Closed Mitigated ²
1	Cactus Avenue	1	60	48	35
		2	68	56	43
3	Cactus Avenue	1	61	49	36
		2	68	56	43
5	Cactus Avenue	1	60	48	35
		2	68	56	43

Notes:

¹ Unmitigated Interior noise levels based on 12 dBA of noise reduction.

² Mitigated Interior noise levels based on 25 dBA of noise reduction with implementation of Mitigation Measure 1.

FHWA RD-77-108 Model.

Source: NOI 2020

As such, Mitigation Measure NOI-1 is included to require installation of forced air conditioning and heating to achieve a “windows closed” condition. As shown in Table N-5, with implementation of MM NOI-1, interior noise levels would be below the City’s interior noise standard. Therefore, with implementation of Mitigation Measure NOI-1, impacts related to operational noise would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

☐
☐
☒
☐

Response:

Less Than Significant Impact.

Construction

Construction activities associated with the proposed project would require the operation of off-road equipment and trucks that are known sources of vibration. Construction activity can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Vibrations at buildings could produce results that range from no perceptible effects at the low levels to damage at the highest levels. It should be noted that vibration is much more discernible in a sitting or laying down position, which typically only occur inside a home. As such, this analysis is based on the vibration levels at the nearest homes, instead of the nearest residential property lines.

Chapter 9.10 of the Municipal Code includes performance standards for proposed development projects that may impact the surrounding neighborhood and Section 9.10.030(B), which is part of this Chapter, exempts temporary construction activities from Section 9.10.170 that restricts the creation of vibration that can be felt at the property line, provided that construction activities occur between the hours of 7 a.m. and 7 p.m.. Since the City’s Municipal does not provide a quantifiable vibration level for construction activities, Caltrans guidance has been utilized, which defines the threshold of perception from transient sources at 0.25 inch per second PPV. Table N-6 shows the typical PPV and average vibration levels shown in vibration velocity in decibels (VdB) that are produced from some common construction equipment that would likely be utilized during construction of the proposed project (NOI 2020).

Table N-5: Typical Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity (inches/second)	Approximate Vibration Level (L _v) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 (upper range)	105
	0.170 (typical)	93
Clam shovel drop (slurry wall)	0.202	94

ISSUES & SUPPORTING INFORMATION SOURCES:			Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	Vibratory Roller	0.210		94		
	Hoe Ram	0.089		87		
	Large bulldozer	0.089		87		
	Caisson drill	0.089		87		
	Loaded trucks	0.076		86		
	Jackhammer	0.035		79		
	Small bulldozer	0.003		58		
Source: NOI 2020						
<p>From the list of equipment shown in Table N-6, the primary source of vibration during construction would be from the operation of a bulldozer. A large bulldozer would create a vibration level of 87 VdB, which is equivalent to 0.089 inch per second rms at 25 feet. Based on typical propagation rates, the vibration level at the nearest homes (20 feet away from proposed construction activities) would be approximately 0.11 inch per second rms. The vibration level at the nearest offsite home is within the 0.25 inch per second PPV threshold detailed above. Therefore, vibration impacts would be less than significant from construction of the proposed project.</p> <p>Operation</p> <p>Operation of the proposed single-family uses would include heavy trucks for residents moving in and out of the residences, large deliveries, and garbage trucks for solid waste disposal. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions. However, typical vibration levels for the heavy truck activity at normal traffic speeds would be approximately 0.006 in/sec PPV, based on the FTA Transit Noise Impact and Vibration Assessment. Truck movements on site would be travelling at very low speed, so it is expected that truck vibration at nearby sensitive receivers would be less than the vibration threshold of 0.08 in/sec PPV for fragile historic buildings and 0.04 in/sec PPV for human annoyance, and therefore, would be less than significant.</p>						
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is March Air Reserve Base that is located approximately 5.2 miles west of the project site. The project site is located outside of the 60 dBA CNEL noise contours of the March Air Reserve Base (RCALUC). Thus, impacts would be less than significant.</p>						
Existing Plans, Programs, or Policies						
None.						
Mitigation Measures						
None.						
Sources:						
<ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 6 – Safety Element – Section 6.4 – Noise <ul style="list-style-type: none"> Figure 5-2 – Buildout Noise Contours Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.4 – Noise <ul style="list-style-type: none"> Figure 4.4-1 – March Air Reserve Base Noise Impact Area Figure 4.4-2 – Buildout Noise Contours – Alternative 1 Figure 4.4-3 -- Buildout Noise Contours – Alternative 2 Figure 4.4-4 -- Buildout Noise Contours – Alternative 3 Appendix D – Noise Analysis, Wieland Associates, Inc., June 2003. 						

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code <ul style="list-style-type: none"> Section 9.10.140 Noise and Sound 4. Moreno Valley Municipal Code Chapter 11.80 Noise Regulations 5. March Air Reserve Base (MARB)/March Inland Port (MIP) Airport Land Use Compatibility Plan (ALUCP) on November 13, 2014, (http://www.rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700) 6. Noise Impact Analysis, Tentative Tract Map No. 37858, City of Moreno Valley. December 31, 2020. Prepared by Vista Environmental (Appendix I).				
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less Than Significant Impact. The project would construct 37 single-family residences on the project site. According to data from the California Department of Finance (CDF) published in May 2021, the City of Moreno Valley has a residential population of 209,426 persons and 57,725. Of these, 46,551 (approximately 81 percent) are single-family detached units. In addition, it is estimated that the City has an average of 3.86 persons per household. Based on this information, the proposed project would result in a net increase of approximately 143 new residents. Therefore, the project would represent a population increase of approximately 0.07 percent and a 0.06 percent increase in residential units within the City. This limited level of growth on a site that has been previously developed would not constitute substantial growth. The proposed project is located in an urbanized residential area of the City and is surrounded by residential and commercial uses and is already served by the existing roadways and infrastructure systems. No infrastructure would be extended or constructed to serve areas beyond the project site, which could reduce further population growth, and indirect impacts related to growth would not occur from implementation of the proposed project. Therefore, potential impacts related to inducement of unplanned population growth, either directly or indirectly, would be less than significant.				
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"/>
Response: No Impact. As described above, the project site is vacant and undeveloped land and does not contain any housing or people on the project site. The proposed project would construct 37 new single-family residences and would not displace any existing housing or people and would not necessitate the construction of housing elsewhere. Thus, impacts would not occur.				
<u>Existing Plans, Programs, or Policies</u> None.				
<u>Mitigation Measures</u> None.				
Sources: <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 2 – Community Development Element – Section 2.1 – Land Use <ul style="list-style-type: none"> Figure 1-1 – Neighboring Lands Uses Figure 1-2 – Land Use Map Chapter 8 – 2014 – 2021 Housing Element Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.12 – Population and Housing <ul style="list-style-type: none"> Attachments #1 - #10 – Housing Sites Inventory 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
- Exhibits A1 – A11, C, D, and E – Maps of Housing Sites 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. California Department of Finance. May 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. Accessed: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (Accessed May 26, 2021).				
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less Than Significant Impact. The City of Moreno Valley Fire Department provides fire protection to the project area. The City's Fire Department is the primary response agency to fires, emergency medical service, hazardous materials incidents, traffic accidents, terrorist acts, catastrophic weather events, and technical rescues. Additionally, the City's Office of Emergency Management is located within the Fire Department allowing for a well-coordinated response to both natural and man-made disasters. The Moreno Valley Fire Department (MVFD) is part of the CAL FIRE/Riverside County Fire Department's regional, integrated, cooperative fire protection organization, which provides access to other regional fire and emergency equipment and/or services, as needed. There are two existing fire stations within two miles of the project site. Fire Station 58 is located 2.4 miles from the project site at 28040 Eucalyptus Avenue. This fire station is a three-bay facility that can house two engine companies, a truck company, and additional resources as needed. This fire station currently houses one paramedic engine company and a type 3 fire engine. Fire Station 99 is 2.8 miles from the project site at 13400 Morrison Street. This fire station is a two-bay facility that houses one paramedic engine company (MVFD 2020). The proposed project could potentially increase the demand for MVFD services due to the construction of the new residential units. As discussed in previously, the project would generate approximately 143 new residents. The project would develop 37 single-family residences in an area already served by the City's Fire Department and within close proximity to two existing fire stations. The project would be adequately served by the two fire stations that currently serve the project area. Additionally, the project would be required to adhere to the California Fire Code (included in the City's Municipal Code Chapters 8.36) and would be reviewed by the Fire Department during the project permitting process to ensure that the project plans meet the fire protection requirements. Therefore, impacts would be less than significant. Additionally, the Developer would be required to pay development fees (including permit and inspection fees) that would be applied to the City's public services including fire protection services.				
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Response: Less Than Significant Impact. The City of Moreno Valley receives policing services through a contract for services with the Riverside County Sheriff's Office. The City's police station is located at 22850 Calle San Juan De Los Lagos, which is approximately 5.7 miles from the project site. Because the project site is currently vacant and undeveloped, implementation of the project would result in an onsite population that would create the need for police services. Calls for police service during project construction may include: theft of building materials and construction equipment, malicious mischief, graffiti, and vandalism. Operation of the project could generate a typical range of police service calls, such as burglaries, thefts, and disturbances. To reduce the potential for these types of crimes, security concerns are addressed in the project design by providing low-intensity security lighting for the purposes of wayfinding, safety, and building structure security.				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Although an incremental increase could result from implementation of the project, the need for law enforcement services from the proposed project would be limited and within an area that is currently served. Thus, the need for policing services generated by the project would not require the construction or expansion of police department facilities. Therefore, impacts would be less than significant. Additionally, the Developer would be required to pay development fees (including permit and inspection fees) that would be applied to the City's public services including police protection services.</p>				
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The project site is located within the Moreno Valley Unified School District, which operates and maintains 43 schools, including 23 elementary schools (K-5), 6 middle schools (7-8), 5 high schools (9-12), and 9 specialized schools. The site is currently located within the attendance area boundaries of Ridgcrest Elementary School, Mountain View Middle School, and Valley View High School.</p> <p>The project would develop 37 single-family residences. The Moreno Valley Unified School District's April 2020 Developer Fee Justification Report indicates that there are over 53,581 residential dwelling units existing within the District. It is anticipated that a total of 13,156 additional units will be constructed by 2040. Based on the District's Student Generation Rate of 0.6041, this will generate over 7,947 additional K-12 students during that period (MVUSD 2020). With the Student Generation Rate of 0.6041, the project will generate approximately 23 additional K-12 students upon implementation.</p> <p>Pursuant to Government Code Section 65995 et seq., the need for additional school facilities is addressed through compliance with school impact fee assessment. SB 50 (Chapter 407 of Statutes of 1998) sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project on mitigation of a project's impacts on school facilities in excess of fees set forth in the Government Code. These fees are collected by school districts at the time of issuance of building permits for development projects. Pursuant to Government Code Section 65995 applicants shall pay developer fees (included as PPP PS-1) to the appropriate school districts at the time building permits are issued; and payment of the adopted fees provides full and complete mitigation of school impacts. As a result, impacts related to school facilities would be less than significant with the Government Code required fee payments.</p>				
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Based on Map 3.1, Existing Parks and Community Facilities, in the City of Moreno Valley Parks, Recreation and Open Space Comprehensive Plan, the City operates and maintains six parks within the project's vicinity: Rock Ridge Park, approximately 2.9 miles to the northwest; Morrison Park, approximately 2.9 miles to the northwest; Ridgcrest Park, approximately 1.6 miles to the southeast; Weston Park, approximately 3.6 miles to the northwest; the Moreno Valley Community Park, approximately 6.4 miles to the west; and Celebration Park, approximately 1.2 miles to the southwest.</p> <p>The project includes the construction of 37 single-family residences, including 11,443 SF at the recreation – open space lot, which would provide park facilities for the new residents. In addition, Section 3.38.080 and Chapter 3.40 of the City's Municipal Code include requirements for mitigation fees in favor of park improvements and/or parkland dedication; where applicable, these fees would be included as a condition of the approval of the residential development (included as PPP PS-2). These fees would be used in the City of the purpose of acquiring, designing, constructing, improving, providing and maintaining, to the extent permitted by law, park improvements provided for in the City's General Plan and its adopted capital improvement program or an adopted master plan of parks and recreation facilities, as amended from time to time. Therefore, as the project would provide sufficient onsite open space for its residents, impacts related to the need to provide new or altered park and recreation facilities in order to maintain acceptable service ratios would be less than significant. Additionally, the developer would be required to pay park fees described above.</p>				
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The proposed project would develop 37 single-family residential units within an area that already contains single-family residential. The additional residences would result in a limited incremental increase in the need for additional services, such as public libraries and post offices, etc. Because the project area is already served by</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
other services and the project would result in a limited increase in residences, the project would not result in the need for new or physically altered facilities to provide other services, the construction of which could cause significant environmental impacts. Therefore, impacts would be less than significant.				
<p>Existing Plans, Programs, or Policies</p> <p>PPP PS-1: The project will be required to pay applicable development fees levied by the Moreno Valley Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.827) to offset any effects on school facilities resulting from new development.</p> <p>PPP PS-2: Park Fees. As a condition of the approval of a residential development, the project shall pay applicable park related fees and/or dedicate parkland pursuant to Municipal Code Section 3.38.080 and Chapter 3.40.</p>				
<p>Mitigation Measures</p> <p>None.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 2 – Community Development Element – Section 2.5 – Schools <ul style="list-style-type: none"> Figure 1-3 – School District Boundaries Chapter 2 – Community Development Element – Section 2.6 – Library Services Chapter 2 – Community Development Element – Section 2.7 – Special Districts Chapter 2 – Community Development Element – Section 2.5 – Other City Facilities Chapter 4 – Parks, Recreation and Open Space Element – Section 4.3 – Parks and Recreation <ul style="list-style-type: none"> Figure 3-2 – Future Parklands Acquisition Areas Figure 3-3 – Master Plan of Trails Chapter 6 – Safety Element – Section 6.1 – Police Protection and Crime Preventions Chapter 6 – Safety Element – Section 6.2 – Fire and Emergency Services <ul style="list-style-type: none"> Figure 5-1 – Fire Stations Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.13 – Public Services <ul style="list-style-type: none"> Figure 4.13-1 – Location of Public Facilities Title 9 – Planning and Zoning of the Moreno Valley Municipal Code City of Moreno Valley Fire Department Website. Accessed: http://www.moreno-valley.ca.us/city_hall/departments/fire/index-fire.shtml (Accessed May 11, 2020). City of Moreno Valley Police Department Website. Accessed: http://www.moreno-valley.ca.us/city_hall/departments/police/index-police.shtml (Accessed May 11, 2020). City of Moreno Valley Parks, Recreational, and Open Spaces Comprehensive Master Plan. Accessed: http://www.ci.moreno-valley.ca.us/resident_services/park_rec/pdfs/park-mp0910.pdf (Accessed May 11, 2020). Moreno Valley Unified School District Fee Justification Report for New Residential and Commercial/Industrial Development. 2020. 				
XVI. RECREATION – Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response:</p> <p>Less Than Significant Impact. As described previously project would develop 37 single-family residences. As discussed previously, residential developments are subject to Section 3.38.080 and Chapter 3.40 of the City's Municipal Code, which include requirements for mitigation fees in favor of park improvements and/or parkland dedication; where applicable, these fees would be included as a condition of the approval of the residential development (included as PPP PS-2). These fees would be used in the City of the purpose of acquiring, designing, constructing, improving, providing and maintaining, to the extent permitted by law, park improvements provided for in the City's General Plan and its adopted</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>capital improvement program or an adopted master plan of parks and recreation facilities, as amended from time to time. Therefore, as the project would provide sufficient onsite open space for its residents, impacts related to the increase the use of existing parks and recreational facilities, such that physical deterioration of the facility would be accelerated would be less than significant. Additionally, the developer would be required to pay park fees described above.</p>				
<p>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. As described above, while the project would contribute park development fees pursuant to Municipal Code 3.38.080 (included as PPP PS-2) to be used towards the future expansion or maintenance parks and recreational facilities, these fees are standard with every residential development, and the proposed project would not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. The project includes 11,443 SF of recreation – open space for residents and the impact of this recreational feature is included as part of the overall project analysis contained in this Initial Study. Therefore, impacts specific to recreation would be less than significant. Additionally, the developer would be required to pay park fees described above.</p>				
<p>Existing Plans, Programs, or Policies PPP PS-2: Park Fees, provided in Section 15, <i>Public Services</i>.</p>				
<p>Mitigation Measures None.</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> • Chapter 4 – Parks, Recreation and Open Space Element – Section 4.3 – Parks and Recreation <ul style="list-style-type: none"> - Figure 3-1 Open Space - Figure 3-2 – Future Parklands Acquisition Areas - Figure 3-3 – Master Plan of Trails 2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> • Section 5.13 – Public Services <ul style="list-style-type: none"> - Figure 4.13-1 – Location of Public Facilities 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 				
<p>XVII. TRANSPORTATION – Would the project:</p>				
<p>a) Conflict with program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. Construction Construction activities associated with the project would generate vehicular trips from construction workers traveling to and from project site, delivery of construction supplies and import materials to, and export of debris from, the project site. However, these activities would only occur for a period of 12 months. The increase of trips during construction activities would be limited and are not anticipated to exceed the number of operational trips described below. The short-term vehicle trips from construction of the project would generate less than significant traffic related impacts.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:

Potentially Significant Impact

Less Than Significant with Mitigation Incorporated

Less Than Significant Impact

No Impact

Operation

As shown in Table T-1 below, the proposed project would generate approximately 30 trips during the a.m. peak hour, 40 trips during the p.m. peak hour, and a total of 378 daily trips.⁷⁸

Table T-1: Project Trip Generation

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Rates								
Single-Family Detached Housing ¹	DU	9.440	0.185	0.555	0.740	0.624	0.366	0.990
Project Trip Generation								
Detached Single Family	38 DU ^a	359	7	21	28	24	14	38

Notes:

^a As noted, the traffic analysis analyzed 38 dwelling units, which results in a more conservative analysis as the project proposes 37 dwelling units.

DU = Dwelling Units

¹ Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 210 - Single-Family Detached Housing.

² Trip rates from the Institute of Transportation Engineers, Trip Generation, 10th Edition, 2017. Land Use Code 220 - Multifamily Housing (Low-Rise).

Source: EPD 2020 (Appendix J)

According to Exhibit A of the City of Moreno Valley Traffic Impact Analysis Preparation Guide, projects that generate fewer than 100 vehicle trips during the peak hours are generally exempt from the requirement to prepare a traffic impact analysis. Operation of the project would not generate over 100 AM or PM peak hour trips. Therefore, the project would not result in a conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, and impacts would be less than significant.

The project area is currently served by the Riverside Transit Authority (RTA). The RTA provides both local and regional services throughout the region with 38 fixed routes, 9 commuter link routes, and Dial-A-Ride services. The existing RTA bus stop for Route 20, located approximately 0.3 miles from the project site on Moreno Beach Drive, is the closest existing route to the project. Operation of the project would not affect the operation of the bus route. Thus, no impacts would occur. In addition, both sidewalks and bicycle lanes are located adjacent to the project site on Cactus Avenue. The proposed project would not alter any of the existing bicycle or sidewalk facilities. Thus, impacts related to bicycle or pedestrian circulation would not occur from implementation of the project.

b) Conflict or be inconsistent with [CEQA Guidelines section 15064.3, subdivision \(b\)](#)?

☐
☐
☒
☐

Response:

Less than Significant Impact. Section 15064.3 of the State CEQA Guidelines codifies that project related transportation impacts are typically best measured by evaluating the project's vehicle miles travelled (VMT). Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on

⁷ It should be noted the traffic analysis analyzed 38 dwelling units based on an earlier iteration of the project's site plan. As the project proposes 37 dwelling units, the project's trip generation and impacts calculated in the traffic analysis are therefore highly conservative.

⁸ It should be noted that the trip generation was modeled using trip rates from the ITE, Trip Generation Manual, 10th Edition. A trip generation was run using trip rates from ITE, Trip Generation Manual, 11th Edition, which found that utilizing the 10th Edition results in more trips. Therefore, the project's trip generation provides a conservative analysis.

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 mile of transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT.</p>				
<p>The City of Moreno Valley has prepared updated <i>Traffic Impact Analysis Guidelines</i> (Guidelines) for Land Use Projects in June 2020 to address changes to CEQA pursuant to SB-743 to include VMT analysis methodology and thresholds. The Moreno Valley <i>Traffic Impact Analysis Guidelines</i> provide several screening thresholds for determining if a VMT analysis is required. A project VMT analysis would not be required if a project is located in a Transit Priority Area (TPA) or a low VMT area, or if the project is a local serving retail project or other neighborhood use, including projects that generate fewer than 400 daily trips, which corresponds to a typical development of 42 single family housing units. As shown on Table T-1, the project proposes less than the 42 dwelling units discussed in the guidelines and generates 359 daily vehicle trips, fewer than the 400 daily vehicle trips threshold. Therefore, based on the Moreno Valley Traffic Impact Analysis Guidelines, the project would be presumed to have a less than significant impact on VMT.</p>				
<p>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The project includes development of single-family residences. The project includes community type uses and does not include any incompatible uses, such as farm equipment. The proposed project area would be accessed from Bradshaw Circle, as well as through the onsite streets to each residence.</p> <p>The project would also not increase any hazards related to a design feature. All of the onsite streets would be developed in conformance with City design standards. The City's construction permitting process includes review of project plans to ensure that no potentially hazardous transportation design features would be introduced by the project. For example, the design of the project streets would be reviewed to ensure fire engine accessibility and turn around area is provided to the fire code standards. As a result, impacts related to vehicular circulation design features would be less than significant.</p>				
<p>d) Result in inadequate emergency access?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant Impact.</p> <p>Construction The proposed construction activities, including equipment and supply staging and storage, would occur within and adjacent to the project area on Bradshaw Circle, and would not restrict access of emergency vehicles to the project site or adjacent areas. The installation of driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed project could require the temporary closure of Bradshaw Circle and Cactus Avenue. Traffic detours are not expected to be necessary. In addition, the construction activities would be required to ensure emergency access in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which would be ensured through the City's permitting process. Thus, implementation of the project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level.</p> <p>Operation As described previously, the proposed project area would be accessed from Bradshaw Circle, as well as through the onsite streets to each residence. Permitting of these roadways would provide adequate and safe circulation to, from, and through the project area and would provide two routes for emergency responders to access different portions of the project area. Because the project is required to comply with all applicable City codes, as verified by the City, potential impacts related to inadequate emergency access would be less than significant.</p>				
<p>Existing Plans, Programs or Policies</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
None.				
<u>Mitigation Measures</u>				
None.				
Sources: <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 5 Circulation Element <ul style="list-style-type: none"> Figure 8-1 – Circulation Plan Figure 8-2 – LOS Standards Figure 8-3 – Roadway Cross-Sections Figure 8-4 – Bikeway Plan Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.2 – Traffic/Circulation <ul style="list-style-type: none"> Figure 4.2-1 – Circulation Plan Figure 4.2-2 – General Plan Roadway Cross-Sections Figure 4.2-3 – Year 2000 Number of Through Lanes Figure 4.2-4 – Year 2000 Daily Volume/Capacity (V/C) Ratios Figure 4.2-5 – Year 2000 Average Daily Traffic Volumes Figure 4.2-6 – Proposed Circulation Plan Figure 4.2-7 – LOS Standards Appendix B – Traffic Analysis, City of Moreno Valley General Plan Traffic Study, Urban Crossroads, June 2004. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code Moreno Valley Municipal Code Chapter 3.18 Special Gas Tax Street Improvement Fund Moreno Valley Master Bike Plan, adopted January 2015 Riverside County Transportation Commission, Congestion Management Program, December 14, 2011 City of Moreno Valley Transportation Engineering Division, Traffic Impact Analysis Preparation Guide. 2007. Trip Generation and VMT Screening Analysis for Cactus and Bradshaw Circle Residential Project. December 30, 2020. Prepared by EPD Solutions, Inc. (Appendix I). 				
XVIII. TRIBAL CULTURAL RESOURCES – Would the project:				
AB 52 and SB 18 Requirements <p>The project would be required to comply with AB 52 and SB 18 regarding tribal consultation. Chapter 532, Statutes of 2014 (i.e., AB 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074). AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside the definition stated above nonetheless qualifies as a "tribal cultural resource."</p> <p>SB 18 requires cities and counties acting as Lead Agency to contact and consult with California Native American tribes before adopting or amending a General Plan. The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments at the earliest possible point in the planning process and to enable tribes to manage "cultural places." Cultural places are defined as a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.993).</p> <p>In compliance with these requirements, the City sent out to the following Native American tribes that may have knowledge regarding tribal cultural resources in the project vicinity.</p> <ul style="list-style-type: none"> Agua Caliente Band of Cahuilla Indians Cahuilla Band of Indians 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> Desert Cahuilla Indians Los Coyotes Band of Cahuilla Mission Indians Morongo Band of Mission Indians Pechanga Band of Luiseño Indians Rincon Band of Luiseño Indians San Manuel Band of Mission Indians Santa Rosa Band of Mission Indians Serrano Nation of Mission Indians Soboba Band of Luiseño Indians 				
<p>The Pechanga Band of Luiseño Indians requested consultation regarding the proposed project. The consulting tribe considers the area sensitive for cultural resources as several sites are located nearby. Although no information for site specific tribal cultural resources was provided, the consulting tribe requested the inclusion of mitigation due to the potential of the project to unearth previously undocumented tribal cultural resources during construction. As such, Mitigation Measures TCR-1 through TCR-3 are included, which require Native American monitoring, and procedures for artifact disposition and inadvertent finds. With implementation of Mitigation Measures TCR-1 through TCR-3, impacts would be less than significant.</p>				
<p>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:</p>				
<p>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</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Response: No Impact. As detailed previously in Section 5, <i>Cultural Resources</i>, the project site is currently vacant. Historic aerial photographs and maps of the project site showed no development in the general vicinity of the project area until after 1976. All improvements, therefore, are less than 45 years of age and considered modern and of no historical consequence (McKenna 2020).</p> <p>The Phase I Resources Investigation and Paleontological Overview prepared for the project included a search of the California Historical Resource Information System (CHRIS) at the Eastern Information Center (EIC), located at the University of California, Riverside, Riverside County. The records search indicated that the nearest recorded resources are more than one-half mile distant. It was also determined that there are no known significant cultural resources within the project area and any future development will not adversely impact any significant resources. Furthermore, the Sacred Lands File search completed by the NAHC stated that there are no known/known sacred lands within a 1 mile of the project site (McKenna 2020). Therefore, no substantial evidence exists that tribal cultural resources are present in the project site, and potential impacts would be less than significant.</p>				
<p>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.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact with Mitigation Incorporated. As detailed previously, to avoid potential adverse effects to tribal cultural resources, Mitigation Measures CR-1 through CR-6, above and Mitigation Measures TCR-1 through TCR-3 have been included to provide for Native American and archaeological monitoring of excavation and grading activities to avoid potential impacts to tribal cultural resources that may be unearthed by project construction activities. No information has been provided to the Lead Agency indicating any likelihood of uncovering tribal cultural resources on the project site, there are no known tribal cultural resources on or adjacent to the project site, and no potentially significant</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>impacts are anticipated. Mitigation Measures CR-1 through CR-6 and Mitigation Measures TCR-1 through TCR-3 are included in the event of any inadvertent discoveries during construction activities.</p> <p>Additionally, as described previously and included as Mitigation Measure CR-6, California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of Mitigation Measures CUL-1 through CUL-6 and Mitigation Measures CUL-1 through CUL-3, impacts to tribal cultural resources would be less than significant.</p>				
<p>Existing Plans, Programs, or Policies PPP CUL-1: Human Remains. Listed previously in Section 5, Cultural Resources.</p>				
<p>Mitigation Measures</p> <p>Mitigation Measure TCR-1: Native American Monitoring. Prior to the issuance of a grading permit, the Developer shall secure agreements with the Pechanga Band of Luiseño Indians for tribal monitoring. The City is also required to provide a minimum of 30 days' advance notice to the tribes of all ground disturbing activities. The Native American Tribal Representatives shall have the authority to temporarily halt and redirect earth moving activities in the affected area in the event that suspected archaeological resources are unearthed. The Native American Monitor(s) shall attend the pre-grading meeting with the Project Archaeologist, City, the construction manager and any contractors and will conduct the Tribal Perspective of the mandatory Cultural Resources Worker Sensitivity Training to those in attendance.</p> <p>Mitigation Measure TCR-2: Cultural Resource Disposition. In the event that Native American cultural resources are discovered during the course of ground disturbing activities (inadvertent discoveries), the following procedures shall be carried out for final disposition of the discoveries:</p> <ol style="list-style-type: none"> a. One or more of the following treatments, in order of preference, shall be employed with the tribes. Evidence of such shall be provided to the City of Moreno Valley Planning Department: <ol style="list-style-type: none"> i. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place they were found with no development affecting the integrity of the resources. ii. Onsite reburial of the discovered items as detailed in the treatment plan required pursuant to Mitigation Measure CR-2. This shall include measures and provisions to protect the future reburial area from any future impacts in perpetuity. Reburial shall not occur until all legally required cataloging and basic recordation have been completed. No recordation of sacred items is permitted without the written consent of all Consulting Native American Tribal Governments as defined in Mitigation Measure TCR-1. The location for the future reburial area shall be identified on a confidential exhibit on file with the City, and concurred to by the Consulting Native American Tribal Governments prior to certification of the environmental document. <p>TCR-3: Non-Disclosure of Reburial Locations. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or associated grave goods shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, pursuant to the specific exemption set forth in California Government Code 6254 (r), parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code 6254 (r).</p>				
<p>Sources:</p> <ol style="list-style-type: none"> 1. Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> • Chapter 7 – Conservation Element – Section 7.2 – Cultural and Historical Resources 2. Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> • Section 5.10 – Cultural Resources 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<ul style="list-style-type: none"> - Figure 4.10-1 – Locations of Listed Historic Resource Inventory Structures - Figure 4.10-2 – Location of Prehistoric Sites - Figure 4.10-3 – Paleontological Resource Sensitive Areas • Appendix F – Cultural Resources Analysis, Study of Historical and Archaeological Resources for the Revised General Plan, City of Moreno Valley, Archaeological Associates, August 2003. <ol style="list-style-type: none"> 3. Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 4. Moreno Valley Municipal Code Title 7 – Cultural Preservation 5. Cultural Resources Inventory for the City of Moreno Valley, Riverside County, California, prepared by Daniel F. McCarthy, Archaeological Research Unit, University of California, Riverside, October 1987 (<i>This document cannot be provided to the public due to the inclusion of confidential information pursuant to Government Code Section 6254.10.</i>) 6. Phase I Cultural Resources Investigation and Paleontological Overview for Tentative Tract Map No. 37858, City of Moreno Valley, Riverside County, California. March 18, 2020. Prepared by McKenna et al. (Appendix C). 				
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant. Water Infrastructure The proposed project would install a new 8-inch water pipeline in Bradshaw Circle that would connect to an existing 12-inch water pipeline in Cactus Avenue. The new onsite water system would convey water supplies to the proposed residences and landscaping through plumbing/landscaping fixtures that are compliant with the CalGreen Plumbing Code for efficient use of water.</p> <p>The proposed project would continue to receive water supplies through the existing water line located within the Cactus Avenue rights-of-way that has the capacity to provide the increased water supplies needed to serve the proposed project, and no extensions or expansions to the water pipelines that convey water to the project site would be required. The installation of onsite water distribution lines would only serve the proposed project and would not provide water to any off-site areas.</p> <p>The construction activities related to the onsite water infrastructure that would be needed to serve the proposed single-family residences is included as part of the proposed project and would not result in any physical environmental effects beyond those identified throughout this Initial Study. For example, construction emissions for excavation and installation of the water infrastructure is included in Sections 3, <i>Air Quality</i> and 8, <i>Greenhouse Gas Emissions</i>. Therefore, the proposed project would not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant.</p> <p>Wastewater Infrastructure The project includes installation of onsite sewer lines within the proposed onsite streets that would connect to the existing sewer line in Cactus Avenue. These wastewater flows will be further transported to the Moreno Valley Regional Water Reclamation Facility.</p> <p>The construction activities related to installation of the onsite sewer infrastructure that would serve the proposed project is included as part of the proposed project and would not result in any physical environmental effects beyond those identified throughout this Initial Study. For example, construction emissions for excavation and installation of the sewer infrastructure is included in Section 3, <i>Air Quality</i> and 8, <i>Greenhouse Gas Emissions</i>, and noise volumes from these activities are evaluated in Section 13, <i>Noise</i>. As the proposed project includes facilities to serve the proposed development, it would not result in the need for construction of other new wastewater facilities or expansions, the construction of which could cause significant environmental effects. Therefore, impacts would be less than significant.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The proposed project would result in an increased demand for water supplies from the 37 single-family residential units. Water supplies to the project area are provided by EMWD, which serves 555 square miles of western Riverside County and includes the project area (UWMP 2015). In 2015, EMWD had a water demand of 146,090 AF, and based on land use and growth projections it anticipates a demand of 197,901 AF in 2020, which is a 35 percent increase over 2015 demands (an increase of 51,811 AF) (UWMP 2015). The UWMP details that the district has water supply to meet the projected demands over the next 25 years and beyond (UWMP 2015). The UWMP describes that the district has a projected supply of 197,901 AFY in 2020, and a predicted supply of 268,200 AFY in 2040.</p> <p>To provide a conservative estimate of project water use, a generation rate of 171 gallons per capita per day was used to estimate water demand from the proposed project (UWMP 2015). As described in Section 14, <i>Population and Housing</i>, the proposed project would result in 143 additional residents at full occupancy. Based on the district's 2020 water use target of 176 gallons per capita per day, the 143 additional residents would generate a water demand of 25,168 gallons per day. The project would limit water demand by inclusion of low-flow plumbing and irrigation fixtures, pursuant to the California Title 24 requirements.</p> <p>As detailed previously, the district has the water supply to meet the projected demands over the next 25 years and beyond. In addition, the 2015 UWMP details the available supply, including groundwater, imported water, and recycled water would meet the projected demand during normal, single dry and multiple dry years (UWMP 2015). Therefore, impacts related to water supplies from the proposed project would be less than significant.</p>				
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant Impact. As described above, wastewater flows would be conveyed to the Moreno Valley Regional Water Reclamation Facility. The treatment facility typically processes 10.6 million gallons per day (mgd) but has a current capacity for 16 mgd and an ultimate capacity of 41 mgd (UWMP 2015). Through the city's plan check process, the city's engineering department would confirm that the wastewater generated from the project would be accommodated within this capacity. Thus, the wastewater treatment plant has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments, and impacts would be less than significant.</p>				
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant Impact. The closest landfill to the vacant project site is the Badlands Sanitary Landfill, which is located approximately 6 miles northeast from the project site at 31125 Ironwood Avenue in Moreno Valley. The landfill is permitted to accept 4,800 tons per day of solid waste and is permitted to operate through 2022 (CalRecycle 2020). In 2019, the landfill had an average throughput of 2,428 tons per day. As such, on average, the landfill would have a remaining capacity of 2,372 tons per day. As of March 2020, the landfill has a remaining capacity of 15,748,799 cubic yards (CalRecycle 2020).</p> <p>The CalEEMod solid waste generation rate for single-family residential land use is 0.41 tons per resident per year. As described previously, full occupancy of the proposed project would generate approximately 143 new residents. Thus, operation of the project would generate approximately 58.6 tons per solid waste per year; or 1.13 tons per week. However, at least 75 percent of the solid waste is required by AB 341 to be recycled, which would reduce the volume of landfilled solid waste to approximately 0.28 tons per week or 0.04 tons per day, which is within the Badlands Sanitary Landfill's</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
average remaining capacity of 2,372 tons per day. Thus, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the project would not impair the attainment of solid waste reduction goals. Impacts related to landfill capacity would be less than significant.				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The proposed project would result in new development that would generate an increased amount of solid waste. All solid waste-generating activities within the City are subject to the requirements set forth in Section 4.408 of the 2019 California Green Building Standards Code that requires demolition and construction activities to recycle or reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, and AB 341 that requires diversion of a minimum of 75 percent of operational solid waste. Implementation of the proposed project would be consistent with all state regulations, as ensured through the City's development project permitting process. Therefore, the proposed project would comply with all solid waste statute and regulations; and impacts would not occur.				
Existing Plans, Programs, or Policies None.				
Mitigation Measures None.				
Sources: <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 2 – Conservation Element – Section 2.4 – Utilities Chapter 6 – Safety Element – Section 6.7 – Water Quality Chapter 7 – Conservation Element – Section 7.3 – Solid Waste Chapter 7 -- Conservation Element – Section 7.5—Water Resources <ul style="list-style-type: none"> Figure 6-1 – Water Purveyor Service Area Map Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.7 – Hydrology and Water Quality <ul style="list-style-type: none"> Figure 4.7-1 – Storm Water Flows and Major Drainage Facilities Figure 4.7-2 – Groundwater Basins Section 5.13 – Public Services <ul style="list-style-type: none"> Figure 4.13-1 – Locations of Public Facilities Title 9 – Planning and Zoning of the Moreno Valley Municipal Code Moreno Valley Municipal Code Chapter 8.10 Stormwater/Urban Runoff Management and Discharge Controls Moreno Valley Municipal Code Section 8.21.170 National Pollutant Discharge Elimination System (NPDES). Moreno Valley Municipal Code Chapter 8.80 – Recycling and Diversion of Construction and Demolition Waste California Emissions Estimator Model Appendix D Default Data Tables. Table 10.1 Solid Waste Disposal Rates. Accessed: http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2 CalRecycle Solid Waste Information System. Accessed at: https://www2.calrecycle.ca.gov/SWFacilities/Directory (Accessed May 12, 2020). CalRecycle Disposal Reporting System: Jurisdiction Tons by Facility. Accessed at: https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility (Accessed May 12, 2020). Eastern Municipal Water District 2015 Urban Water Management Plan. June 2016. Prepared by RMC. Available: https://www.emwd.org/post/urban-water-management-plan (Accessed May 12, 2020). Eastern Municipal Water District Moreno Valley Regional Water Reclamation Facility Fact Sheet. Accessed: https://www.emwd.org/sites/main/files/file-attachments/mvrwrffactsheet.pdf (Accessed May 12, 2020). 				
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. The project site is developed and within an urbanized residential area of Moreno Valley. The project site is surrounded by developed and urban areas. The project site is not adjacent to any wildland areas. According to the CAL FIRE Hazard Severity Zone map, the project site is not within a fire hazard zone. The proposed project area would be accessed from two driveways on Bradshaw Circle. Permitting of these roadways would provide adequate and safe circulation to, from, and through the project area and would provide two routes for emergency responders to access different portions of the project area. Because the project is required to comply with all applicable City codes, as verified by the City potential impacts related to an emergency response or evacuation would be less than significant.				
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 type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. As discussed previously, the project site is developed and within an urbanized residential area of Moreno Valley. The project site is surrounded by developed and urban areas. The project site is not adjacent to any wildland areas, and as determined by the CAL FIRE Hazard Severity Zone map, the project site is not within a fire hazard zone. In addition, the project site is flat and within a flat area. The site is adjacent to roadways and residential developments. There are no factors on or adjacent to the project site that would exacerbate wildfire risks. Thus, no impact related to other factors that would expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would occur from the project.				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. As described previously, the project site is developed and within a developed and urban area that is not within a wildfire hazard zone. The project does not include any infrastructure that would exacerbate fire risks. In addition, the project would provide internal streets and fire suppression facilities (e.g., hydrants and sprinklers) that conform to the California Fire Code requirements, included as Municipal Code Chapter 8.36, as verified through the City's permitting process. Therefore, impacts related to infrastructure that could exacerbate fire risks would not occur with the proposed project.				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Response: No Impact. As described previously, the project site is developed and within a developed and urban area that is not within a wildfire hazard zone. In addition, the project site is flat and surrounded by flat areas. There are no slope or hillsides that would become unstable. In addition, the project would install onsite drainage that would be conveyed to the existing flood control channel, which is consistent with the existing condition. Therefore, impacts related to flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes would not occur from the proposed project.				
Sources: <ol style="list-style-type: none"> Moreno Valley General Plan, adopted July 11, 2006 <ul style="list-style-type: none"> Chapter 6 – Safety Element – Section 6.2- Fire and Emergency Services – 6.2.8—Wildland Urban Interface Final Environmental Impact Report City of Moreno Valley General Plan, certified July 11, 2006 <ul style="list-style-type: none"> Section 5.5 – Hazards and Hazardous Materials <ul style="list-style-type: none"> Figure 4.5-2 – Floodplains and High Fire Hazard Areas Title 9 – Planning and Zoning of the Moreno Valley Municipal Code 				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>4. Local Hazard Mitigation Plan, City of Moreno Valley Fire Department, adopted October 4, 2011, amended 2017, http://www.moval.org/city_hall/departments/fire/pdfs/haz-mit-plan.pdf</p> <ul style="list-style-type: none"> Chapter 5 – Wildland and Urban Fires <ul style="list-style-type: none"> Figure 4-2 – Moreno Valley High Fire Area Map 2016 Chapter 8 – Landslide <ul style="list-style-type: none"> Figure 7-1 – Moreno Valley Slope Analysis 2016 <p>5. Emergency Operations Plan, City of Moreno Valley, March 2009, http://www.moval.org/city_hall/departments/fire/pdfs/mv-eop-0309.pdf</p> <ul style="list-style-type: none"> Threat Assessment 3 – Wildfire <p>6. California Department of Forestry and Fire Protection (CAL FIRE). 2020. Fire Hazard Severity Zone Map. Accessed: https://forestwatch.maps.arcgis.com/apps/Style/index.html?appid=5e96315793d445419b6c96f89ce5d153 (Accessed May 12, 2020).</p>				
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
<p>a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less Than Significant with Mitigation Incorporated. The Habitat Assessment describes that the special-status wildlife and plant species with the potential to occur on the project site are covered by compliance with the MSHCP, which requires payment of fees, included as PPP BIO-1. Additionally, any impacts to SKR would be covered through payment of SKR fees as included in Mitigation Measure BIO-1. In addition, because the site supports suitable habitat for burrowing owl the MSHCP requires focused surveys pursuant to the Western Riverside County Regional Conservation Authority (RCA) Burrowing Owl Survey Instructions for the MSHCP area. Hence, Mitigation Measure BIO-2 requires a preconstruction burrowing owl survey to be conducted pursuant to the RCA Survey Instructions prior to start of ground disturbance activities. With implementation of Mitigation Measures BIO-2, impacts related to burrowing owl would be less than significant.</p> <p>In addition, the Habitat Assessment identified suitable habitat and substrate for raptors and migratory birds that are protected under the Migratory Bird Treaty Act and Section 3503.5 of the California Department of Fish and Wildlife (CDFW) code. Therefore, Mitigation Measures BIO-3 and BIO-4 are included to require raptor and migratory nesting bird surveys if construction activities begin during the nesting season. With implementation of Mitigation Measures BIO-3 and BIO-4, impacts related to protected bird species would also be reduced to a less than significant level.</p> <p>As described in Section 5, <i>Cultural Resources</i>, the project site does not contain any buildings or structures that meet any of the California Register of Historical Resources criteria or qualify as “historical resources” as defined by CEQA. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource. In addition, the Phase I Cultural Resources Investigation and Paleontological Overview determined that the potential for archaeological resources to be located within the project site is extremely low to nonexistent. However, the project area is considered moderately sensitive for paleontological resources. Thus, MM PAL-1 has been included to require paleontological monitoring during all future excavations that would exceed a relative depth of five feet below the present surface. Thus, implementation of MM PAL-1 would reduce potential impacts to important examples of California prehistory to a less than significant level.</p> <p>As described in Section 18, <i>Tribal Cultural Resources</i>, to avoid potential adverse effects to tribal cultural resources, Mitigation Measures CR-1 through CR-6, above and Mitigation Measures TCR-1 through TCR-3 have been included to provide for Native American and archaeological monitoring of excavation and grading activities to avoid potential impacts to tribal cultural resources that may be unearthed by project construction activities.</p>				

ISSUES & SUPPORTING INFORMATION SOURCES:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 project, and the effects of probable future projects.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant with Mitigation Incorporated. The project would redevelop the project site for single-family residences within a developed area. The project would provide land uses that are consistent with the adjacent single-family residential uses. As described above, all of the potential impacts related to implementation of the project would be less than significant or reduced to a less than significant level with implementation of mitigation measures that are imposed by the City that effectively reduce environmental impacts.</p> <p>The other cumulative effects of the proposed project taken into consideration with these other projects would be limited, because the project site has already been developed and disturbed and the new uses onsite would not result in substantial change in the urban use of the area. As discussed in Section 19, <i>Utilities and Service Systems</i>, public services and utility infrastructure are in place to serve the project and would not result in cumulatively considerable increases in service and utility needs to serve the project. In addition, the project would not result in substantial effects to any environmental resource topic, as described though out this document.</p> <p>Overall, the proposed project would develop an area that has been subject to previous urban uses, is disturbed, and is surrounded by consistent development and roadways. Impacts to environmental resources or issue areas would not be cumulatively considerable; and cumulative impacts would be less than significant with implementation of the previously identified mitigation measures related to biological resources, paleontological resources, noise, and tribal cultural resources.</p>				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Response: Less than Significant with Mitigation Incorporated. The project proposes development of the project site for single-family residential uses. As described previously, the project site is within an urban area and surrounded by consistent land uses. The project would not consist of any use or any activities that would result in a substantial negative affect on persons in the vicinity. All resource topics associated with the proposed project have been analyzed in accordance with CEQA and the State CEQA Guidelines and were found to pose no impacts or less-than-significant impacts with implementation of mitigation measures related to biological resources, paleontological resources, noise, and tribal cultural resources; and existing plans, programs, or policies that are required by the City. Consequently, the proposed project would in environmental effects that would cause substantial adverse effects on human beings directly or indirectly, and impacts would be less than significant with mitigation.</p>				

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