



Draft Initial Study/
Mitigated Negative Declaration
Crystal Cove Apartments Project
Moreno Valley, California

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1.0 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended, and the CEQA Guidelines, as revised. This IS/MND evaluates the environmental effects of the proposed Crystal Cove Apartments Project (project).

The IS/MND includes the following components:

1. A Draft MND and the formal findings made by the City of Moreno Valley (City) that the project would not result in any significant effects on the environment, as identified in the CEQA IS Checklist.
2. A detailed project description.
3. The CEQA IS Checklist, which provides standards to evaluate the potential for significant environmental impacts from the project and is adapted from Appendix G of the CEQA Guidelines. The project is evaluated in 21 environmental issue categories to determine whether the project's environmental impacts may be significant in any category. Brief discussions are provided that further substantiate the project's anticipated environmental impacts in each category.

Because the project fits into the definition of a "project" under Public Resources Code Section 21065 requiring discretionary approvals by the City, and because it could result in a significant effect on the environment, the project is subject to CEQA review. The IS Checklist was prepared to determine the appropriate environmental document to satisfy CEQA requirements: an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration (ND). The analysis in this IS Checklist supports the conclusion that the project may result in significant environmental impacts, but (1) revisions in the project plans or proposals made by or agreed to by the applicant before a proposed MND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and (2) there is no substantial evidence, in light of the whole record before the City, that the project as revised may have a significant effect on the environment; therefore, an MND has been prepared.

This IS/MND will be circulated for 20 days for public and agency review, during which time individuals and agencies may submit comments on the adequacy of the environmental review. Following the public review period, the City's Planning Commission and City Council will consider any comments received on the IS/MND when deciding whether to adopt the MND.

2.0 Project Description

1. Project Name:

Crystal Cove Apartments Project

2. Lead Agency:

City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553

3. Contact Person and Phone Number:

Claudia Manrique
Associate Planner
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92553
(951) 413-3225
claudiam@moval.org

4. Project Location:

The Crystal Cove Apartments Project (project) is located in the central portion of the city of Moreno Valley, California, approximately 4.2 miles east of Interstate 215 (Figure 1). The project is located within Section 17, Township 3 South, Range 3 West of the U.S. Geological Survey 7.5-minute topographic map, Sunnymead quadrangle (Figure 2). The 8.00-acre project site is located on Assessor's Parcel Number 484-030-028 southwest of the intersection of Alessandro Boulevard and Lasselle Street. The project site is currently undeveloped. Figure 3 shows an aerial photograph of the project site and vicinity.

5. Project Applicant/Sponsor:

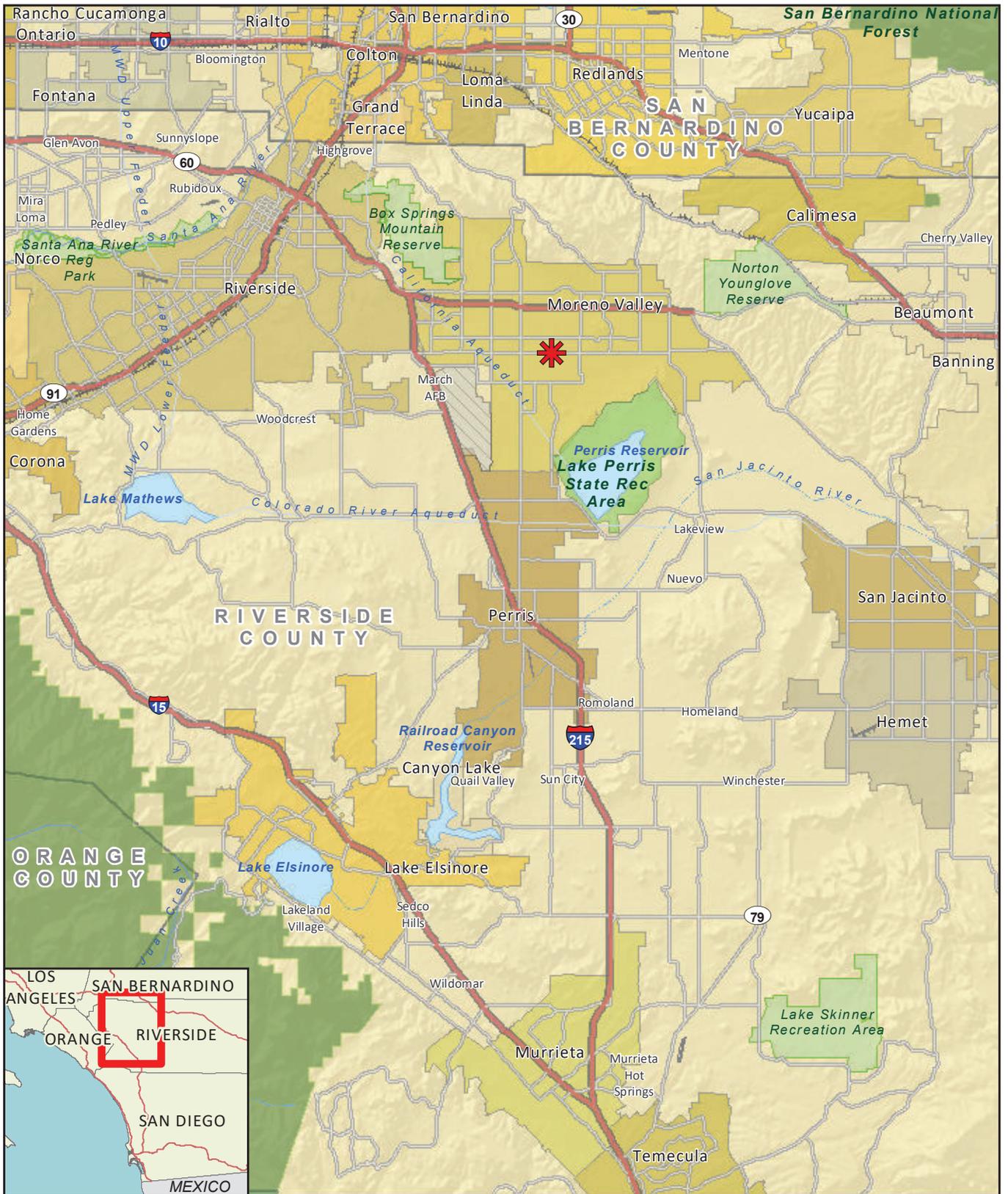
Empire Construction Management, Inc.
2280 Wardlow Circle, Suite 250
Corona, CA 92878

6. General Plan Designation:

Existing: Corridor Mixed Use (COMU)
Proposed: Corridor Mixed Use (COMU)

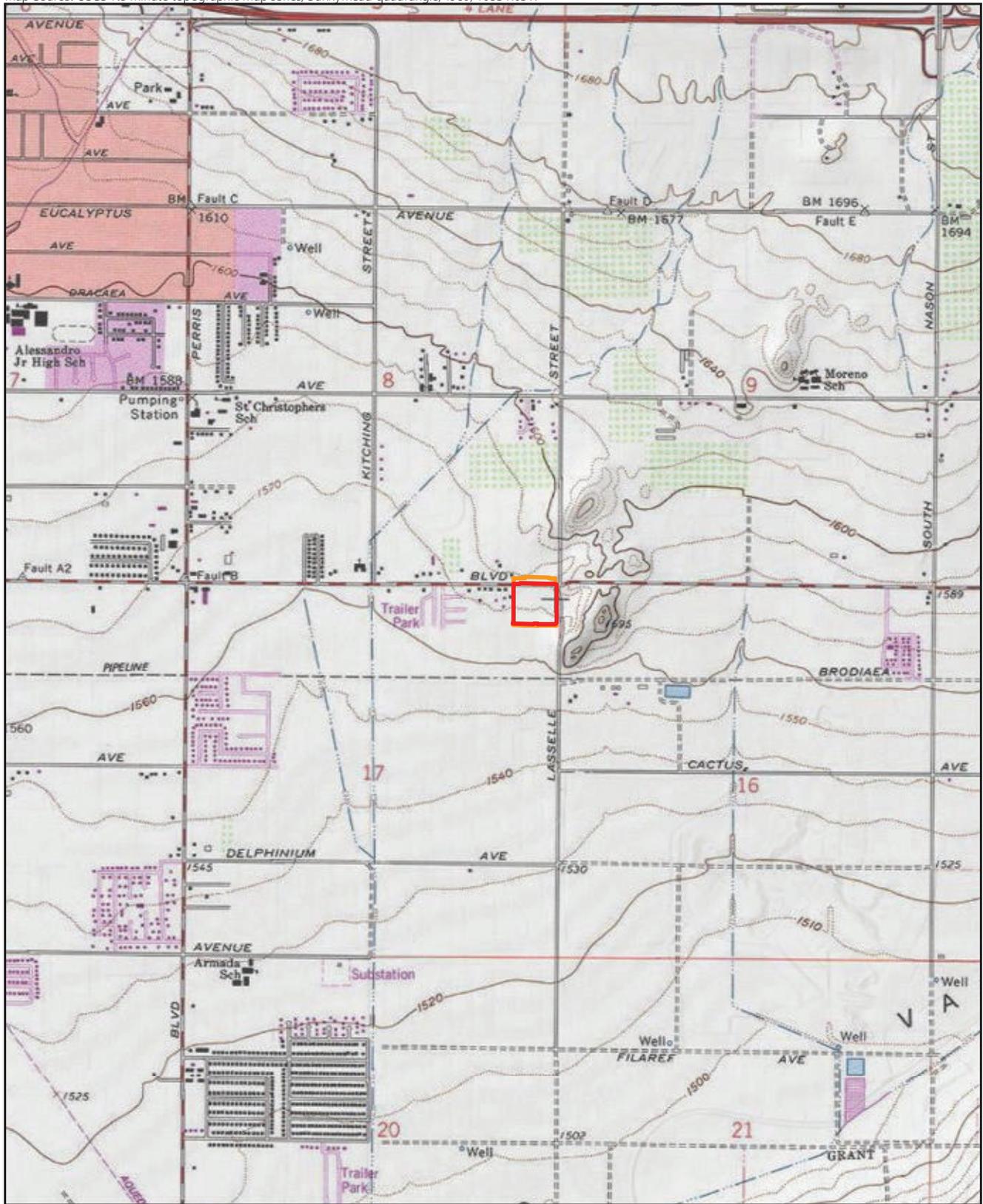
7. Zoning:

Existing: Corridor Mixed Use (COMU)
Proposed: Corridor Mixed Use (COMU)



 Project Location

FIGURE 1
Regional Location



-  Project Boundary
-  Off-site Improvement Area



FIGURE 2
Project Location on USGS Map



-  Project Boundary
-  Off-site Improvement Area

FIGURE 3
Project Location on Aerial Photograph

8. Description of Project:

The project would develop a 192-unit apartment complex that would consist of eight separate buildings providing a total of 84 one-bedroom apartments and 108 two-bedroom apartments. The total floor area of all the units within the eight apartment buildings would equal 173,820 square feet. The project would also provide a recreation center building with an outdoor pool and a 14,000 square foot community dog park. The project would provide a total of 359 parking spaces consisting of 208 covered parking spaces and 151 uncovered parking spaces, including 11 Americans with Disabilities Act-compliant parking spaces and 36 electrical vehicle parking spaces wired for future installation of charging equipment. Access to the site would be provided via a new driveway connection to Alessandro Boulevard along the northern project boundary and a new driveway connection to Copper Cove Lane along the southern project boundary. The project would also make the following off-site improvements:

- Widen Alessandro Boulevard at the project frontage to the ultimate width on the southern half (67 feet from centerline to right-of-way [ROW]) and provide two eastbound lanes.
- Construct raised median islands along Alessandro Boulevard between Chervil Court and Lasselle Street.
- Widen Copper Cove at the project frontage to the ultimate width on the northern half (30 feet from centerline to ROW) and provide one westbound lane.
- Add a southbound bike lane within the existing ROW and improvements of Lasselle Street.

These off-site improvements would total 1.41 acres, which would increase the total project area to 9.41 acres. Figure 4 shows the proposed site plan.

9. Surrounding Land Use(s) and Project Setting:

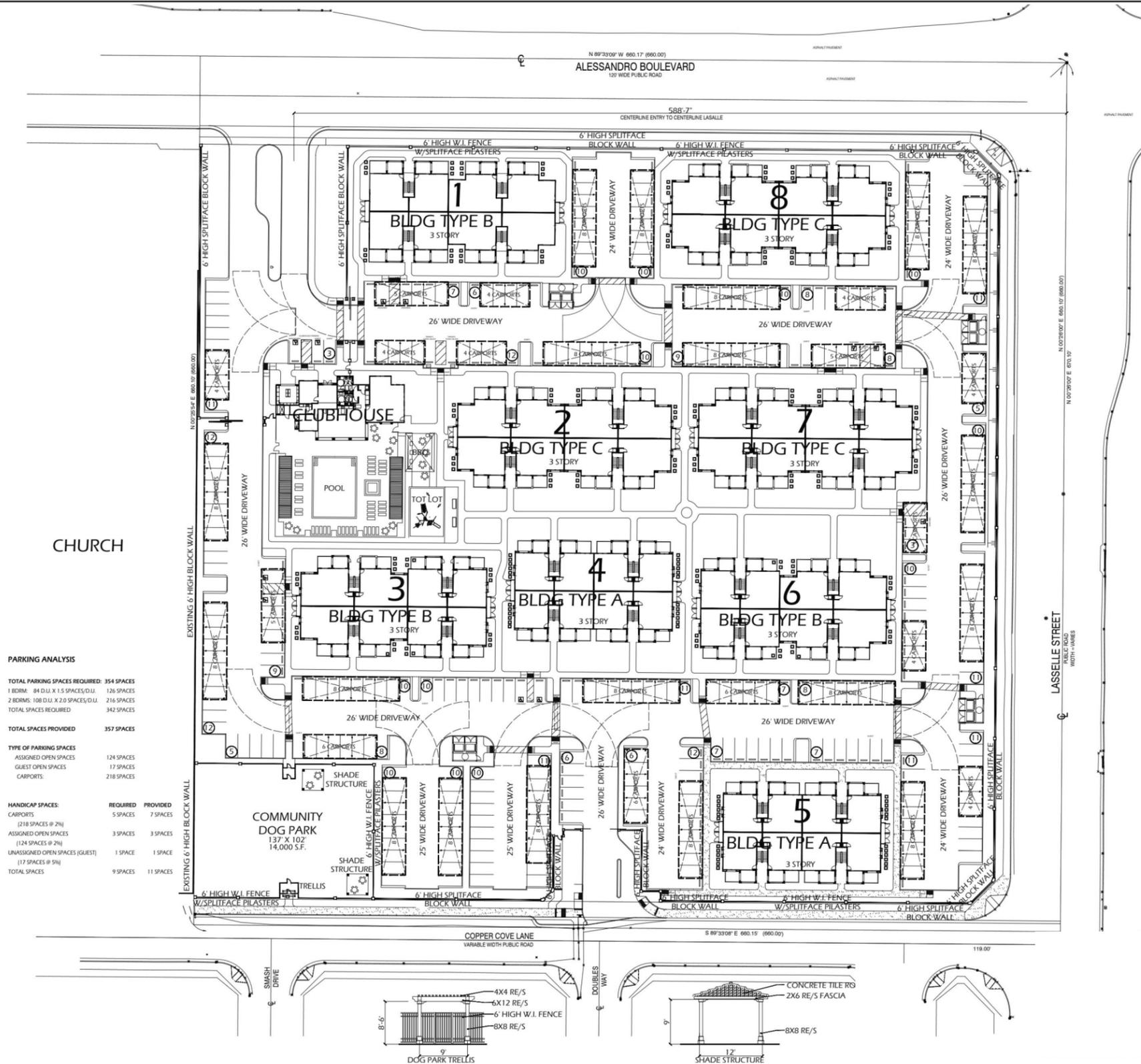
The project is located within an urbanizing environment that consists of a mix of developed and undeveloped land. Existing residential development is located to the south across Copper Cove Lane. The Moreno Hills Seventh-day Adventist Church is located along the western project boundary, followed by an undeveloped property that is planned for residential development further west. Undeveloped land to the north is designated as Corridor Mixed Use (COMU) and undeveloped land to the east is designated as Downtown Center (DC), both of which designations would allow for future development.

10. Required Approvals:

- Plot Plan

11. Other Required Agency Approvals or Permits Required:

None



PARKING ANALYSIS

TOTAL PARKING SPACES REQUIRED:	354 SPACES
1 BDRM: 84 D.U. X 1.5 SPACES/D.U.	126 SPACES
2 BDRMS: 108 D.U. X 2.0 SPACES/D.U.	216 SPACES
TOTAL SPACES REQUIRED:	342 SPACES
TOTAL SPACES PROVIDED:	357 SPACES
TYPE OF PARKING SPACES	
ASSIGNED OPEN SPACES	124 SPACES
GUEST OPEN SPACES	17 SPACES
CARPPOITS:	218 SPACES
HANDICAP SPACES:	
CARPPOITS	REQUIRED: 5 SPACES, PROVIDED: 7 SPACES
ASSIGNED OPEN SPACES	3 SPACES, 3 SPACES
UNASSIGNED OPEN SPACES (GUEST)	1 SPACE, 1 SPACE
TOTAL SPACES	9 SPACES, 11 SPACES



FIGURE 4
Site Plan

12. 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.?

The City initiated consultation with California Native American tribes traditionally and culturally affiliated with the project site who have requested consultation, consistent with the requirements of Assembly Bill 52 (AB 52). The City sent letters to the traditionally and culturally affiliated tribes on May 31, 2022, and requested that they provide responses by July 1, 2022. The City received responses from the following tribes:

1. Agua Caliente Band of Cahuilla Indians
2. Rincon Band of Luiseño Indians
3. Yuhaaviatam of San Manuel Nation

The Agua Caliente Band of Cahuilla Indians stated that the project site is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians Reservation and deferred to the Soboba Band of Luiseño Indians and Pechanga Band of Luiseño Indians. This concluded consultation with the Agua Caliente Band of Cahuilla Indians. The Rincon Band of Luiseño Indians stated that the project site is within the Traditional Use Area of the Luiseño people and requested consultation in order to evaluate the potential for the project to impact tribal cultural resources. The Yuhaaviatam of San Manuel Nation stated that the project site is located within Serrano ancestral territory, but did not have any concern regarding the project. However, they requested that cultural and tribal cultural monitoring be implemented during project construction.

13. Summary of 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.

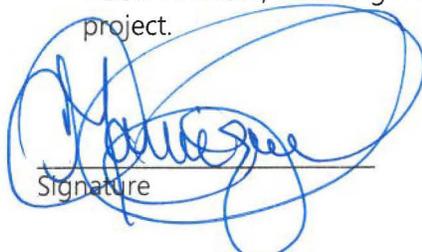
- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input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

3.0 Draft Mitigated Negative Declaration

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 shall be prepared.
- I find that, although the proposed project might have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made, or agreed to, by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
- I find that the proposed project might have a significant effect on the environment and/or deficiencies exist relative to the City's General Plan Quality of Life Standards, and the extent of the deficiency exceeds the levels identified in the City's Environmental Quality Regulations pursuant to Zoning Code Article 47, Section 33-924 (b), and an ENVIRONMENTAL IMPACT REPORT shall be required.
- I find that the proposed project might have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment, but at least one effect: (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT shall be required, but it shall analyze only the effects that remain to be addressed.
- I find that, although the proposed project might have a significant effect on the environment, no further documentation is necessary 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.



Signature

Claudia Manrique, Associate Planner
 City of Moreno Valley

11/3/12
 Date of Draft MND

 Date of Final MND

4.0 Initial Study Checklist

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. A “No Impact” answer should be explained where it is based on project specific factors as well as general standards.
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or (mitigated) negative declaration. Section 15063(c)(3)(D).
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 significant.

4.1 Aesthetics

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. No Impact

The Open Space and Resource Conservation (OSRC) Element of the City’s 2040 General Plan identifies scenic resources and designated view corridors in the city. Review of Map OSRC-3 of the City’s 2040 General Plan determined that the project site is not situated within any designated view corridors and would not substantially alter views from any designated view corridors (City of Moreno Valley 2021). Therefore, the project would not have a substantial adverse effect on a scenic vista. No impact would occur.

b. No Impact

There are no designated state scenic highways within the city. The closest eligible state scenic highway is State Route 74, which is located approximately 14 miles south of the city. As described in Section 4.5(a) below, no historic buildings are currently located on the project site. Furthermore,

there are no mature trees or rock outcroppings on the project site. Therefore, the project would not substantially damage any scenic resources within a state scenic highway. No impact would occur.

c. Less Than Significant Impact

The project would be consistent with the existing visual character of the surrounding urbanizing environment. The project would construct an apartment complex within a site surrounded by a mix of developed land and undeveloped land that is designated for future development. Existing residential development is located to the south across Copper Cove Lane. The Moreno Hills Seventh-day Adventist Church is located along the western project boundary, followed by an undeveloped property that is planned for residential development further west. Undeveloped land to the north is designated as Corridor Mixed Use (COMU) and undeveloped land to the east is designated as Downtown Center (DC), both designations would allow for future development.

The project has been designed consistent with the design guidelines and development requirements of the Corridor Mixed Use (COMU) land use designation, as well as the applicable Corridor Mixed Use (COMU) zoning requirements of the City Municipal Code (MVMC). The project would also utilize landscaping that would enhance the visual quality of the project site and ensure that the project would visually blend with the visual character of the existing development surrounding the project site. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings, and would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

d. Less Than Significant Impact

Project construction would be limited to daytime hours Monday through Friday and is not anticipated to require lighting. In the event that construction lighting is required, it would be properly shielded to avoid spillover effects. Once project construction is complete, any temporary lighting that was required would be removed. The project would introduce new sources of light and glare typical of residential uses. However, the project has been designed consistent with the applicable requirements of MVMC section 9.08.100, which provide standards for the reduction of light and glare associated with residential uses. Therefore, the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and impacts would be less than significant.

4.2 Agriculture and Forestry Resources

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 1220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

a. No Impact

The project site is undeveloped and is not used for agricultural production. The Department of Conservation "California Important Farmland Finder" classifies the project site as "other land" and surrounding properties as a mix of "urban and built up land" or "other land" (State of California Department of Conservation 2016). Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. No impact would occur.

b. No Impact

The City does not have any exclusive agricultural zones, and the project site and surrounding properties are not zoned for agricultural use. Review of Figure 4.2-2 of the City’s 2040 General Plan Final Environmental Impact Report (EIR) determined that the project site and surrounding properties are not subject to a Williamson Act contract (City of Moreno Valley 2021). No impact would occur.

c. No Impact

The City does not have any zoning classifications for forestland, timberland, or timberland production zones. The project site does not contain any forest or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g) and is not zoned as forest or timberland. No impact would occur.

d. No Impact

The project site does not contain any forest lands or timberland as defined by Public Resources Code Section 12220[g], Public Resources Code Section 4526, or Government Code Section 51104(g). No impact would occur.

e. No Impact

There are no agricultural uses or forestlands on-site or in the vicinity of the project site. Therefore, the project would not result in conversion of farmland or forest land. No impact would occur.

4.3 Air Quality

Would the project:

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

EXPLANATIONS:**a. Less Than Significant Impact**

RECON Environmental Inc. (RECON) prepared an Air Quality Analysis for the project (Appendix A). The project site is located within the South Coast Air Basin (SoCAB). The South Coast Air Quality Management District (SCAQMD) is the air pollution control agency in the SoCAB that is tasked with regulating emissions to ensure that air quality in the basin does not exceed National or California Ambient Air Quality Standards (NAAQS and CAAQS). NAAQS and CAAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. NAAQS and CAAQS have been established for six common pollutants of concern known as criteria pollutants, which include ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), lead, and respirable particulate matter (particulate matter less than 10 microns [PM₁₀] and less than 2.5 microns [PM_{2.5}]).

The portion of the SoCAB covering the project site is currently classified as a federal non-attainment area for ozone and PM_{2.5}, and a state non-attainment area for ozone, PM₁₀ and PM_{2.5}. The SCAQMD prepared the 2016 Air Quality Management Plan (2016 AQMP), which represents its contribution to the State Implementation Plan, to outline the SCAQMD's strategy for achieving attainment of federal and state Ambient Air Quality Standards (AAQS). The 2016 AQMP provides an overview of air quality and sources of air pollution, and identifies the pollution-control measures needed to meet clean air standards.

The growth forecasting for the 2016 AQMP is based in part on the land uses established by local general plans. Thus, if a project is consistent with land use as designated in the local general plan, it can normally be considered consistent with the 2016 AQMP. Projects that propose a different land use than is identified in the local general plan may also be considered consistent with the 2016 AQMP if the proposed land use is less intensive than buildout under the current designation. For projects that propose a land use that is more intensive than the current designation, analysis that is more detailed is required to assess conformance with the 2016 AQMP.

The project site is designated as Corridor Mixed Use (COMU) in the City's 2040 General Plan. This designation provides for a mix of housing with supporting retail and services that would cater to the daily needs of local residents. A mix of uses is not required on every site but is desired on sites at intersections to foster nodes of commercial mixed-use development along the corridor. The project would be consistent with the City's 2040 General Plan Corridor Mixed Use (COMU) land use designation.

However, the City's 2040 General Plan was adopted in 2021, prior to development the 2016 AQMP. Therefore, growth forecasting in the 2016 AQMP utilized the previous land use designation identified in the 2006 General Plan, which designated the project site as Commercial, which allowed for development of neighborhood, community, and regional commercial land uses. The Zoning Code identifies a maximum lot coverage of 60 percent for Commercial zones, which would have allowed the 8.00-acre project site to have accommodated approximately 209,000 square feet of commercial uses under the previous land use designation. Using a trip generation rate of 44.3 trips per 1,000 square feet for a strip mall land use (California Air Pollution Control Officers Association [CAPCOA] 2022), it was calculated that a commercial project would generate 9,263 daily trips, which greatly

exceeds the 1,298 daily trips that would be generated by the project. Therefore, the project would generate fewer emissions compared to a commercial project under the 2006 General Plan designation. Therefore, the project would not exceed the growth assumptions used to develop the 2016 AQMP, and impacts would be less than significant.

Another factor used to determine if a project would conflict with implementation of the 2016 AQMP is determining if the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards (NAAQS and CAAQS) or interim emissions reductions specified in the 2016 AQMP. NAAQS and CAAQS violations could occur if project emissions would exceed regional significance thresholds or Localized Significance Thresholds (LSTs).

The SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions. These significance thresholds are updated as needed to appropriately represent the most current technical information and attainment status in the SoCAB. The City uses the current SCAQMD thresholds to determine whether a project would have a significant impact. Construction and operation air emissions were calculated using California Emissions Estimator Model (CalEEMod) 2020.4.0 (CAPCOA 2021). The CalEEMod program is a tool used to estimate air emissions resulting from land development projects based on California-specific emission factors. The CalEEMod output files are presented in Appendix A, Attachment 1. Table 1 presents the total projected construction maximum daily emission levels for each criteria pollutant and compares emissions to the SCAQMD regional significance thresholds. As shown in Table 1, maximum daily construction emissions for each separate phase of construction of the project would be less than the daily SCAQMD regional thresholds for all criteria pollutants.

Table 1 Maximum Daily Construction Emissions						
Construction	Emissions (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Site Preparation	3	28	19	<1	9	5
Grading	2	18	15	<1	4	2
Building Construction	2	16	23	<1	3	1
Paving	1	10	15	<1	1	1
Architectural Coatings	58	1	3	<1	1	<1
Maximum Daily Emissions¹	58	28	23	<1	9	5
<i>SCAQMD Significance Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<i>Exceeds Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
¹ Emissions were rounded to the nearest whole number. Emissions reported as <1 indicate that emissions were calculated to be less than 0.5 pound per day. NOTE: CalEEMod output files are presented in in Appendix A, Attachment 1.						

Table 2 presents the total projected operational emissions generated by the project. As shown in Table 2, project-generated emissions are projected to be less than the SCAQMD’s regional thresholds for all criteria pollutants.

Table 2 Summary of Project Operational Emissions (pounds per day)						
Source	Emissions					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Sources	4	<1	16	<1	<1	<1
Energy Sources	<1	1	<1	<1	<1	<1
Mobile Sources	3	6	35	<1	9	3
Total	8	6	51	<1	10	3
<i>SCAQMD Significance Threshold</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
<i>Exceeds Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
NOTE: Totals may vary due to independent rounding. CalEEMod output files are presented in Appendix A, Attachment 1.						

The SCAQMD’s Final LST Methodology was developed as a tool to assist lead agencies in analyzing localized air quality impacts to sensitive receptors in the vicinity of the project (SCAQMD 2008). The LST Methodology outlines how to analyze localized impacts from common pollutants of concern including NO₂, CO, PM₁₀, and PM_{2.5}. Localized air quality impacts would occur if pollutant concentrations at sensitive receptors exceeded applicable NAAQS or CAAQS.

LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below state standards. In the case of CO and NO₂, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM₁₀ and PM_{2.5}, both of which are non-attainment pollutants.

Table 3 presents the maximum daily localized emissions from project construction in comparison to the applicable LSTs. As shown in Table 3, the maximum localized construction emissions would not exceed any of the SCAQMD recommended localized screening thresholds.

Table 4 presents the maximum on-site emissions and applicable LSTs. As a conservative assessment, on-site emissions were evaluated against the most restrictive LSTs for a 1-acre project site with a sensitive receptor located 25 meters from the project boundary. As shown in Table 4, the maximum localized operational emissions would not exceed any of the SCAQMD recommended localized screening thresholds.

Table 3 Localized Construction Emissions				
	NO _x	CO	PM ₁₀	PM _{2.5}
Site Preparation (3.5 acres per day)				
Maximum On-site Daily Emission	27.5	18.2	8.9	5.1
<i>Localized Significance Threshold</i>	216.8	1,221.4	9.8	6.1
Exceeds Threshold?	No	No	No	No
Grading (3.0 acres per day)				
Maximum On-site Daily Emission	17.9	14.8	3.5	2.0
<i>Localized Significance Threshold</i>	198.3	1,101.0	8.7	5.4
Exceeds Threshold?	No	No	No	No
NOTE: CalEEMod output files are presented in in Appendix A, Attachment 1.				

Table 4 Localized Operations Emissions				
Operations	Pollutant (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area Sources	0.18	15.83	0.09	0.09
Energy Sources	0.70	0.30	0.06	0.06
Maximum On-site Emissions	0.88	16.13	0.14	0.14
<i>Operations Localized Significance Threshold¹</i>	118	602	1	1
Exceeds Threshold?	No	No	No	No
NOTE: Totals may vary due to independent rounding.				
¹ Emissions are assessed against the threshold for 1-acre project sites with sensitive receptors within 25 meters of the project site boundary.				
NOTE: CalEEMod output files are presented in in Appendix A, Attachment 1.				

Overall, the project would be consistent with the 2016 AQMP growth projects as contained in the State Implementation Plan and would not exceed SCAQMD thresholds related to construction or operational emissions. Therefore, the project would not conflict with or obstruct implementation of applicable air quality plans, and impacts would be less than significant.

b. Less Than Significant Impact

As discussed in Section 4.3(a) above, the SoCAB is designated as a nonattainment area for NAAQS for the 8-hour ozone and PM_{2.5} standards, and is in nonattainment area under state PM₁₀ standards. Ozone is not emitted directly, but is a result of atmospheric activity on precursors. NO_x and reactive organic gases (ROG) are known as the chief “precursors” of ozone. These compounds react in the presence of sunlight to produce ozone.

As discussed in Section 4.3(a) above, the SCAQMD has established significance thresholds to assess the regional and localized impacts of project-related air pollutant emissions. These significance thresholds are updated as needed to appropriately represent the most current technical information and attainment status in the SoCAB. The City uses the current SCAQMD thresholds to determine whether a project would have a significant impact.

As shown in Tables 1 and 2 above, emissions of ozone precursors (ROG and NO_x), PM₁₀, and PM_{2.5} from construction and operation would be below the SCAQMD's thresholds of significance. These thresholds are designed to provide limits below which project emissions from an individual project would not significantly affect regional air quality or the timely attainment of the NAAQS and CAAQS. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment, and impacts would be less than significant.

c. Less Than Significant Impact

A sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Examples of sensitive receptor locations in the community include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. The nearest sensitive receptors to the project site are the residential uses located approximately 40 feet south of the southern project boundary and the church located approximately 20 feet west of the western project boundary.

Diesel Particulate Matter– Construction

Construction of the project would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Other construction-related sources of diesel particulate matter (DPM) include material delivery trucks and construction worker vehicles; however, these sources are minimal relative to construction equipment. Not all construction worker vehicles would be diesel-fueled and most DPM emissions associated with material delivery trucks and construction worker vehicles would occur off-site.

For purposes of analyzing construction-related toxic air contaminant emissions and their impact on sensitive receptors, the maximum annual PM₁₀ emissions from equipment exhaust were used to develop an average daily emission rate. The exhaust emissions were calculated by CalEEMod, and the maximum annual DPM concentration was calculated using AERSCREEN. AERSCREEN calculates a worst-case maximum 1-hour concentration at a specific distance and specific angle from the source. The maximum 1-hour concentration is then converted to an annual concentration using a 0.08 conversion factor (U.S. Environmental Protection Agency [U.S. EPA] 1992).

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. In this analysis, non-carcinogenic impacts are evaluated for chronic exposure inhalation exposure. Estimates of health impacts from non-carcinogenic concentrations are expressed as a hazard quotient (HQ) for individual substances, such as diesel particulate. An HQ of one or less indicates that adverse health effects are not expected to result from exposure to emissions of that substance.

Based on the CalEEMod calculations for project construction, the project would result in on-site maximum annual emissions of 0.0972 ton of PM₁₀ exhaust (see Appendix A). This maximum annual emissions rate was modeled over the entire 14-month construction period, and therefore is a conservative assessment. Based on AERSCREEN modeling results, the maximum 1-hour ground-level

DPM concentration from construction activities would be 0.04683 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). This was converted to an annual average concentration of $0.00375 \mu\text{g}/\text{m}^3$ using a conversion factor of 0.08 (U.S. EPA 1992). The resulting annual concentration was used in the equations discussed above. Using this methodology, it was calculated that the excess cancer risk would be 0.78 in 1 million. DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer. Additionally, the HQ would be 0.0007, which is less than one. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations associated with DPM during construction that could result in excess cancer risks, and impacts would be less than significant.

Diesel Particulate Matter – Freeway

The California Air Resources Board (CARB) handbook indicates that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles per day should be avoided when possible (CARB 2005). The project site is located adjacent to Alessandro Boulevard and Lasselle Street. However, based on the future traffic projections provided in the City's 2040 General Plan Final EIR, traffic volumes on these roadways would be well less than 100,000 vehicles per day (City of Moreno Valley 2021). Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations associated with DPM during operation, and impacts would be less than significant.

Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near congested intersections where idling and queuing occurs. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, more recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. This analysis conservatively assesses potential CO hot spots using the Sacramento Metropolitan Air Quality Management District screening threshold of 31,600 vehicles per hour.

The project would generate 1,298 average daily trips (ADT; K2 Traffic Engineering, Inc. 2022). Future year 2040 traffic volumes were obtained from the noise analysis prepared as part of the City's 2040 General Plan Final EIR (City of Moreno Valley 2021). Based on this analysis, Alessandro Boulevard would carry 22,460 to 26,745 ADT and Lasselle Street would carry 10,843 to 15,233 ADT in the vicinity of the project site. Peak hour volumes are typically 10 percent of the ADT. Based on this, the hourly turning volumes at nearby intersections are projected to be well less than 31,600 vehicles per hour. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations associated with a CO hot spot, and impacts would be less than significant.

d. Less Than Significant Impact

The potential for an odor impact is dependent on a number of variables, including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. During construction, construction equipment may generate some nuisance odors. Sensitive receptors near the project site include residential uses and a church; however, exposure to odors associated with project construction would be short term and temporary in nature. Project construction would be regulated by CARB’s Airborne Toxic Control Measures 13 (California Code of Regulations Chapter 10 Section 2485), which requires that equipment idling time not exceed 5 minutes unless more time is required per engine manufacturers’ specifications or for safety reasons. Therefore, project construction would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant. Once operational, the project would not include any uses or activities that would result in potentially significant operational-source odor impacts. Therefore, the project would not generate substantial amounts of odors adversely affecting a substantial number of people, and impacts would be less than significant.

4.4 Biological Resources

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

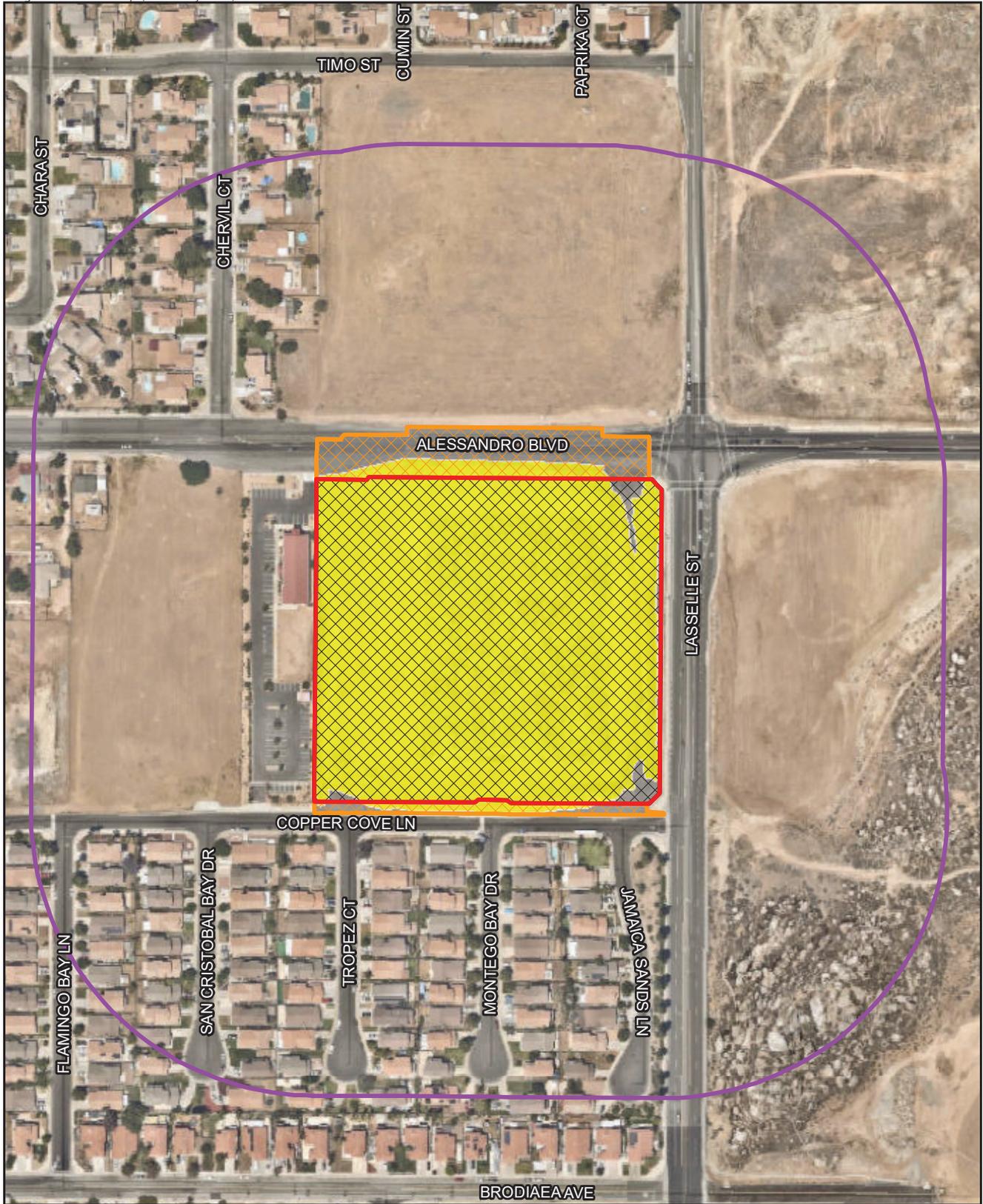
EXPLANATIONS:

a. Potentially Significant Unless Mitigation Incorporated

RECON prepared a Biological Resources Letter Report (Appendix B), as well as a Burrowing Owl Habitat Assessment (Appendix C) and Burrowing Owl Focused Surveys (Appendix D) in accordance with the guidelines developed for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP; Western Riverside County Regional Conservation Authority [WRCRCA] 2006) to verify conditions within the site. The survey area included the entire 9.41-acre project area (on and off-site) and surrounding 500-foot buffer (Figure 5). The Biological Resources Letter Report also reviewed the WRCRCA MSHCP Information Map (WRCRCA 2022); California Natural Diversity Database (CNDDDB; CDFW 2022), the All Species Occurrence Database (USFWS 2022a), and National Wetlands Inventory (USFWS 2022b).

Vegetation Communities/Land Cover Types

The general biological survey identified two vegetation communities/land cover types within the project site: non-native grassland and residential/urban/exotic. The acreage of these vegetation communities/land cover types is presented in Table 5 and descriptions are provided below.



-  Project Boundary
-  On-site Impact Area
-  Off-site Improvement Area
-  Burrowing Owl Survey Area

Vegetation Community

-  Non-native Grassland
-  Residential/Urban/Exotic



FIGURE 5
Impacts to Biological Resources

Table 5 Vegetation Communities/Land Cover Types within the Project Area (acres)			
Vegetation Communities/ Land Cover Types	Project Site	Off-Site Improvement Area	Project Area Total
Non-native Grassland	7.78	0.46	8.24
Residential/Urban/Exotic	0.22	0.94	1.17
Total	8.00	1.41	9.41

Non-native Grassland

Non-native grassland is a vegetation community characterized by a dense to sparse cover of annual grasses that have evolved to persist in concert with human agricultural practices. The project site was dominated by wall barley (*Hordeum murinum*), common fiddleneck (*Amsinckia menziesii*), and short-pod mustard (*Hirschfeldia incana*). The non-native grassland totals 8.24 acres.

Residential/Urban/Exotic

Residential/urban/exotic habitat is composed of areas that have been previously disturbed and no longer function as a native or naturalized vegetation community, as well as any land that has been constructed upon, containing permanent or semi-permanent structures, pavement or hardscape, or landscaped areas that are regularly maintained and/or irrigated. Vegetation, if present, is dominated by short-pod mustard and long-beak filaree (*Erodium botrys*). The residential/urban/exotic land occurs along the northern, southern, and eastern boundary edge. The residential/urban/exotic land totals 1.17 acres.

The project would result in a total of 8.24 acres of direct impacts to non-native grassland and 1.17 acres of direct impacts to residential/urban/exotic (Table 6; see Figure 5). As described in greater detail in Section 4.4(f) below, the project would be consistent with the MSHCP Conservation Criteria, and therefore would be considered a Covered Project under the MSHCP. Consequently, impacts to non-native grassland and residential/urban/exotic would not be considered significant under the MSHCP. Therefore, the project would not have substantial adverse effects on sensitive species, either directly or through habitat modifications of sensitive vegetation communities, and impacts would be less than significant.

Table 6 Project Impacts to Vegetation Communities and Land Cover Types within the Project Area				
Vegetation Communities/ Land Cover Types	Existing Acreage within the Project Area	Project Site Impacts (Acres)	Off-site Improvement Area Impacts (Acres)	Total Project Impacts
Non-native Grassland	8.24	7.78	0.46	8.24
Residential/Urban/Exotic	1.17	0.22	0.95	1.17
Total	9.41	8.00	1.41	9.41

Sensitive Plants

No sensitive plant species were identified within the project area, and no sensitive plant species are anticipated to occur due to the highly disturbed nature of the site. Based on the database review completed for the project, no sensitive plant species are known to occur within one mile of the project area. Therefore, the project would not have substantial adverse effects on any sensitive plant species. No impact would occur.

Sensitive Wildlife

No sensitive wildlife species were identified within the project area. However, three sensitive wildlife species, burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), and Stephens' kangaroo rat (*Dipodomys stephensi*) have a moderate to high potential to occur within the project area. Each of these species and potential impacts are described below.

Western Burrowing Owl

The project is located within the MSHCP survey area for burrowing owl. Therefore, a burrowing owl habitat assessment was conducted pursuant to the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area (WRCRCA 2006). Although no evidence of burrowing owls was present on-site, suitable burrows, prey species, and habitat were identified during the MSHCP protocol habitat assessment. Due to the presence of suitable habitat and burrows, per the MSHCP guidelines, Step II-Part B Focused Burrowing Owl surveys were conducted during the breeding season (WRCRCA 2022; Appendix B). The Step II-Part B focused burrowing owl surveys were conducted on four separate dates: May 24 and 25, and June 8 and 10, 2022. The surveys were conducted between two hours before sunset and one hour after sunset or one hour before sunrise and two hours after sunrise. Meandering transects were walked through all suitable habitat identified within the project boundary and burrows were inspected for sign (e.g., pellets, whitewash, feathers). The 500-foot buffer was surveyed from the project boundary using binoculars, as permission to survey within the buffer was not granted. Although burrows were observed on-site and within the 500-foot buffer, no burrowing owls or sign were observed during these focused surveys. However, due to the presence of suitable burrows and prey species, the project would have the potential to result in direct impacts to burrowing owl as a result of vegetation removal, grading, and construction within the project impact footprint. Direct impacts to this species would be considered significant (Impact BIO-1). Implementation of mitigation measure MM-BIO-1 would reduce impacts to a level less than significant.

MM-BIO-1: Burrowing Owl

Due to the presence of suitable burrows and prey species identified on-site, prior to project construction, 30-day preconstruction surveys following the protocol established in the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area shall be conducted in accordance with the requirements of the MSHCP (WRCRCA 2006). Take of active nests shall be avoided. If burrowing owls are detected, the WRCRCA, and CDFW shall be notified in 48 hours. A burrowing owl relocation plan for active or passive relocation will be required to be developed and is subject to review and approval by WRCRCA and CDFW.

Migratory and Nesting Birds

The California horned lark is a CDFW watch list species and a covered species under the MSHCP. This species has a high potential to nest and forage within the project area due to the presence of disturbed habitat with suitable openings for nesting. Direct impacts to nesting and migratory birds, including California horned lark, could potentially occur if vegetation removal or grading within the project impact footprint occur during the general avian breeding season (February 1 to September 15). These species are protected by the California Fish and Game Code (CFGF) Section 3503.5, and direct impacts to nesting individuals would be considered significant and require mitigation (Impact BIO-2). Implementation of mitigation measure MM-BIO-2 would reduce impacts to a level less than significant.

MM-BIO-2: Migratory and Nesting Birds

To remain in compliance with the Migratory Bird Treaty Act (MBTA) and CFGF Sections 3503 and 3503.5, no direct impacts shall occur to any nesting birds, their eggs, chicks, or nests. If vegetation removal activities were to occur during the bird breeding season of February 1 to September 15, a qualified biologist will conduct pre-construction surveys no more than three days prior to the commencement of project activities to identify locations of nests. If nests or breeding activities are located in the project area, a qualified biologist shall establish a clearly marked appropriate exclusionary buffer or other avoidance and minimization measures around the nest. Avoidance and minimization measures shall be maintained until the young have fledged and no further nesting is detected. If no nesting birds are detected during the pre-construction survey, no further measures are required.

Stephens' Kangaroo Rat

The Stephens' kangaroo rat is federally listed as threatened, state listed as threatened, and an MSHCP covered species. This species has a moderate potential to occur due to the presence of grassland and open areas. In 1996, USFWS approved the Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) and granted an incidental take permit for Riverside County covering an estimated 30,000 acres of occupied habitat within the following eight member cities: Perris, Temecula, Murrieta, Lake Elsinore, Corona, Riverside, Moreno Valley, and Hemet (Riverside County Habitat Conservation Agency [RCHCA] 1996). The Stephens' kangaroo rat HCP authorizes the incidental take of half of the occupied habitat remaining in the HCP plan area while using development fees to implement the plan, purchase private property, and create a reserve system. The Stephens' Kangaroo Rat HCP and corresponding permits are in effect for areas covered by the MSHCP; however, the Stephens' Kangaroo Rat HCP and the MSHCP remain separate. The Stephens' Kangaroo Rat fee areas are subject to mandatory conservation measures as outlined in the Stephens' Kangaroo Rat HCP (RCHCA 1996) and as subsequently modified. The entire 9.41-acre project area is not part of a Stephens' kangaroo rat core reserve, and therefore would not require focused Stephens' kangaroo rat surveys (RCHCA 1996). However, the project site is located within the Stephens' kangaroo rat fee area, which is considered a significant impact (Impact BIO-3). Implementation of mitigation measure MM-BIO-3 would reduce impacts to a level less than significant.

MM-BIO-3: Stephens' Kangaroo Rat Fee Area

Prior to the issuance of a development permit, the applicant shall pay an impact and mitigation fee of \$500 per gross acre for impacts to 9.41 acres within the Stephens' Kangaroo Rat fee area. This mitigation fee is intended to include all impacts located within the parcel to be developed and the area disturbed by related off-site improvements.

b. No Impact

No riparian or riverine features were recorded on-site during the general biological survey. Direct impacts associated with the project would be limited to non-native grassland and residential/urban/exotic habitat, neither of which are considered riparian habitats. As described in Section 4.4(a) above, impacts to these vegetation communities would not be significant and would not require mitigation. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impact would occur.

c. No Impact

No potential jurisdictional waters, including wetlands, vernal pools, or non-wetland waters, were observed within or adjacent to the project area during the general biological survey. Therefore, the project would not have a substantial adverse effect on state or federally protected wetlands. No impact would occur.

d. Potentially Significant Unless Mitigation Incorporated

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetation cover provide corridors for wildlife travel. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits between populations (Beier and Loe 1992). Wildlife movement corridors are considered sensitive by resource and conservation agencies. The project site is located on undeveloped land, and is surrounded by urban development and existing roadways to the north, south, east, and west. Although there is undeveloped land to the north and the east, species would not likely traverse these areas because the surrounding developed areas preclude wildlife movement. Therefore, the project would not interfere substantially with wildlife movement and does not function as a wildlife corridor.

As described in Section 4.4(a) above, direct impacts to nesting and migratory birds, including California horned lark, could potentially occur if vegetation removal or grading within the project impact footprint occur during the general avian breeding season (February 1 to September 15), which would be considered a significant impact. However, implementation of mitigation measure MM-BIO-2 would reduce impacts on nesting and migratory birds to a level less than significant. Therefore, the project would not impede the use of native wildlife nursery sites, and impacts would be mitigated to a level less than significant.

e. No Impact

The project does not possess any trees. All other potential impacts to biological resources have been addressed in Section 4.4(a) through 4.4(d) above. Therefore, the project would not conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance. No impact would occur.

f. Potentially Significant Unless Mitigation Incorporated

The Biological Resources Letter Report evaluated the project for consistency with applicable policies of the MSHCP (see Appendix B). No riparian/riverine areas or vernal pools were identified during the general biological survey. Therefore, the project is consistent with the requirements for the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools in Section 6.1.2 of the MSHCP, and no additional surveys, analysis, or mitigation is required. The project is located outside the MSHCP Narrow Endemic Plant Species Survey Area and no narrow endemic plants are anticipated to occur within the project area due to the disturbed nature of the site and lack of suitable habitat. Therefore, the project is consistent with the requirements for the Additional Surveys Needs and Procedures in Section 6.1.3 of the MSHCP, and no additional surveys or mitigation is required. The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with development located in proximity to a MSHCP Conservation Area. The project area is not located inside or adjacent to any Criteria Area, Criteria Cell, or Conservation Area identified for conservation potential by the MSHCP. As described in Section 4.4(a) above, implementation of mitigation measure MM-BIO-1 would reduce impacts on western burrowing owl to a level less than significant. Similarly, implementation of mitigation measure MM-BIO-2 would reduce impacts on nesting and migratory birds to a level less than significant. Furthermore, implementation of mitigation measure MM-BIO-3 would reduce impacts on the Stephens' kangaroo rat to a level less than significant. Therefore, the project would not conflict with the provisions of the MSHCP, and impacts would be mitigated to a level less than significant.

4.5 Cultural Resources

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Disturb human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. No Impact

RECON prepared an Archaeological Survey Report for the project’s Area of Potential Effect (APE) that conducted background research, review of topographic maps and historic aerial photographs, and an on-foot survey (Appendix E).

Prior to the survey, a records search was requested from the Eastern Information Center. The results indicated that 28 archaeological investigations have been completed within the one-mile buffer, including 4 historic-era sites and 10 prehistoric sites. None of the previously recorded resources occur within the APE.

An on-foot survey was conducted by RECON and a representative from the Pechanga Band of Luiseño Indians. No significant or potentially significant prehistoric or historic cultural resources were observed during the survey of the APE. Therefore, the project would not cause a substantial adverse change in the significance of an historical resource pursuant to §15064.5. No impact would occur.

b. Less Than Significant Impact

As described in Section 4.5(a), the records search results indicate that there are no previously recorded cultural resources within the APE. A letter was sent to the Native American Heritage Commission (NAHC) by RECON requesting a search of their Sacred Lands File to identify any spiritually significant and/or sacred sites or Traditional Use Areas in the project vicinity. The search results came back negative. As described in Section 4.5(a) above, no previously recorded resources occur within the APE, and no significant or potentially significant prehistoric or historic cultural resources were observed during the survey of the APE. Additionally, the possibility of intact buried significant cultural resources being present within the APE is considered low because of past ground disturbances, including previous agricultural activity that occurred on the project site and current tilling or mowing for weed control. Therefore, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5, and impacts would be less than significant.

c. Less Than Significant Impact

There are no formal cemeteries or recorded burials on the project site or surrounding area. If Native American human remains are encountered during construction, Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5 will be followed. If human remains are encountered, no further disturbance shall occur until the Riverside County Coroner has made the

necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the coroner shall contact the NAHC within 24 hours. Subsequently, the NAHC shall identify the person or persons it believes to be the “most likely descendant.” The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Adherence to these regulatory requirements in the event of an unanticipated discovery would ensure that the project would not disturb human remains, including those interred outside of formal cemeteries and reduce impacts to a level less than significant.

4.6 Energy

Would the project:

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

EXPLANATIONS:

a. Less Than Significant Impact

The analysis of energy resources requires a discussion of construction, transportation, and operational energy use.

Construction-Related Energy Use

Energy use during construction would occur within two general categories: fuel use from vehicles used by workers commuting to and from the construction site, and fuel use by vehicles and other equipment to conduct construction activities. Based on CalEEMod calculations, project construction is anticipated to last 14 months. and would require a maximum of 200 worker vehicle trips per day and 45 vendor trips per day during building construction activities. All other construction activities would require fewer worker and vendor vehicle trips. It is anticipated that soil grading quantities would be balanced on-site and would require no soil hauling trips during any of the construction phases. CalEEMod output files are presented in Appendix A. Fuel consumption associated with

construction worker commutes would be similar of any other typical commute in Riverside County, and would not result in a wasteful, inefficient, or unnecessary consumption of gasoline or diesel fuel. Consistent with state requirements, all construction equipment would meet CARB Tier 3 In-Use Off-Road Diesel Engine Standards. Engines are required to meet certain emission standards, and groups of standards are referred to as Tiers. A Tier 0 engine is unregulated with no emission controls, and each progression of standard level (i.e., Tier 1, Tier 2, Tier 3, etc.) generate lower emissions, use less energy, and are more advanced technologically than the previous tier. CARB's Tier 3 In-Use Off-Road Diesel Engine Standards requires that construction equipment fleets become cleaner and use less energy over time. There are no known conditions in the project area that would require nonstandard equipment or construction practices that would increase fuel-energy consumption above typical equipment fuel consumption rates. Additionally, construction activities would be temporary and short-term (14 months) and would adhere to all construction best management practices (BMPs). As required by the City's Climate Action Plan (CAP), the project would post clear signage during the construction period reminding construction workers to limit idling of construction equipment. Therefore, project construction would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

Operation-Related Energy Use

During operation, energy use would be associated with transportation-related fuel use (gasoline, diesel fuel, and electric vehicles), and building-related energy use (electricity and natural gas).

Transportation-Related Energy Use

Buildout of the project and vehicle trips associated with project operation would result in transportation energy use. Trips by individuals traveling to and from the project site would consist of passenger vehicles mostly powered by gasoline, with some fueled by diesel or electricity. The project would generate 1,298 ADT (K2 Traffic Engineering, Inc. 2022). Compared to the overall number of vehicle trips generated in the city, this amount of vehicle traffic would be negligible. Additionally, as discussed in Section 4.8(a) below, the project would implement measures that would reduce trips and vehicle miles travelled (VMT), including electric vehicle parking and bicycle parking, as required by the City's CAP. The project would include on-site amenities including a dog park, clubhouse, pool, cabanas, and tot lot, thereby reducing the need to travel for recreational activities. Additionally, vehicle trips would be reduced through the use of public transit by project residents. The project would construct a high-density residential use adjacent to an existing transit route along Alessandro Boulevard immediately adjacent to the project site. Riverside Transit Agency Route 20 provides service to major destinations, including Moreno Valley College southeast of the project site, the Riverside University Health System Medical Center east of the project site, commercial and retail uses along Alessandro Boulevard, and the Metrolink Moreno Valley/March Field Station west of the project site. The Metrolink 91 Perris Line provides transportation between Perris Valley and Los Angeles Union Station, and connects to other Metrolink lines that provide transportation throughout the greater region. Project fuel consumption would decline over time beyond the initial operational year of the project due to continued implementation of increased federal and state vehicle efficiency standards. There is no component of the project that would result in unusually high vehicle fuel use during operation. Therefore, operation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

Non-Transportation-Related Energy Use

Non-transportation energy use would be associated with electricity and natural gas. The Renewables Portfolio Standard (RPS) promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by Executive Orders (EO) S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, Senate Bill (SB) 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's renewable energy mix goal to 50 percent by year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030. Once operational, the project would be served by Moreno Valley Electric Utility (MVU), which has an Integrated Resource Plan that identifies how it will achieve these RPS goals (MVU 2018).

The California Code of Regulations, Title 24, is referred to as the California Building Code (CBC). It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, and so on. Of particular relevance to GHG reductions are the CBC's energy efficiency and green building standards as outlined below.

Title 24, Part 11 of the California Code of Regulations is CALGreen. Beginning in 2011, CALGreen instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial and low-rise residential buildings, state-owned buildings, schools, and hospitals. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory requirements and may adopt CALGreen with amendments for stricter requirements.

The project would, at a minimum, be required to comply with the mandatory measures included in the current 2019 Energy Code (California Code of Regulations, Title 24, Part 6) and the 2019 CALGreen standards. The mandatory standards require the following:

1. Outdoor water use requirements as outlined in local water efficient landscaping ordinances or current Model Water Efficient Landscape Ordinance standards, whichever is more stringent;
2. Requirements for water conserving plumbing fixtures and fittings;
3. 65 percent construction/demolition waste diverted from landfills;
4. Inspections of energy systems to ensure optimal working efficiency; and
5. Low-pollutant emitting exterior and interior finish materials such as paints, carpets, vinyl flooring, and particle boards.

Once operational, the project would use electricity and natural gas to run various appliances and equipment, including space and water heaters, air conditioners, ventilation equipment, lights, and

numerous other devices. Generally, electricity use is higher in the warmer months due to increased air conditioning needs, and natural gas use is highest when the weather is colder as a result of high heating demand. As a part of the air quality modeling prepared for the project, CalEEMod was used to estimate the total operational electricity and natural gas consumption associated with the project. Table 7 summarizes the anticipated operational energy and natural gas use.

Table 7 Operational Electricity and Natural Gas Use	
	Total Use
Electricity	806,822 kWh/Year
Natural Gas	2,761,380 BTU/Year
kWh = kilowatt hour; BTU = British thermal units	

Buildout of the project would result in an increase of operational electricity and natural gas usage when compared to the existing condition. The project would be required to meet the mandatory energy requirements of 2019 CALGreen and the California Energy Code (Title 24, Part 6 of the California Code of Regulations) and would benefit from the efficiencies associated with these regulations as they relate to heating, ventilating, and air conditioning mechanical systems, water-heating systems, and lighting. Additionally, the project would implement all applicable GHG reduction measures related to energy efficiency and clean energy as required by the City’s CAP, which includes the installation of real-time energy smart meters (see Section 4.8[a] below). Therefore, there are no project features that would support the use of excessive amounts of energy or would create unnecessary energy waste, or conflict with any adopted plan for renewable energy efficiency, and impacts would be less than significant.

b. Less Than Significant Impact

The applicable state plans that address renewable energy and energy efficiency are CALGreen, the California Energy Code, and RPS, and the applicable local plan is the CAP. As discussed in Section 4.6(a) above, the project would be required to meet the mandatory energy requirements of 2019 CALGreen and the 2019 California Energy Code. The project would not conflict with or obstruct implementation of CALGreen and the California Energy Code, or with MVU’s implementation of RPS. Additionally, as described in Section 4.8(a) below, the project would be consistent with the City’s CAP. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be less than significant.

4.7 Geology and Soils

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a.i. Less Than Significant Impact

The project site is located within the seismically active southern California region, within the northern portion of the Peninsular Range Physiographic. The Preliminary Geotechnical and Infiltration Feasibility Investigation completed for the project determined that there are no active or potentially active faults that traverse the project site. The nearest known active fault is the San Jacinto Fault, which is approximately 4.1 miles northeast of the project site (Appendix F). While the San Jacinto Fault is categorized as an Alquist-Priolo Earthquake zone, the project site is not located within the fault zone. Therefore, the risk of fault rupture is low, and impacts related to the exposure of people or structures to rupture of a known earthquake fault would be less than significant.

a.ii. Less Than Significant Impact

The project site is located in a seismically active southern California region. As described in Section 4.7(a.i) above, the nearest known active fault is the San Jacinto Fault, which is approximately 4.1 miles northeast of the project site. Additionally, the San Andreas fault is located approximately 13.7 miles to the northeast, and the Elsinore fault located approximately 18.0 miles to the southwest.

The San Jacinto fault zone is a sub-parallel branch of the San Andreas fault zone, extending from the northwestern San Bernardino area, southward into the El Centro region. This fault has been active in recent times with several large magnitude events. It is believed that the San Jacinto fault is capable of producing an earthquake magnitude on the order of 6.5 or larger. The San Andreas fault is considered to be the major tectonic feature of California, separating the Pacific Plate and the North American Plate. While estimates vary, the San Andreas fault is generally thought to be capable of generating large magnitude events on the order of 7.5. The Elsinore fault zone is one of the largest in southern California. At its northern end it splays into two segments and at its southern end it is cut by the Yuba Wells fault. It is believed that the Elsinore fault zone is capable of producing an earthquake magnitude on the order of 6.5 to 7.5 (see Appendix F). However, the Preliminary Geotechnical and Infiltration Feasibility Investigation determined that development of the project site would be feasible from a geotechnical standpoint, provided the recommendations presented in the report were incorporated into design and implemented during grading and construction. These

recommendations included constructing a compacted fill beneath footings and slabs. The compacted fill mat would provide adequate support for the proposed structures by providing a dense, high-strength soil layer to uniformly distribute the anticipated foundation loads over the underlying soils. The report also recommends the use of conventional foundation systems utilizing either individual spread footings and/or continuous wall footings to provide adequate support for the anticipated downward and lateral loads when utilized in conjunction with the recommended fill mat. Furthermore, the project would adhere to all other recommendations presented in the Preliminary Geotechnical and Infiltration Feasibility Investigation related to seismic safety (see Appendix F). Adherence to these recommendations documented in Appendix F and the requirements and seismic design parameters of the current California Building Code would ensure that the project would not expose people or structures to strong seismic shaking, and impacts would be less than significant.

a.iii. Less Than Significant Impact

The Preliminary Geotechnical and Infiltration Feasibility Investigation determined that the project site is located within an area mapped by the County of Riverside as having a very low potential for liquefaction. The potential for liquefaction generally occurs during strong ground shaking within granular loose sediments where the groundwater is usually less than 50 feet below the ground surface. Since soil testing determined that groundwater does not lie within 50 feet beneath the project site, and the site is underlain by relatively dense to very dense older alluvial materials and hard igneous bedrock, the possibility of liquefaction at the site is considered very low (see Appendix F). Therefore, the project would not expose people or structures to adverse effects from seismic-related ground failure, including liquefaction, and impacts would be less than significant.

a.iv. Less Than Significant Impact

The project site and surrounding area are relatively flat. Elevations on the project site range from approximately 1,567 to 1,582 feet above mean sea level and do not possess any slopes that could generate a landslide. Therefore, the project would not cause or increase the potential for landslides, and impacts would be less than significant.

b. Less Than Significant Impact

The project would implement BMPs during construction consistent with the requirements of the Regional Water Quality Control Board – Santa Ana Region (RWQCB-SAR) and MVMC Chapter 8.10 that would minimize erosion potential by controlling storm water flows and minimization of topsoil loss. Therefore, compliance with the requirements of the RWQCB-SAR and MVMC would prevent substantial soil erosion or the loss of topsoil, and impacts would be less than significant.

c. Less Than Significant Impact

As described in the Section 4.7(a.iii) above, the project site is not located within an area mapped as having a risk for liquefaction. The Preliminary Geotechnical and Infiltration Feasibility Investigation determined that the potential for settlement is considered very low due to the relatively dense to very dense older alluvial materials and hard igneous rock at the site (see Appendix F). Furthermore, the project would adhere to earthwork recommendations presented in the Preliminary Geotechnical and Infiltration Feasibility Investigation to address any near surface loose soil conditions. Therefore,

the project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and impacts would be less than significant.

d. Less Than Significant Impact

Expansive soils are characteristically clayey and can undergo significant volume changes (shrinking or swelling) due to variations in soil moisture content (drying or wetting) that can be damaging to structures. The Preliminary Geotechnical and Infiltration Feasibility Investigation determined that on-site soils have very low expansion potential and no specialized construction procedures to resist expansive soil activity would be necessary (see Appendix F). Furthermore, the project would adhere to grading recommendations presented in the Preliminary Geotechnical and Infiltration Feasibility related to soil stability. Therefore, the project would not be located on expansive soil, creating substantial direct or indirect risks to life or property, and impacts would be less than significant.

e. No Impact

The project does not propose the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

f. Less Than Significant Impact

As described in Section 4.5(b) above, potential resources being present within the project site is considered low because of past ground disturbances, including previous agricultural activity that occurred on the project site. Therefore, the project would not directly or indirectly destroy a unique paleontological resource, and impacts would be less than significant.

4.8 Greenhouse Gas Emissions

Would the project:

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

EXPLANATIONS:**a. Less Than Significant Impact**

RECON prepared a Greenhouse Gas (GHG) Analysis for the project (Appendix G).

Climate Action Plan Consistency Checklist

The City adopted a CAP in June 2021, which was designed to reinforce the City's commitment to GHG emissions and demonstrate how the City will comply with the state of California's GHG emission reduction standards (City of Moreno Valley 2021). The CAP addresses the SB 32 target of reducing GHG emissions 40 percent below 1990 levels by 2030 and EO S-3-15 target of reducing GHG emissions 80 percent below 1990 levels by 2050. The GHG emission targets established in the CAP are based on the goals established by EO S-3-15 and SB 32, consistent with the CAP guidelines established in the 2017 *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan). The horizon year for analysis in the CAP is 2040. Therefore, the CAP includes targets of 6 metric tons of carbon dioxide equivalent (MT CO₂E) per capita per year by 2030 and 4 MT CO₂E per capita per year by 2040 (derived from the Scoping Plan target of 2 MT CO₂E per capita per year in 2050). The proposed 2040 target of 4 MT CO₂E per capita per year is determined using a linear trajectory in emissions reduction between 2030 and 2050. Pursuant with CEQA Guidelines Section 15183.5(b), the CAP is considered a qualified GHG reduction strategy that will allow developments to tier off and streamline the GHG analyses under CEQA.

According to CEQA Guidelines Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. A project that complies with a qualified GHG reduction strategy would be considered to have less than significant impact related to GHG emissions. For the purposes of this analysis the project's significance is determined by consistency with the CAP, which is consistent with the 2017 Scoping Plan and emission reduction targets per SB 32.

The City's CAP includes a CAP Consistency Checklist to demonstrate if new developments are consistent with reduction strategies from the City's CAP. The purpose of the checklist is to streamline project-level CEQA requirements by identifying clear GHG reduction strategies that all new developments would need to implement for compliance with the GHG reduction strategies. If a project meets the checklist criteria, then it would be considered to have a less than significant impact related to GHG emissions. Table 8 demonstrates that the project would be consistent with the CAP checklist. Refer to Appendix G for the full checklist. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

Table 8 Project Consistency with Moreno Valley Climate Action Plan	
Goals, Targets, Policies	Project Consistency
General Plan Consistency	
Are the proposed land uses in the project consistent with the existing 2040 General Plan land use and zoning designations?	The project site is zoned Corridor Mixed Use (COMU) and is designated COMU in the 2040 General Plan. The project proposes the construction of 192 multi-family residential units, which would be consistent with the COMU zoning and land use designation.
CAP Measures Consistency	
If the project includes new residential, commercial, and/or mixed-use development, would the project implement trip reduction programs? (Examples of residential trip reduction programs, or transportation demand management (TDM) strategies include, among others, installing and maintaining on-site bicycle parking; providing designated parking spaces for car share operations; offering an annual carshare membership to building residents or employees; posting wayfinding signage near major entrances directing building users to bus stops, bicycle facilities, car sharing kiosks, and other alternative travel options; and unbundling the price of parking from rents or sale of units.)	The project would include on-site bicycle parking and electric vehicle parking. The project would include 359 parking spaces and 36 (>10 percent) would be wired for the installation of electric vehicle charging stations. Additionally, trips would be reduced through the use of public transit. The project would construct a high-density residential use adjacent to an existing transit route along Alessandro Boulevard immediately adjacent to the project site. Riverside Transit Agency Route 20 provides service to major destinations including Moreno Valley College southeast of the project site, the Riverside University Health System Medical Center east of the project site, commercial and retail uses along Alessandro Boulevard, and the Metrolink Moreno Valley/March Field Station west of the project site. The Metrolink 91 Perris Line provides transportation between Perris Valley and Los Angeles Union Station, and connects to other Metrolink lines that provide transportation throughout the greater region.
For projects including new construction or major remodeling of residential development, does the project include installation of real-time energy smart meters?	The project would include installation of real-time energy smart meters.
During project construction, will clear signage reminding construction workers to limit idling of construction equipment provided?	Clear signage would be provided reminding construction workers to limit idling of construction equipment.
During project construction, will the project limit construction-related GHG emissions through one or more of the following measures: substituting electrified or hybrid equipment for diesel/gas powered equipment; using alternative-fueled equipment on-site; and avoiding use of on-site diesel/gas powered generators?	The project site would be provided with temporary electrical power during construction, and no on-site diesel/gas powered generators would be used.
For any new landscaping to be included as part of the project, does the project incorporate climate-appropriate, water-wise landscaping features, such as those identified in the <i>County of Riverside Guide To California Friendly Landscaping</i> .	The project would incorporate climate-appropriate, water-wise landscaping features that are identified in the <i>County of Riverside Guide to California Friendly Landscaping</i> . The project's landscaping would be consistent with the Model Water Efficient Landscape Ordinance, as well as all City landscaping ordinance requirements specified in Section 9.17.030 of the Municipal Code. This includes drought-resistant plantings and water-efficient irrigation systems.

Table 8 Project Consistency with Moreno Valley Climate Action Plan	
Goals, Targets, Policies	Project Consistency
Voluntary CAP Measures Consistency	
The CAP establishes a citywide target of increasing alternatives to single-occupant vehicle use by 10 percent for people employed in Moreno Valley by 2040. If the project involves a business with over 50 employees or tenants with such businesses, will the project implement Transportation Demand Management strategies and programs identified in Connect SoCal, the SCAG Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS), including but not limited to: implementing commuter benefit programs, promoting telecommuting and alternative work schedule options, and other financial incentives?	The project is residential and does not include more than 50 employees.
If the project includes new multi-family residential and/or mixed-use development, will the project reduce the need for external trips by providing useful services/facilities on-site (Examples include an ATM, vehicle refueling, electric vehicle infrastructure, and shopping)?	The project would include on-site amenities including a dog park, clubhouse, pool, cabanas, and tot lot. The project would not include on-site shopping. However, the project would construct a high-density residential use adjacent to an existing transit route along Alessandro Boulevard immediately adjacent to the project site. Riverside Transit Agency Route 20 provides service to major destinations including commercial and retail uses along Alessandro Boulevard.
If the project includes new industrial facilities or involves the expansion of existing industrial facilities, will the project include energy efficient building operations systems to support the citywide goal of a 40 percent energy reduction in 30 percent of industrial square footage by 2040?	The project is residential and does not include industrial uses.
If the project includes industrial or warehousing facilities, will the project install solar energy infrastructure to support the City's goal of providing 25 percent of energy needs with solar in 30 percent of industrial and warehouse square footage by 2040?	The project is residential and does not include industrial or warehousing facilities.
Will the project use water efficient lawn and garden maintenance equipment, or reduce the need for landscaping maintenance through drought-resistant planting?	The project would incorporate climate-appropriate, water-wise landscaping features that are identified in the County of Riverside Guide to California Friendly Landscaping. The project's landscaping would be consistent with the Model Water Efficient Landscape Ordinance, as well as all City landscaping ordinance requirements specified in Section 9.17.030 of the Municipal Code. This includes drought-resistant plantings and water-efficient irrigation systems.

GHG Emission Quantification

For further support, the GHG emissions associated with the project were calculated and compared to the SCAQMD screening threshold. The SCAQMD published its Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans in 2008 (SCAQMD 2008, 2010). Consistent with

the SCAQMD guidance, the recommended tiered approach for land use development projects in SCAQMD jurisdiction is assessment against the applicable screening levels. The SCAQMD screening threshold of 3,000 MT CO₂E was used. This screening level is intended to exempt projects that are too small to have significant impacts from further analysis. Emissions from all construction and operational sources were calculated and compared to the screening threshold.

The project’s GHG emissions were calculated using the CalEEMod Version 2020.4.0 and the MVU energy intensity factors from CalEEMod Version 2022.1 (see Appendix G, Attachment 2). GHG emissions were calculated for construction, mobile sources, energy use, area sources, water and wastewater, and solid waste. Table 9 summarizes the total construction emissions. Table 10 summarizes the total GHG emissions associated with the project.

Table 9 Construction GHG Emissions	
Year	Construction GHG Emissions MT CO ₂ E
2023	601
2024	27
Total GHG Emissions	628
Amortized Over 30 Years	21
NOTE: CalEEMod output files are presented in in Appendix G, Attachment 2.	

Table 10 Project GHG Emissions	
Source	Project GHG Emissions MT CO ₂ E
Mobile	1,428
Energy Source	315
Area Sources	3
Water/Wastewater Sources	70
Solid Waste Sources	44
Construction (Amortized over 30 years)	21
Total	1,881
<i>SCAQMD Significance Threshold</i>	<i>3,000</i>
NOTE: CalEEMod output files are presented in in Appendix G, Attachment 2.	

As shown in Table 10, construction and operation of the project would generate 1,881 MT CO₂E annually, which would be less than the applicable SCAQMD screening level of 3,000 MT CO₂E. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

b. Less Than Significant Impact

As described in Section 4.8(a) above, the project would be consistent with the City’s CAP, which is a qualified GHG reduction plan that is consistent with the 2017 Scoping Plan and emission reduction targets per SB 32. Because the project would be consistent with the CAP, it would not conflict with the 2017 Scoping Plan or SB 32. Furthermore, project GHG emissions would be below the screening level of 3,000 MT CO₂E. This threshold is based on the concept of establishing a 90 percent GHG

emission capture rate. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to a CEQA analysis, which includes analyzing feasible alternatives and imposing feasible mitigation measures. The market capture rate is based on guidance from the CAPCOA report *CEQA & Climate Change*, dated January 2008, which identifies several potential approaches for assessing a project's GHG emissions (CAPCOA 2008). Following the market capture rate approach, a lead agency defines an acceptable capture rate and identifies the corresponding emissions level. Following rationale presented in the CAPCOA Guidance, the aggregate emissions from all projects with individual annual emissions that are equal to or less than the identified market capture rate would not impede achievement of the state GHG emissions reduction targets codified by AB 32 (2006) and SB 32 (2016). Therefore, impacts under CEQA associated with projects with individual annual emissions that are equal to or less than the identified capture rate would be less than cumulatively considerable. A 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

Furthermore, project emissions would decline beyond the buildout year of the project, 2024, as a result of continued implementation of federal, state, and local reduction measures such as increased federal and state vehicle efficiency standards, and MVU's increased renewable sources of energy in accordance with RPS goals. Based on currently available models and regulatory forecasting, project emissions would continue to decline through at least 2050. Given the reasonably anticipated decline in project emissions, once fully constructed and operational, the project is in line with the GHG reductions needed to achieve the 2050 GHG emission reduction targets identified by EO S-3-05.

The 2017 Scoping Plan identifies state strategies for achieving the state's 2030 interim GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan scenario build on existing programs such as the Low Carbon Fuel Standard, Advanced Clean Cars Program, RPS, Sustainable Communities Strategy, Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. The project would comply with all applicable provisions contained in the 2017 Scoping Plan since the adopted regulations would apply to new development or the emission sectors associated with new development.

1. **Transportation** – State regulations and 2017 Scoping Plan measures that would reduce the project's mobile source emissions include the California Light-Duty Vehicle GHG Standards (AB 1493/Pavley I and II), and the Low Carbon Fuel Standard, and the heavy-duty truck regulations. These measures are implemented at the state level and would result in project-related mobile source GHG emissions.
2. **Energy** – State regulations and 2017 Scoping Plan measures that would reduce the project's energy-related GHG emissions include RPS, Title 24 Energy Efficiency Standards, and CALGreen. The project would be served by MVU, which has an Integrated Resource Plan that identifies how it will achieve 44 percent renewables by 2024. The project's energy related GHG emissions would decrease as MVU increases its renewables procurement towards the 2030 goal of 60 percent.

3. **Water** – State regulations and 2017 Scoping Plan measures that would reduce the project’s electricity consumption associated with water supply, treatment, and distribution, and wastewater treatment include RPS, CALGreen, and the Model Water Efficient Landscape Ordinance. The project would also be subject to all City landscaping ordinance requirements specified in Section 9.17.030 of the Municipal Code.
4. **Waste** – State regulations and 2017 Scoping Plan measures that would reduce the project’s solid waste-related GHG emissions are related to landfill methane control, increases efficiency of landfill methane capture, and high recycling/zero waste. The project would be subject to CALGreen, which requires a diversion of construction and demolition waste from landfills. Additionally, the project would include recycling storage and would divert waste from landfills in accordance with AB 341.

Therefore, the project would not conflict with an applicable state plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

Regional Plans

In addition to being consistent with the CAP and meeting the SCAQMD screening thresholds, the project was evaluated for consistency with the Sustainable Communities Strategy (SCS) strategies contained in Connect SoCal, the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Community Strategy (RTP/SCS). As discussed in Table 11 below, the project would be consistent with applicable Connect SoCal strategies, particularly by constructing a high-density residential use adjacent to existing transit. Therefore, the project would not conflict with an applicable regional plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

Local Plans

As described in Section 4.8(a) above, the project would be consistent with the City’s CAP. Therefore, the project would not conflict with an applicable local plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be less than significant.

Table 11 Project Consistency with Connect SoCal Strategies	
	Project Consistency
Focus Growth Near Destinations and Mobility Options	
<ol style="list-style-type: none"> 1. Emphasize land use patterns that facilitate multimodal access to work, educational, and other destinations. 2. Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets. 3. Plan for growth near transit investments and support implementation of first/last mile strategies. 4. Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses. 5. Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods. 6. Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations). 7. Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g., shared parking or smart parking). 	<p>The project would be consistent with Connect SoCal's strategies to focus growth near destinations and mobility options. The project site is currently undeveloped. The project would construct a high-density residential use adjacent to an existing transit route. Riverside Transit Agency Route 20 is located along Alessandro Boulevard immediately adjacent to the project site. Route 20 provides service to major destinations including Moreno Valley College southeast of the project site, the Riverside University Health System Medical Center east of the project site, commercial and retail uses along Alessandro Boulevard, and the Metrolink Moreno Valley/March Field Station west of the project site. The Metrolink 91 Perris Line provides transportation between Perris Valley and Los Angeles Union Station, and connects to other Metrolink lines that provide transportation throughout the greater region. The project would therefore be consistent with these strategies by accommodating new residential growth near a transit route that provides access to commercial and job centers.</p>
Promote Diverse Housing Options	
<ol style="list-style-type: none"> 1. Preserve and rehabilitate affordable housing and prevent displacement. 2. Identify funding opportunities for new workforce and affordable housing development. 3. Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply. 4. Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions. 	<p>The project would support this strategy by providing much needed housing to the region.</p>
Leverage Technology Innovations	
<ol style="list-style-type: none"> 1. Promote low emission technologies such as neighborhood electric vehicles, shared ride hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space. 2. Improve access to services through technology, such as telework and telemedicine as well as other incentives such as a mobility wallet. 3. Identify ways to incorporate micro-power grids in communities, for example solar energy, hydrogen fuel cell power storage and power generation. 	<p>These strategies are not directly applicable to the project. The project would not interfere with SCAG's efforts to promote low emission technologies, improve access to telework and telemedicine, or incorporate micro-power grids in communities.</p>

Table 11 Project Consistency with Connect SoCal Strategies	
	Project Consistency
Support Implementation of Sustainable Policies	
<ol style="list-style-type: none"> 1. Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions. 2. Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations. 3. Support local jurisdictions in the establishment of EIFDs, CRIAS, or other tax increment or value capture tools to finance sustainable infrastructure and development projects including parks and open space. 4. Work with local jurisdictions/communities to identify opportunities and assess barriers for implementing sustainability strategies. 5. Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region. 6. Continue to support long range planning efforts by local jurisdictions. 7. Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy. 	<p>These strategies are not directly applicable to the project. The project would not interfere with SCAG’s efforts to work with local jurisdictions, communities, and other planning organizations to implement sustainable policies. The project would result in less than significant GHG emissions and would be located near high-quality transit.</p>
Promote a Green Region	
<ol style="list-style-type: none"> 1. Support development of local climate adaptation and hazard mitigation plans as well as project implementation that improves community resiliency to climate change and natural hazards. 2. Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration. 3. Integrate local food production into the regional landscape. 4. Promote more resource efficient development focused on conservation, recycling and reclamation. 5. Preserve, enhance and restore regional wildlife connectivity. 6. Reduce consumption of resource areas, including agricultural land. 7. Identify ways to improve access to public park space. 	<p>Strategies regarding climate adaptation, food production, wildlife connectivity, agricultural lands, and park space are not applicable to the project. The project would be served by MVU, which has an Integrated Resource Plan that identifies how it will achieve 44 percent renewables by 2024. The project’s energy-related GHG emissions would decrease as MVU increases its renewables procurement beyond 2020 towards the 2030 goal of 60 percent.</p>

4.9 Hazards and Hazardous Materials

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport 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 type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

Project construction would require the transport, temporary storage, and use of asphalt fuels, oils, paints, and solvents. However, these materials are not acutely hazardous, and use of these common hazardous materials in small quantities would not represent a significant hazard to the public or environment. Additionally, project construction would be required to be undertaken in compliance with applicable federal, state, and local regulations pertaining to the proper use of these common hazardous materials. Operation of the project would include the use and storage of cleaning supplies for the residential uses and recreation building. However, these materials are not acutely hazardous, and the project would handle and store these materials consistent with all applicable regulations. Therefore, the project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials, and impacts would be less than significant.

b. Less Than Significant Impact

As described in Section 4.9(a) above, the project would handle all hazardous materials in accordance with all applicable federal, state, and local regulations. Furthermore, project construction would be conducted consistent with all applicable safety regulations and would not introduce accident conditions that could result in the release of hazardous materials into the environment. Therefore, the project would not create upset and accident conditions that could result in the release of hazardous materials, and impacts would be less than significant.

c. Less Than Significant Impact

The nearest school to the project site is Hendrick Ranch Elementary School, which is located approximately 0.25 mile southwest of the project site. As stated in Section 4.9(a) above, operation of the apartment complex would not involve the use of substantial amounts of hazardous materials and would comply with all federal, state, and local regulations governing the storage and use of hazardous materials. Therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, and impacts would be less than significant.

d. Less Than Significant Impact

LOR Geotechnical Group, Inc prepared a Phase I Environmental Site Assessment (ESA) for the project (Appendix H). The Phase I ESA conducted a search of hazardous materials databases, including the County of Riverside Department of Environmental Health, California Regional Water

Quality Control Board GeoTracker database, California Department of Toxic Substances Control (DTSC) Hazardous Waste Tracking System, and South Coast Air Quality Management District database. Additionally, the Phase I ESA included reconnaissance of the project site to search for potential hazardous materials. Site reconnaissance identified an approximate one-gallon plastic container in the southern portion of the project site, filled with approximately 0.25 gallon of a volatile organic compound mixture of some kind, possibly wood stain, varnish, or similar material. This container of hazardous material or waste shall be properly transported off-site for disposal, reuse, or recycling prior to planned residential development of the subject site. Relatively minor on-site soil staining associated with this one-gallon plastic container, generally from heavy hydrocarbons, such as waste oil or hydraulic oil, was observed within the southern portion of the project site or within the Copper Cove Lane ROW. These stained soils are anticipated to be limited and were deemed to be a de minimis condition (see Appendix H).

The record search identified the following four properties within one mile of the project site listed on hazardous materials databases, none of which are located on the project site:

1. The Moreno Hills Seventh-day Adventist church located immediately west of the project site is listed as a hazardous waste generator of 0.11676 ton of photo-chemicals/photo-processing waste in 1998 when the property was operated as the Press Enterprise Newspaper. A permanent California Environmental Protection Agency (EPA) identification number was issued in April 1997, inactive in June 1999.
2. Moreno Valley Unified School District located 0.2 mile west-northwest of the project site was verified to be a federal hazardous waste non-generator and is listed with no violations.
3. A site approximately 680 feet to the west-northwest with reported past agricultural use from at least 1938 to about 1989. The site received a "No Further Action" determination.
4. A site approximately 0.1 mile to the west-northwest received a "No Further Action" determination.

Three of the properties listed above were either confirmed a federal hazardous waste non-generator or received a "No Further Action" determination. The four identified properties do not have current or former releases of hazardous substances and/or petroleum products that are known to have migrated to and/or impacted the subject site. The Phase I ESA also conducted a Vapor Encroachment Screen (VES) to evaluate the potential for contaminant vapor concerns within or adjacent to the project site. The VES determined that the Moreno Hills Seventh-day Adventist church located immediately west of the project site had previously conducted newspaper production and/or distribution, and based on historical hazardous waste manifest records, involved the handling of photo-chemicals and/or generation of photo-processing waste. This previous handling of photo-chemicals and/or generation of photo-processing may have resulted in subsurface soil vapor beneath the project site. Therefore, the Phase I ESA identified this historic use on the Moreno Hills Seventh-day Adventist as a recognized environmental condition, which necessitated preparation of a Phase II ESA to verify the condition of the subsurface soil vapor beneath the project site and evaluate the suitability of the property for development (Appendix I). The Phase II ESA conducted five soil borings with approximate 30-foot spacing and roughly coincident with the existing church to the west. The five soil borings did not identify any obvious signs of impacts, including soil staining

or chemical odor, during soil boring advancement for soil vapor probe installation. Additionally, laboratory testing determined that none of the soil vapor samples obtained during the borings had concentrations above the laboratory reporting limits. Consequently, the Phase II ESA determined that the project site is suitable for development without any restrictions (see Appendix I). Therefore, the project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 that would create a significant hazard to the public or the environment, and impacts would be less than significant.

e. No Impact

The nearest airport is the March Air Reserve Base (MARB), which is located approximately 2.8 miles southwest of the project site. Review of Map S-7 of the Safety Element of the City's 2040 General Plan determined that the project site is outside the Airport Influence Area Boundary for MARB (City of Moreno Valley 2021). Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area. No impact would occur.

f. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would not generate vehicle trips beyond what is anticipated for the existing circulation network that could affect emergency access. The project would widen Alessandro Boulevard to two lanes, thereby providing increased vehicular capacity on the roadway. The project would also construct driveway connections to Alessandro Boulevard and Copper Cove Lane consistent with all applicable City safety requirements related to emergency access. The project would also include an internal fire access lane between two buildings to ensure adequate fire protection response during an emergency. Therefore, 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. Less Than Significant Impact

Review of Map S-5 of the Safety Element of the 2040 General Plan determined that the project site and surrounding area is not located in a High Fire Hazard Severity Zone (City of Moreno Valley 2021). Furthermore, the project site is located in an urbanizing area consisting primarily of developed land. Vacant land to the north and east are surrounded by urban uses and do not pose a threat related to wildland fires. Therefore, the project would not expose people or structures, either directly or indirectly, to significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

4.10 Hydrology and Water Quality

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner, which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>

EXPLANATIONS:

a. Less Than Significant Impact

Project construction would have the potential to generate erosion/sedimentation and pollutants that could impact water quality. However, the project would implement construction BMPs consistent with the requirements of the RWQCB-SAR and MVMC Chapter 8.10 that would minimize erosion and prevent pollution from affecting water quality. The Project Specific Water Quality Management Plan prepared for the project documented that stormwater runoff within the project site currently flows south towards Copper Cove Lane where it enters the existing storm drain system that outlets to the San Jacinto River and ultimately drains to Lake Elsinore (Appendix J). Stormwater would continue to flow south in the post-project condition and drain to an on-site stormwater collection system consisting of two infiltration and detention basins with an underground detention pipe system to route stormwater into the existing off-site stormwater collection system. The infiltration and detention basins would utilize modular wetlands to treat stormwater in order to improve water quality before discharging to the existing off-site stormwater collection system. Therefore, the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality, and impacts would be less than significant.

b. Less Than Significant Impact

Water services would be provided by Eastern Municipal Water District (EMWD), which utilizes imported water from Metropolitan Water District, as well as local potable groundwater and desalinated groundwater, to provide water supply to the City. The 2020 Urban Water Management Plan (UWMP) prepared by EMWD anticipated that adequate water supplies would be available to meet future demand under all water year conditions from 2020 through 2045 (EMWD 2021). As described in Section 4.14(a) below, the project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast water supply demand in the 2020 Urban Runoff Management Plan. The project site is located within the San Jacinto Groundwater Basin. Although the project would increase the amount impervious surface on-site, landscaped areas would allow for continued groundwater recharge. Furthermore, water would continue to infiltrate through undeveloped land throughout the groundwater basin. Therefore, the project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge, and impacts would be less than significant.

c.i. Less Than Significant Impact

As described in Section 4.10(a) above, the project would implement construction BMPs consistent with the requirements of the RWQCB-SAR and MVMC Chapter 8.10 that would minimize erosion and prevent pollution from affecting water quality. Stormwater would continue to flow south in the post-project condition and drain to a stormwater collection system consisting of two infiltration and detention basins with an underground detention pipe system that would manage stormwater flows. The Preliminary Hydrology Report prepared for the project determined that project would increase peak flows during the 10- and 100-year storm events as follows:

- Increase the 10-year storm water runoff rate from 7.4 cubic feet per second (cfs) in the existing condition to 11.6 cfs in the post-development condition.
- Increase the 100-year storm water runoff rate from 12.4 cfs in the existing condition to 17.0 cfs in the post-project condition (Appendix K).

However, the Preliminary Hydrology Report determined that the existing storm drain system would have adequate capacity to convey peak storm water flows during the 100-year storm event. Therefore, the project would not substantially alter the drainage pattern of the site or the surrounding area in a manner that could result in substantial erosion, runoff, impediment or redirection of flood flows, and impacts would be less than significant.

c.ii. Less Than Significant Impact

As described in Section 4.10(a) above, the project would implement construction BMPs consistent with the requirements of the RWQCB-SAR and MVMC Chapter 8.10 that would minimize erosion and prevent pollution from affecting water quality. Stormwater would continue to flow south in the post-project condition and drain to a stormwater collection system consisting of two infiltration and detention basins with an underground detention pipe system that would manage stormwater flows. As described in Section 4.10(c.i) above, the Preliminary Hydrology Report determined that the existing storm drain system would have adequate capacity to convey peak storm water flows during the 100-year storm event (see Appendix K). Therefore, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, and impacts would be less than significant.

c.iii. Less Than Significant Impact

As described in Section 4.10(a) above, the project would implement construction BMPs consistent with the requirements of the RWQCB-SAR and MVMC Chapter 8.10 that would minimize erosion and prevent pollution from affecting water quality. Stormwater would continue to flow south in the post-project condition and drain to a stormwater collection system consisting of two infiltration and detention basins with an underground detention pipe system that would manage stormwater flows. As described in Section 4.10(c.i) above, the Preliminary Hydrology Report determined that the existing storm drain system would have adequate capacity to convey peak storm water flows during the 100-year storm event (see Appendix K). Therefore, the project would not 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, and impacts would be less than significant.

c.iv. Less Than Significant Impact

Review of Figure 4.10-3 of the 2040 General Plan Final EIR determined that the project site is not located within a 100-year or 500-year flood zone designated by Federal Emergency Management Agency (City of Moreno Valley 2021). Additionally, the existing storm drain system would have adequate capacity to convey peak storm water flows during the 100-year storm event (see Appendix K). Therefore, the project would not impede or redirect flood flows, and impacts would be less than significant.

d. No Impact

The project site is not located within a dam inundation zone. The project site is located approximately 41 miles northeast of the Pacific Ocean, and therefore is not subject to risk associated with tsunamis. The nearest body of water is Lake Perris Reservoir, located approximately 3.7 miles southeast of the project site. Given this distance of 3.7 miles, the project would not be affected by a seiche. Therefore, the project would not result in impacts associated with flood hazard, tsunamis, or seiche zones. No impact would occur.

e. Less Than Significant Impact

As described in Section 4.10(a) above, the project would implement construction and operational BMPs that would prevent erosion and pollution from affecting water quality. As described in Section 4.10(b) above, the project would not decrease groundwater supplies or interfere with groundwater recharge. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and impacts would be less than significant.

4.11 Land Use and Planning

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

The project is located within an urbanizing environment that consists of a mix of developed and undeveloped land. Existing residential development is located to the south across Copper Cove Lane. The Moreno Hills Seventh-day Adventist Church is located along the western project boundary, followed by an undeveloped property that is planned for residential development further west. Undeveloped land to the north is designated as Corridor Mixed Use (COMU) and undeveloped land to the east is designated as Downtown Center (DC), both of which designations would allow for future development. The proposed apartment complex would be constructed entirely within the project site and would be consistent with surrounding properties and the overall existing and planned land use pattern. Changes to the existing circulation network would be limited to widening Alessandro Boulevard to two lanes, constructing raised median islands along Alessandro Boulevard between Chervil Court and Lasselle Street, and providing driveway connections to Alessandro Boulevard and Copper Cove Lane. The project would also improve bicycle access by adding a southbound bike lane within the existing ROW and improvements of Lasselle Street. The project would connect to utilities that are already serving the surrounding development. Therefore, the project would not physically divide an established community, and impacts would not be significant.

b. Less Than Significant Impact

The project would be consistent with the existing Corridor Mixed Use (COMU) land use and zoning designation for the project site. As described in Section 4.4(a) above, the project would mitigate all potential impacts on biological resources to a level less than significant. As described in Section 4.8(a) above, the project would be consistent with the City’s adopted CAP. As described throughout this Draft Initial Study/MND, all other impacts not requiring mitigation would be less than significant or would have no impact. Therefore, the project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

4.12 Mineral Resources

Would the project:

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

EXPLANATIONS:

a. No Impact

Review of Figure 4.12-1 of the City 2040 General Plan Update Final EIR determined that the project site is classified as Mineral Resource Zone 3, land for which the significance of mineral resources cannot be determined (City of Moreno Valley 2021). Land classified as Mineral Resource Zone 3 is not considered a significant mineral resource. Therefore, the project would not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state or of a locally important mineral resource recovery site. No impact would occur.

b. No Impact

There are no active mineral resource extraction facilities within the City, and the City's 2040 General Plan Update Final EIR does not identify the project site as an existing mineral resource recovery site (City of Moreno Valley 2021). No impact would occur.

4.13 Noise

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

RECON prepared a Noise Analysis for the project that evaluated potential impacts associated with noise (Appendix L).

Existing Conditions

Existing noise levels at the project site were measured at the locations shown in Figure 6 to obtain typical ambient noise levels at the project site and surrounding area. The results of the noise measurements are summarized in Table 12.

Table 12 Noise Measurements				
Measurement	Location	Time	Noise Sources	L _{eq}
1	50 feet west of Lasselle Street	1:35 p.m. – 1:50 p.m.	Vehicle traffic on Lasselle Street	60.3
2	25 feet east of western project boundary	2:14 p.m. – 2:29 p.m.	Vehicle traffic on Alessandro Boulevard	49.0
3	50 feet south of Alessandro Boulevard	2:45 p.m. – 3:00 p.m.	Vehicle traffic on Alessandro Boulevard	60.4

NOTE: Noise measurement data is contained in Appendix L, Attachment 1.

Construction Noise

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, building construction, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the soils from excavation. Table 13 summarizes typical construction equipment noise levels.

During excavation, grading, and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for non-equipment tasks, such as measurement. Although maximum noise levels may be 70 to 95 dB(A) at a distance of 50 feet during most construction activities, hourly average noise levels from the grading phase of construction would be 85 A-weighted decibels dB(A) equivalent noise level (L_{eq}) at 50 feet from the center of construction activity when assessing the loudest pieces of equipment—dozer, excavator, and loader—working simultaneously.



-  Project Boundary
-  Off-site Improvement Area
-  Noise Measurement Location

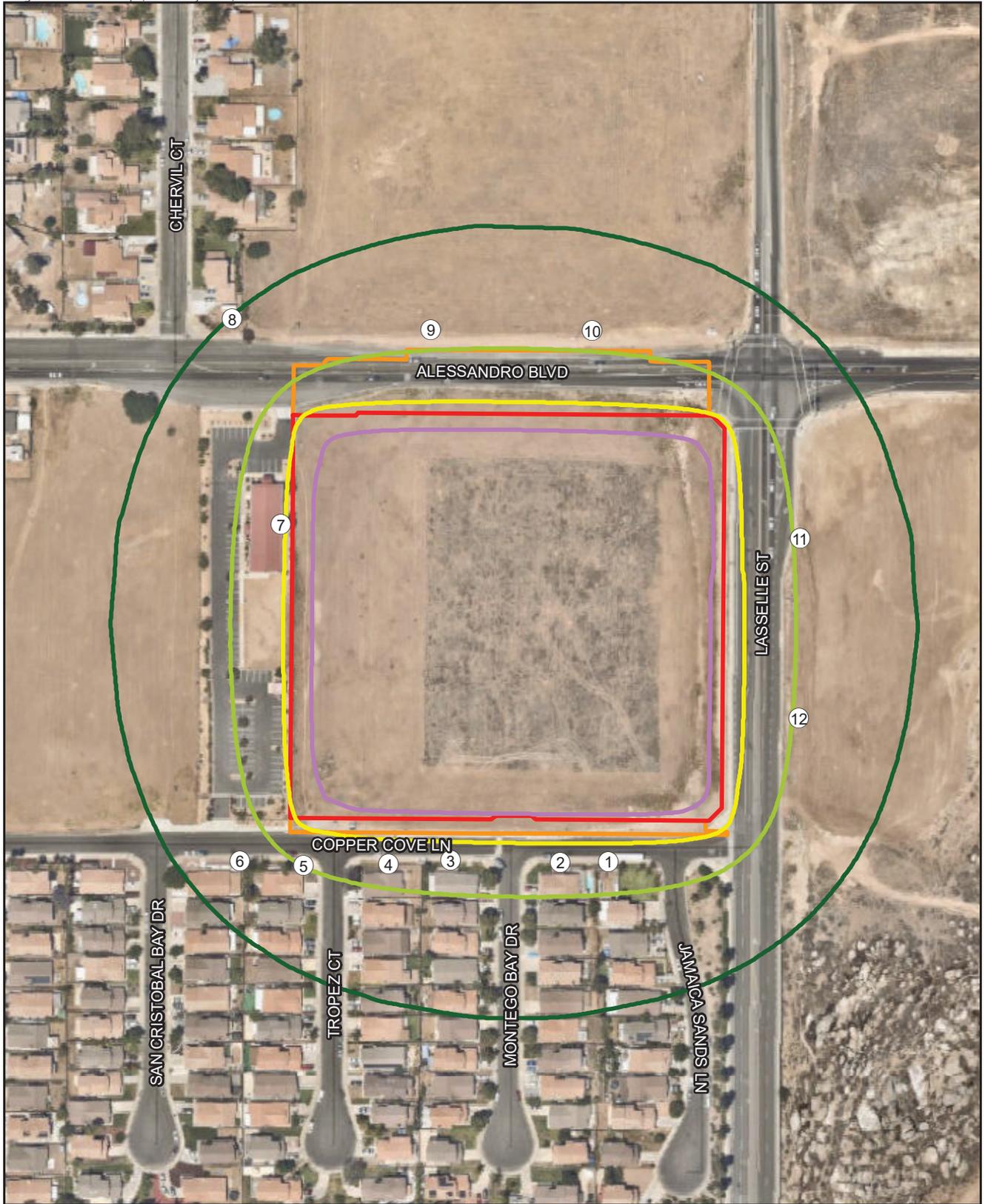


FIGURE 6
Noise Measurement Locations

Table 13 Typical Construction Equipment Noise Levels		
Equipment	Noise Level at 50 Feet [dB(A) L_{eq}]	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Blasting	94	1%
Chain Saw	85	20%
Clam Shovel	93	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 kilovolt amps or less)	70	50%
Generator (more than 25 kilovolt amps)	82	50%
Grader	85	40%
Hydra Break Ram	90	10%
Impact Pile Driver (diesel or drop)	95	20%
Insitu Soil Sampling Rig	84	20%
Jackhammer	85	20%
Mounted Impact Hammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Roller	74	40%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%
Vibratory Pile Driver	95	20%

SOURCE: Federal Highway Administration 2006.

The project site is surrounded by single-family residential uses to the south, southwest, and northwest, and a church to the west. Additionally, multi-family residential uses are planned for the parcel west of the church. Undeveloped land is located to the north and east. Construction noise levels were modeled at these adjacent land uses assuming the simultaneous use of a dozer, excavator, and loader. The total combined noise level would be approximately 85 dB(A) L_{eq} at 50 feet which is equivalent to a sound power level (L_{pw}) of 116 dB(A) L_{pw} . Noise levels were modeled at a series of 12 receivers located at the adjacent uses. Construction activities are also anticipated to occur at the undeveloped lot west of the church. The exact timing of construction activities is not known at this time, however, in order to provide a worst-case cumulative analysis, noise levels due to simultaneous construction activity on both parcels were also calculated. The results are summarized in Table 14. Modeled receiver locations and construction noise contours are shown in Figure 7.



- Project Boundary
- Off-site Improvement Area
- Receivers

Construction Noise

- 60 dB(A) L_{eq}
- 65 dB(A) L_{eq}
- 70 dB(A) L_{eq}
- 75 dB(A) L_{eq}



FIGURE 7
Construction Noise Contours

Table 14 Construction Noise Levels at Off-site Receivers			
Receiver	Land Use	Construction Noise Level [dB(A) L_{eq}]	
		Project Only	Cumulative
1	Residential	68	68
2	Residential	68	68
3	Residential	68	68
4	Residential	67	68
5	Residential	65	67
6	Residential	62	67
7	Church	69	71
8	Residential	60	64
9	Undeveloped	64	65
10	Undeveloped	64	64
11	Undeveloped	64	65
12	Undeveloped	64	65

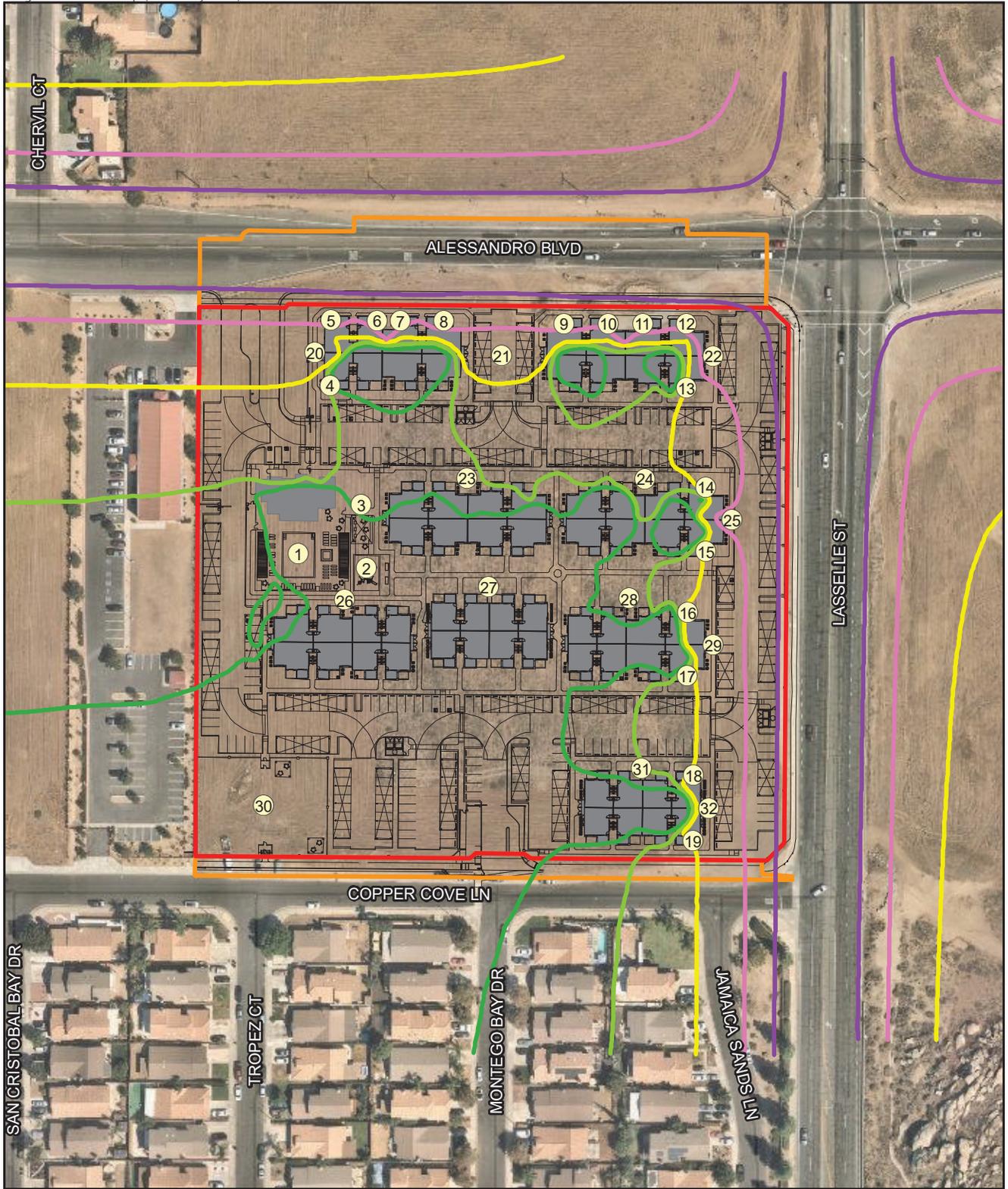
As shown in Table 14, noise levels generated by project-related construction activities are projected to range from 60 to 69 dB(A) L_{eq} , and noise levels due to simultaneous construction activities at the project site and the parcel to the west would range from 64 to 71 dB(A) L_{eq} . The City does not specify a numerical noise level limit applicable to construction activities; however, the Federal Transit Administration’s (FTA’s) Transit Noise and Vibration Impact Assessment manual indicates that 80 dB(A) L_{eq} is reasonable criteria for assessing construction noise levels at residential uses (FTA 2018). Construction noise levels are not projected to exceed 80 dB(A) L_{eq} at the adjacent residential uses. Although the adjacent residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary.

The City regulates construction noise through Sections 8.14.040I and 11.80.030(D)(7) of the MVMC by limiting construction activities to 7:00 a.m. to 7:00 p.m. from Monday through Friday excluding holidays and from 8:00 a.m. to 4:00 p.m. on Saturdays. Construction activities would only occur during the hours permitted under Sections 8.14.040I and 11.80.030(D)(7) of the MVMC. Therefore, on-site construction activities would not generate a substantial temporary increase in ambient noise levels, and impacts would be less than significant.

On-site Exterior Noise Compatibility

The Noise Element of the City’s 2040 General Plan establishes noise level compatibility standards and interior noise standards to be used to guide land use planning decisions (City of Moreno Valley 2021). Per these standards, multi-family residential uses are “normally acceptable” with noise levels up to 65 community noise equivalent level (CNEL; “conditionally acceptable” with noise levels from 65 to 70 CNEL, “normally unacceptable” with noise levels from 70 to 75 CNEL, and “clearly unacceptable” with noise levels above 75 CNEL. The interior noise level standard is 45 CNEL. Parks are “normally acceptable” with noise levels up to 70 CNEL, “conditionally acceptable” with noise levels from 70 to 75 CNEL, and “normally unacceptable” with noise levels above 75 CNEL.

Figure 8 presents the vehicle traffic noise level contours across the project site were calculated for the project. As shown on Figure 8, noise levels are projected to be less than 65 CNEL across a majority of the project site. Noise levels are projected to exceed 65 CNEL at the northern and eastern project boundaries. Ground floor noise levels at all proposed buildings are not projected to exceed 70 CNEL.



-  Project Boundary
-  Off-site Improvement Area
-  Receivers
-  Buildings
-  Site Plan

Vehicle Traffic Noise

-  50 CNEL
-  55 CNEL
-  60 CNEL
-  65 CNEL
-  70 CNEL



FIGURE 8
Vehicle Traffic Noise Contours

Noise levels were also modeled at the exterior use area (pool, cabanas, and tot lot), at the balconies facing located closest to Alessandro Boulevard and Lasselle Street, at the dog park, and around the building façades. Noise levels were modeled at the exterior use area to determine exterior noise compatibility with City standards. Noise levels were modeled at balconies and building façades in order to determine the necessary noise reduction measures needed to reduce interior noise levels to 45 CNEL or less. Exterior noise levels are summarized in Table 15.

As shown in Table 15, exterior noise levels at the exterior use area (Receivers 1 through 3) would range from 47 to 51, which would be less than the City’s “normally acceptable” compatibility standard of 65 CNEL. Exterior noise levels at the dog park would be 48 CNEL, which would be less than the City’s “normally acceptable” compatibility standard of 70 CNEL. Therefore, the project would not be exposed to exterior noise levels in excess of standards established in the General Plan, and impacts would be less than significant.

Table 15 On-Site Vehicle Traffic Noise Levels				
Receiver	Location	Exterior Noise Level (CNEL)		
		1 st Floor	2 nd Floor	3 rd Floor
1	Clubhouse Exterior Space	49	--	--
2	Clubhouse Exterior Space	47	--	--
3	Clubhouse Exterior Space	51	--	--
4	Building 1 Balcony	53	56	58
5	Building 1 Balcony	67	70	70
6	Building 1 Balcony	67	70	70
7	Building 1 Balcony	67	70	70
8	Building 1 Balcony	67	70	70
9	Building 8 Balcony	67	70	70
10	Building 8 Balcony	67	70	71
11	Building 8 Balcony	67	70	70
12	Building 8 Balcony	68	71	72
13	Building 8 Balcony	60	64	65
14	Building 7 Balcony	63	66	67
15	Building 7 Balcony	61	65	66
16	Building 6 Balcony	60	64	65
17	Building 6 Balcony	60	63	65
18	Building 5 Balcony	61	64	66
19	Building 5 Balcony	60	64	65
20	Building 1 Façade	62	65	67
21	Building 1/8 Façade	62	66	67
22	Building 8 Façade	67	70	71
23	Building 2 Façade	55	57	59
24	Building 7 Façade	57	60	62
25	Building 7 Façade	65	69	69
26	Building 3 Façade	46	49	52
27	Building 4 Façade	46	50	51
28	Building 6 Façade	53	56	58
29	Building 6 Façade	63	67	68
30	Dog Park	48	--	--
31	Building 5 Façade	54	57	60
32	Building 5 Façade	63	67	68

On-site Interior Noise Compatibility

The interior noise level standard for residential uses is 45 CNEL. As shown in Table 15, exterior noise levels would range from 46 to 72 CNEL. Standard light-frame construction would reduce exterior to interior noise levels by at least 20 dB. This analysis conservatively assumes that standard construction techniques would achieve 20 dB exterior to interior noise reduction. Using this assumption, interior noise levels would be reduced to 45 CNEL or less in buildings exposed to exterior noise levels of 65 CNEL or less.

The sound transmission class (STC) rating of windows, walls, and roofs is an integer value that rates how well a building component attenuates noise. The STC rating general reflects the decibel reduction that a building component can achieve. Therefore, because a noise reduction of up to 27 dB(A) is required to achieve interior noise levels of 45 CNEL or less, building components with an STC rating of up to 27 are required. Standard walls and roofs typically have STC ratings greater than 40, therefore, this analysis focuses on the minimum required window STC ratings.

Table 16 summarizes the required composite STC ratings that need to be achieved in each location exceeding 65 CNEL. The provision of windows that have an STC equal to or greater than the values shown in Table 16 would be sufficient to reduce interior noise levels to 45 CNEL or less. Therefore, the project would not be exposed to interior noise levels in excess of standards established in the General Plan, and impacts would be less than significant.

Table 16 Typical Construction Equipment Noise Levels		
Building	Maximum Exterior Noise Level (CNEL)	Required Window STC Rating
Building 1	70	25
Building 2	59	--
Building 3	52	--
Building 4	51	--
Building 5	68	23
Building 6	68	23
Building 7	69	24
Building 8	72	27
-- = Exterior noise levels are less than 65 CNEL, therefore, standard construction would reduce interior noise levels to less than 45 CNEL and windows with an increased STC rating would not be required.		

Off-site Vehicle Traffic Noise

The project would increase traffic volumes on local roadways. However, the project would not substantially alter the vehicle classifications mix on local or regional roadways, nor would the project alter the speed on an existing roadway or create a new roadway. Thus, the primary factor affecting off-site noise levels would be increased traffic volumes. While changes in noise levels would occur along any roadway where project-related traffic occurs, for noise assessment purposes, noise level increases are assumed to be greatest nearest the project site, as this location would represent the

greatest concentration of project-related traffic. A substantial noise increase is defined as an increase of 3 decibels (dB) above existing conditions.

Based on the ITE Trip Generation Manual, 11th Edition, the project would generate 6.74 weekday trips per unit for a total of 1,298 daily weekday trips (K2 Traffic Engineering, Inc. 2022). Typically, a project would have to double the traffic volume on a roadway in order to have a significant direct noise increase of 3 dB or more or to be major contributor to the cumulative traffic volumes. The project would result in an increase of 1,298 trips on Alessandro Boulevard would result in a noise increase of 0.7 to 0.8 dB, and an increase of 1,298 trips on Lasselle Street would result in a noise increase of 0.9 to 1.1 dB. These would not be audible changes in noise levels. Therefore, operational roadway noise would not generate a substantial permanent increase in ambient noise levels for off-site noise sensitive land uses, and impacts would be less than significant.

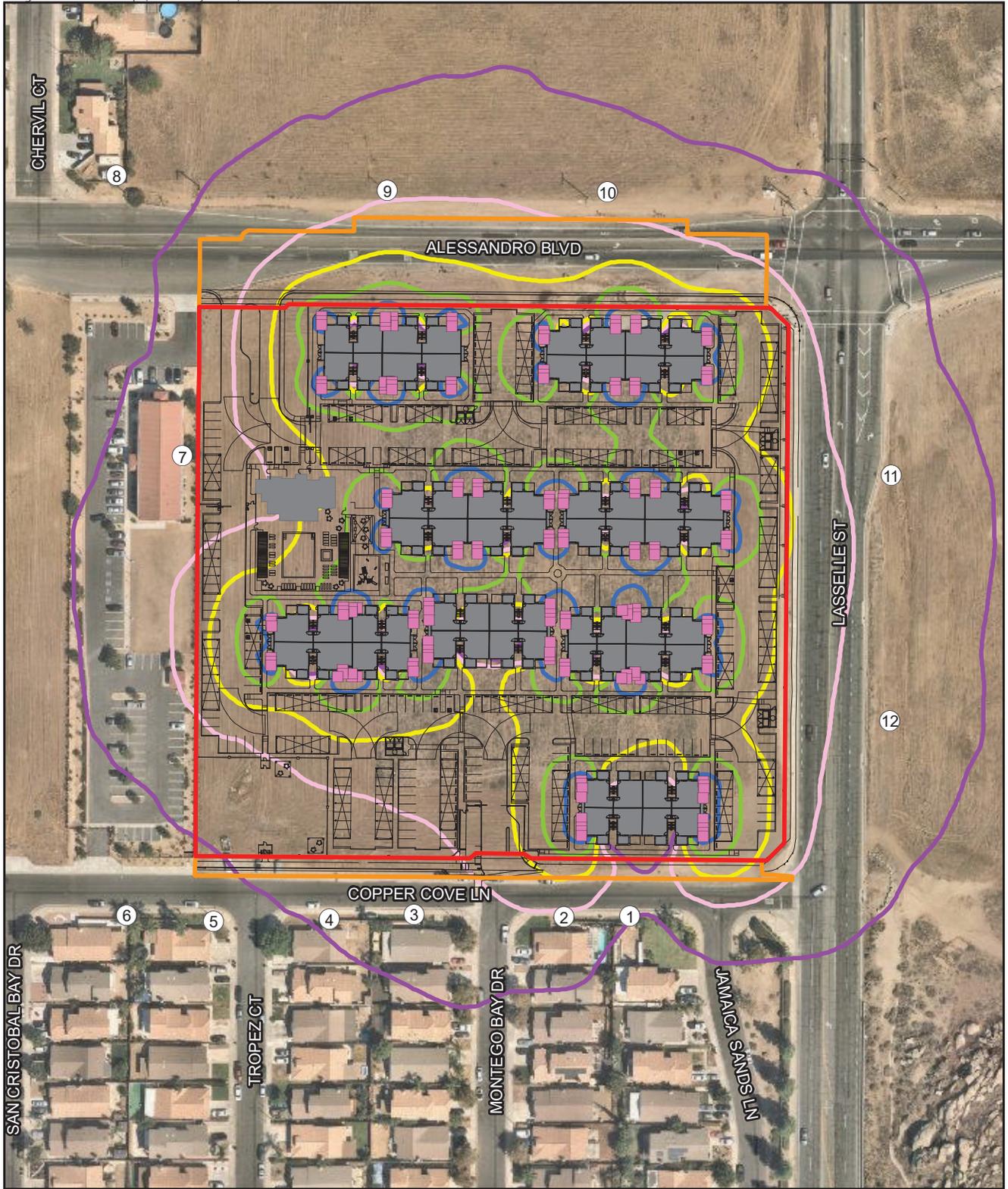
On-site Generated Noise

The primary source of on-site noise would be heating, ventilation, and air conditioning (HVAC) equipment. Noise levels associated with HVAC equipment were modeled at a series of 12 receivers located at the adjacent uses. Modeled receivers and HVAC noise contours are shown in Figure 9, and future projected noise levels are presented in Table 17.

Table 17 HVAC Noise Levels at Adjacent Property Lines [dB(A) L_{eq}]			
Receiver	Land Use	Applicable Limit Daytime/Nighttime ¹	HVAC Noise Level
1	Residential	60/55	42
2	Residential	60/55	46
3	Residential	60/55	44
4	Residential	60/55	42
5	Residential	60/55	40
6	Residential	60/55	39
7	Church	65/60	42
8	Residential	60/55	37
9	Undeveloped	--	44
10	Undeveloped	--	43
11	Undeveloped	--	43
12	Undeveloped	--	44

¹Refer to in Appendix L, Section 2.2.1.

As shown in Table 17, HVAC noise levels are anticipated to range from 37 to 46 dB(A) L_{eq} , which would not exceed the applicable limits as specified in Section 11.80.030(C) of the MVMC. Therefore, operational HVAC noise would not generate a substantial permanent increase in ambient noise levels in excess of limits established in the MVMC, and impacts would be less than significant.



- Project Boundary
- Off-site Improvement Area
- Receivers
- HVAC Unit
- Buildings
- Site Plan

- HVAC Noise**
- 40 dB(A) L_{eq}
 - 45 dB(A) L_{eq}
 - 50 dB(A) L_{eq}
 - 55 dB(A) L_{eq}
 - 60 dB(A) L_{eq}



FIGURE 9
HVAC Noise Contours

b. Less Than Significant Impact

Human reaction to vibration is dependent on the environment the receiver is in, as well as individual sensitivity. For example, vibration outdoors is rarely noticeable and generally not considered annoying. Typically, humans must be inside a structure for vibrations to become noticeable and/or annoying. Based on several federal studies, the threshold of perception is 0.035 inch per second (in/sec) peak particle velocity (PPV), with 0.24 in/sec PPV being a distinctly perceptible (California Department of Transportation 2013). The City's 2040 General Plan Final EIR established a threshold that vibration levels shall not exceed FTA architectural damage thresholds (e.g., 0.12 in/sec PPV for fragile or historical resources, 0.2 in/sec PPV for non-engineered timber and masonry buildings, and 0.3 in/sec PPV for engineered concrete and masonry).

Construction activities produce varying degrees of ground vibration, depending on the equipment and methods employed. While ground vibrations from typical construction activities very rarely reach levels high enough to cause damage to structures, special consideration must be made when sensitive or historic land uses are near the construction site. The construction activities that typically generate the highest levels of vibration are blasting and impact pile driving and the use of a vibratory roller. However, the project would not require blasting, pile driving, or vibratory rollers. The largest piece of vibration-generating equipment that could be used for project construction is a large bulldozer. Large bulldozers generate a vibration level of 0.089 in/sec PPV at 25 feet. The nearest receptors are the residential uses located approximately 40 feet south of the southern project boundary and the church located approximately 20 feet west of the western project boundary. A vibration level of 0.089 in/sec PPV at 25 feet would be 0.114 in/sec PPV at 20 feet and 0.053 in/sec PPV at 40 feet. These vibration levels would be less than the FTA thresholds. Additionally, construction equipment would move throughout the entire site and would only be located near the project boundaries for short periods of time. Thus, vibration levels at the receptors located near the project boundaries would be less than these maximum levels for a majority of the construction period. Although vibration levels may be perceptible for short periods of time, maximum vibration levels would not exceed FTA thresholds. Therefore, project construction would not generate excessive ground borne vibration or ground borne noise levels, and impacts would be less than significant. Once operational, the project would not be a source of ground borne vibration or ground borne noise.

c. No Impact

The project site is not located within the vicinity of a private airstrip. The nearest airport is MARB, which is located approximately 2.8 miles southwest of the project site. Review of Map S-7 of the 2040 General Plan Safety Element determined that the project site is outside the Airport Influence Area Boundary for MARB. Therefore, the project would not expose people residing or working in the area to excessive aircraft noise levels. No impact would occur.

4.14 Population and Housing

Would the project:

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

EXPLANATIONS:

a. Less Than Significant Impact

The project would construct a 192-unit apartment complex consisting of 84 one-bedroom apartments and 108 two-bedroom apartments. According to the U.S. Census Bureau, the population of the City in 2020 was 208,634 (U.S. Census Bureau 2020). The SCAG Connect SoCal Demographics and Growth Forecast projects that the City's population would increase by approximately 58,188 people to 266,800 by the year 2045 (SCAG 2020). The SCAG 2019 Local Profile of the City indicates the average household size is 3.9 persons. The project is anticipated to house approximately 749 persons, which would be less than the total anticipated population growth of 58,188 people within the City by 2045. Therefore, the project would accommodate population growth that is already anticipated within the city.

Additionally, the project would contribute to the housing needs within the city, which was identified as 13,596 housing units in the SCAG 6th Cycle Regional Housing Needs Assessment (RHNA) Allocation Plan. Therefore, the project would not induce substantial unplanned population growth, either directly or indirectly, impacts would be less than significant.

b. No Impact

The project site is vacant and does not possess any residential structures. Therefore, the project would not displace substantial numbers of existing people or housing or require the construction of replacement housing. No impacts will occur.

4.15 Public Services

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a.i. Less Than Significant Impact

Fire protection services would be provided by the Moreno Valley Fire Department (MVFD), which contracts with the Riverside County Fire Department (RCFD) for local fire protection services. The fire station located nearest to the project site is Morrison Park Fire Station 99, located at 13400 Morrison Street which is approximately one mile from the project site. Therefore, Fire Station 99 would serve the project site. The project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future fire protection facilities within the city. Furthermore, the project would be required to pay development impact fees (DIFs) that would contribute the project’s fair share towards the funding of future fire protection facilities. Therefore, the project would not result in the need for new or altered fire protection facilities, and impacts would be less than significant.

a.ii. Less Than Significant Impact

Police services would be provided by the Moreno Valley Police Department (MVPD), which contracts with the Riverside County Sheriff’s Department (RCSD). The MVPD is located at 22850 Calle San Juan

de Los Lagos in the city's Civic Center, which is approximately 3.2 miles from the project site. Therefore, the MVPD would be able to serve the project site. The project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future fire protection facilities within the City. Furthermore, the project would be required to pay DIFs that would contribute the project's fair share towards the funding of future fire protection facilities. Therefore, the project would not result in the need for new or altered police protection facilities, and impacts would be less than significant.

a.iii. Less Than Significant Impact

The project would construct a 192-unit apartment complex that would generate school-aged children within the boundaries of the Moreno Valley Unified School District. However, the project would pay DIFs that would contribute the project's fair share towards the funding of future schools. Furthermore, the project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future schools within the city. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, and impacts would be less than significant.

a.iv. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future parks within the city. Additionally, the project would be required to pay DIFs to contribute the project's fair share towards the funding of future park facilities. Furthermore, the project would include a 14,000-square-foot community dog park that would increase the amount of park facilities within the city. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered parks and recreation facilities, and impacts would be less than significant.

a.v. Less Than Significant Impact

The project would result in an increase in residents that would generate additional demand for public facilities such as libraries or hospitals. However, the project would be required to pay DIFs to contribute the project's fair share funding of future facilities. The project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future facilities within the City. Therefore, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered facilities, and impacts would be less than significant.

4.16 Recreation

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would accommodate anticipated population growth and would be consistent with planning projections for future parks within the City. Additionally, the project would be required to pay DIFs that would contribute the project’s fair share towards the funding of future park facilities. Furthermore, the project would include a 14,000-square-foot community dog park that would increase the amount of park facilities within the city. Therefore, the project would not 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, and impacts would be less than significant.

b. Less Than Significant

The project would include on-site recreational amenities including a dog park, clubhouse, pool, cabanas, and tot lot. These amenities would be located entirely within the project footprint. Consequently, potential impacts associated with proposed on-site recreation facilities have been considered within this environmental document. Therefore, project would not have adverse physical effect on the environment caused by expansion or construction of recreational facilities, and impacts would be less than significant.

4.17 Transportation/Traffic

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would not generate vehicle trips beyond what is anticipated for the existing circulation network. The project would widen Alessandro Boulevard to two lanes while maintaining access for existing and planned bicycle lanes along Alessandro Boulevard. The project would also improve bicycle access by adding a southbound bike lane within the existing ROW and improvements of Lasselle Street. The project would also improve pedestrian access by construct sidewalks along project frontages. The project would not physically impact any bus stops located along Alessandro Boulevard. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, and impacts would be less than significant.

b. Less Than Significant Impact

In September 2013, the Governor’s Office signed SB 743 into law, starting a process that identified VMT as the most appropriate CEQA transportation metric. Effective July 1, 2020, the VMT guidelines became applicable statewide, and are documented in CEQA Guidelines Section 15064.3 Determining the Significance of Transportation Impacts. The City has adopted criteria for evaluating VMT impacts under CEQA including the preferred analysis methodology and thresholds of significance. The criteria

are included in the City’s Transportation Impact Analysis Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment (June 2020). Per the City’s guidelines, the first step in the process is to conduct a screening assessment to determine if a VMT analysis would be required. A Traffic Scoping Agreement was prepared for the project that included a VMT screening assessment (see Appendix M). The screening analysis compared several projected VMT metrics within the project’s Traffic Analysis Zone (TAZ) to the jurisdictional average. Table 18 presents the results of the VMT screening analysis.

Table 18 VMT Screening Assessment		
	Jurisdictional Average VMT	Project TAZ VMT
Daily Total VMT	24.49	17.48
Residential Home-Based VMT	12.79	11.09
Home-Based Work VMT	11.01	6.11
SOURCE: Appendix M		

As shown in Table 18, the project TAZ VMT would be lower for all three categories compared to the jurisdictional average. Based on the results of this analysis, the project screened out of the requirement for a VMT analysis, and it is expected that the project would result in a less than significant impact related to VMT without conducting a detailed study. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and impacts would be less than significant.

c. Less Than Significant Impact

The project would widen Alessandro Boulevard to two lanes, construct raised median islands along Alessandro Boulevard between Chervil Court and Lasselle Street, and construct driveway connections to Alessandro Boulevard and Copper Cove Lane. All of these roadway improvements would be constructed consistent with all applicable City roadway requirements. Therefore, the project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses, and impacts would be less than significant.

d. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would not generate vehicle trips beyond what is anticipated for the existing circulation network that could delay emergency access. The project would widen Alessandro Boulevard to two lanes, thereby providing increased vehicular capacity on the roadway. The project would also construct driveway connections to Alessandro Boulevard and Copper Cove Lane consistent with all applicable City safety requirements related to emergency access. The project would also include an internal fire access lane between two buildings to ensure adequate fire protection response during an emergency. Therefore, the project would not result in inadequate emergency access to or from the project site, and impacts would be less than significant.

4.18 Tribal Cultural Resources

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:**a.i. No Impact**

The City initiated consultation with California Native American tribes traditionally and culturally affiliated with the project site who have requested consultation consistent with the requirements of AB 52. The City sent letters to the traditionally and culturally affiliated tribes on May 31, 2022, and requested that they provide responses by July 1, 2022. The City received responses from the following tribes:

1. Agua Caliente Band of Cahuilla Indians
2. Rincon Band of Luiseño Indians
3. Yuhaaviatam of San Manuel Nation

The Agua Caliente Band of Cahuilla Indians stated that the project site is not located within the boundaries of the Agua Caliente Band of Cahuilla Indians Reservation and deferred to the Soboba Band of Luiseño Indians and Pechanga Band of Luiseño Indians. This concluded consultation with the Agua Caliente Band of Cahuilla Indians. The Rincon Band of Luiseño Indians stated that the project site is within the Traditional Use Area of the Luiseño people and requested consultation in order to evaluate the potential for the project to impact tribal cultural resources. The Yuhaaviatam of San Manuel Nation (YSMN) stated that the project site is located within Serrano ancestral territory, but did not have any concern regarding the project.

As described in Section 4.5(a) above, the previously recorded cultural resource mapped within the APE does not meet the eligibility criteria under CEQA, nor any of the local regulation guidelines. The NAHC search of their Sacred Lands File to identify any spiritually significant and/or sacred sites or Traditional Use Areas in the project vicinity were negative. An on-foot survey was conducted by RECON and a representative from the Pechanga Band of Luiseño Indians. No previously unrecorded significant or potentially significant prehistoric or historic cultural resources were observed during the survey of the APE. Therefore, the project would not cause a substantial adverse change to a tribal cultural resource that would qualify or be eligible for listing in the California Register of Historical Resources or the local register of historical resources in accordance with the Public Resources Code Section 5020.1(k). No impact would occur.

a.ii. Potentially Significant Unless Mitigation Incorporated

As described in Section 4.18(a.i) above, the Rincon Band of Luiseño Indians stated that the project site is within the Traditional Use Area of the Luiseño people and requested consultation in order to evaluate the potential for the project to impact tribal cultural resources. Although the YSMN stated that they did not have any concern regarding the project, they requested that tribal cultural monitoring be implemented during project construction. Therefore, the project would have the potential to unearth previously unknown tribal cultural resources, which would be considered a significant impact (Impact TCR-1). Implementation MM-TCR-1 through MM-CUL-9 would reduce impacts to a level less than significant.

MM-TCR-1 Archaeological Monitoring

Prior to the issuance of a grading permit, the applicant 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 YSMN, the Contractor, and the City, shall develop a Cultural Resource Monitoring Plan (CRMP) as defined in MM-TCR-3. 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 for 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.

MM-TCR-2: Native American Monitoring

Prior to the issuance of a grading permit, the Developer shall secure agreements with the YSMN 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, the 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.

MM-TCR-3: Cultural Resource Monitoring Plan

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 AB 52 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 AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in California Public Resources Code Section 21080.3.2(b)(1) of AB 52. Details in the CRMP shall include:

- a. Project description and location;
- b. Project grading and development scheduling;
- c. Roles and responsibilities of individuals on the project;
- d. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details;
- e. 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;
- f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items;
- g. Contact information of relevant individuals for the project.

MM-TCR-4: 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:

- 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 Planning Department:
 - 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. On-site reburial of the discovered items as detailed in the treatment plan required pursuant to MM-TCR-1. 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 MM-TCR-3. 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.

MM-TCR-5: Grading Plan Notes

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.

MM-TCR-6: 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 Code of Federal Regulations 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 and any and all Consulting Native American Tribes as defined in MM-TCR-2 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.

MM-TCR-7: 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 NAHC 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) (General Plan Objective 23.3, CEQA).

MM-TCR-8: 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).

MM-TCR-9: 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 at the University of California Riverside, and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).

4.19 Utilities and Service Systems

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water or 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"/>
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"/>
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"/>
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"/>
e. Comply with federal, state, and local statutes and regulation related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:**a. Less Than Significant Impact**

Water services would be provided by EMWD. The 2020 UWMP prepared by EMWD anticipated that adequate water supplies would be available to meet future demand under all water year conditions from 2020 through 2045 (EMWD 2021a). As described in Section 4.14(a) above, the project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast water supply demand in the EMWD 2020 Urban Runoff Management Plan. Consequently, the project would not require construction of any off-site water facilities. Existing water service lines are available adjacent to the site, and improvements would be limited to extension of pipelines onto the project site. Consequently, potential impacts associated with construction of new or expanded water facilities would only occur on-site and have been considered as part project construction within this environmental document and would be less than significant.

Wastewater treatment services would be provided by EMWD, which operates the Moreno Valley Regional Water Reclamation Facility. The Moreno Valley Regional Water Reclamation Facility currently treats approximately 11.5 million gallons of wastewater per day and has an excess capacity of 4.5 million gallons per day (EMWD 2021b). As described in Section 4.14(a) above, the project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast wastewater demand. Consequently, the project would not require construction of any off-site wastewater facilities. Existing wastewater service lines are available adjacent to the site, and improvements would be limited to extension of pipelines onto the project site. Consequently, potential impacts associated with construction of new or expanded wastewater facilities would only occur within the project site and have been considered as part of project construction within this environmental document and would be less than significant.

As described in Section 4.10c.i, the project would introduce an on-site stormwater collection system consisting of two infiltration and detention basins with an underground detention pipe system that would manage stormwater flows. As described in Section 4.10(c.i) above, the Preliminary Hydrology Report determined that the existing storm drain system would have adequate capacity to convey peak storm water flows during the 100-year storm event (see Appendix K). Consequently, the project would not require construction or expansion of existing off-site stormwater facilities. The proposed on-site infiltration and detention basins with an underground detention pipe system would be located within the project footprint. Consequently, potential impacts associated with construction of the proposed on-site stormwater facilities have been considered within this environmental document. Therefore, the project would not require construction of off-site storm water drainage facilities or expansion of existing facilities, and impacts would be less than significant.

As described in Section 4.14(a) above, the project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast demand for electric power, natural gas, and telecommunications, and would not require the construction of any off-site facilities. Existing electric power, natural gas, and telecommunications lines are available adjacent to the site, and improvements would be limited to extension of utilities onto the project site. Consequently, potential

impacts associated with required on-site electric power, natural gas, and telecommunications facilities have been considered as part of the project construction within this environmental document, and impacts related to their construction would be less than significant.

Overall, the project would not require or result in the construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, and impacts would be less than significant.

b. Less Than Significant Impact

As described in Section 4.19(a) above, the project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast water supply demand in the EMWD 2020 Urban Runoff Management Plan (EMWD 2021a). Therefore, sufficient water supplies would be available to serve the project, and impacts would be less than significant.

c. Less Than Significant Impact

As described in Section 4.19(a) above, the Moreno Valley Regional Water Reclamation Facility currently treats approximately 11.5 million gallons of wastewater per day and has an excess capacity of 4.5 million gallons per day (EMWD 2021b). The project would accommodate population growth anticipated in the SCAG Connect SoCal Demographics and Growth Forecast, and therefore would be consistent with the growth projections utilized to forecast wastewater demand. Therefore, the project would not exceed existing wastewater treatment capacity, and impacts would be less than significant.

d. Less Than Significant Impact

The majority of solid waste generated within the city is disposed of at the Badlands Landfill, which has a remaining disposal capacity of 7,800,000 cubic yards (CalRecycle 2022a). Additionally, solid waste is disposed of at the El Sobrante Landfill, which has a remaining disposal capacity of 3,834,470 cubic yards (CalRecycle 2022b), as well as the Lamb Canyon Landfill, which has a remaining disposal capacity of 19,242,950 cubic yards (CalRecycle 2022c). Construction and operation of the project would not exceed the remaining capacity of these three landfills. The project would complete and submit a Waste Management and Recycling Plan for approval consistent with the requirements of the City's building code prior to issuance of building permits. The Waste Management and Recycling Plan would identify the project type, and estimate the amount of materials to be recycled during construction. The project would also be required to complete a Diversion Report for review by the City's Building Department to demonstrate that the project recycled a minimum of 50 percent of its construction waste. Therefore, the project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, and impacts would be less than significant.

e. Less Than Significant Impact

As described in Section 4.19(d) above, the project would complete and submit a Waste Management and Recycling Plan for approval consistent with the requirements of the City's building code complete a Diversion Report for review by the City's Building Department to demonstrate that the project recycled a minimum of 50 percent of its construction waste. Additionally, the project would

implement organic waste recycling programs consistent with the requirements of AB 1826 and SB 1383. Therefore, the project would comply with federal, state, and local statutes and regulation related to solid waste, and impacts would be less than significant.

4.20 Wildfire

Would the project:

Issue	Potentially Significant Impact	Potentially Significant Unless 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 checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Less Than Significant Impact

The project would be consistent with the existing land use designation for the site, and therefore would not generate vehicle trips beyond what is anticipated for the existing circulation network that could delay emergency access. The project would widen Alessandro Boulevard to two lanes, thereby

providing increased vehicular capacity on the roadway. The project would also construct driveway connections to Alessandro Boulevard and Copper Cove Lane consistent with all applicable City safety requirements related to emergency access. The project would also include an internal fire access lane between two buildings to ensure adequate fire protection response during an emergency. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b. Less Than Significant Impact

As described in Section 4.9(g) above, review of Map S-5 of the City's 2040 General Plan Update Safety Element determined that the project is not located in a High Fire Hazard Severity Zone (City of Moreno Valley 2021). The project site and surrounding area are relatively flat and do not possess any slopes that could result in post-fire landslides. Furthermore, the project site is located in an urbanizing area consisting primarily of developed land. Vacant land to the north and east are surrounded by urban uses and do not pose a threat related to wildland fires. Therefore, there are no characteristics of the surrounding environment that would exacerbate wildfire risks, and impacts would be less than significant.

c. Less Than Significant Impact

As described in Section 4.19(a) above, the project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. Additionally, the project would not require construction or maintenance of any other infrastructure facilities. Therefore, the project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk, and impacts would be less than significant.

d. Less Than Significant Impact

Review of Map S-4 in the Safety Section of the City's 2040 General Plan Update determined that the project site is not located within a Flood Hazard Area (City of Moreno Valley 2021). Furthermore, the project site and surrounding area are relatively flat and do not possess any slopes that could result in post-fire landslides. Therefore, the project would not expose people or structures to significant risks from runoff, post-fire slope instability, or drainage changes. No impact would occur.

4.21 Mandatory Findings of Significance

Does the project:

Issue	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable futures projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

EXPLANATIONS:

a. Potentially Significant Unless Mitigation Incorporated

As described in Section 4.4(a), implementation of mitigation measures MM-BIO-1 through MM-BIO-3 would reduce impacts on sensitive wildlife species to a level less than significant. The project does not have the potential to result in any other impacts that would 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. As described in Section 4.18(a.ii) above, implementation of mitigation measures MM-TRC-1 through MM-TRC-9 would reduce potential impacts on unknown tribal cultural resources to a level less than significant.

b. Potentially Significant Unless Mitigation Incorporated

As described in the Draft IS/MND, all potential impacts would be mitigated to a level less than significant. Air quality is a regional issue and the cumulative study area for air quality impacts encompasses the SoCAB as a whole. Therefore, the cumulative analysis addresses regional air quality plans and policies, such as the NAAQS, CAAQS, and SCAQMD 2016 AQMP as well as the project's contribution to a net increase of any criteria pollutant for which the SoCAB is listed as a non-attainment area. As described in Section 4.3(a) above, the project would not exceed the growth forecasting used to develop the 2016 AQMP, and construction and operational emissions would not exceed the SCAQMD recommended regional or localized screening thresholds. Therefore, the project would not conflict with or obstruct implementation of applicable air quality plans, and air quality impacts would be cumulatively less than significant. As described in Section 4.4(a), implementation of mitigation measures MM-BIO-1 through MM-BIO-3 would reduce impacts on sensitive wildlife species to a level less than significant. Implementation of MM-BIO-1 through MM-BIO-3 would also ensure consistency with the MSHCP, which is a regional resource conservation document. Projects that are consistent with the MSHCP would not contribute a cumulative impact to biological resources. As described in Section 4.8 above, would be consistent with the City's CAP, which is a qualified GHG reduction plan that is consistent with the regional 2017 Scoping Plan as well as all applicable Connect SoCal strategies. Therefore, the project would not conflict with an applicable local plan, policy, or regulation adopted for the purpose of reducing GHG emissions, and impacts would be cumulatively less than significant. As described in Section 4.18(a.ii) above, implementation of mitigation measures MM-TRC-1 through MM-TRC-9 would reduce potential impacts on unknown tribal cultural resources to a level less than significant. As described throughout the Draft IS/MND, all other project-level impacts would be less than significant without mitigation. Therefore, the project would not result in any project-level significant impacts that could contribute to an existing cumulative impact on the environment.

c. Less Than Significant Impact

As described in Sections 4.1 through 4.20, the project would not result in any substantial adverse direct or indirect impacts to human beings. Therefore, impacts would be less than significant.

5.0 Mitigation, Monitoring, and Reporting Program

Section 21081.6 of the CEQA Guidelines requires that a Mitigation, Monitoring, and Reporting Program (MMRP) be adopted upon certification of an Environmental Impact Report or adoption of a Mitigated Negative Declaration to ensure that the mitigation measures are implemented. The MMRP specifies the mitigation for the project, when in the process it should be accomplished, and the entity responsible for implementing and/or monitoring the mitigation. Public Resources Code Section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. After analysis, potentially significant impacts requiring mitigation were identified for biological resources and tribal cultural resources. The MMRP is presented below in Table 19.

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
Biological Resources			
<p>MM-BIO-1: Burrowing Owl Due to the presence of suitable burrows and prey species identified on-site, prior to project construction, 30-day preconstruction surveys following the protocol established in the Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area shall be conducted in accordance with the requirements of the MSHCP (WRCRCA 2006). Take of active nests shall be avoided. If burrowing owls are detected, the WRCRCA, and CDFW shall be notified in 48 hours. A burrowing owl relocation plan for active or passive relocation will be required to be developed and is subject to review and approval by WRCRCA and CDFW.</p>	Prior to Construction	Applicant/ Qualified Biologist	
<p>MM-BIO-2: Migratory and Nesting Birds To remain in compliance with the Migratory Bird Treaty Act (MBTA) and CFGC Sections 3503 and 3503.5, no direct impacts shall occur to any nesting birds, their eggs, chicks, or nests. If vegetation removal activities were to occur during the bird breeding season of February 1 to September 15, a qualified biologist will conduct pre-construction surveys no more than three days prior to the commencement of project activities to identify locations of nests. If nests or breeding activities are located in the project area, a qualified biologist shall establish a clearly marked appropriate exclusionary buffer or other avoidance and minimization measures around the nest. Avoidance and minimization measures shall be maintained until the young have fledged and no further nesting is detected. If no nesting birds are detected during the pre-construction survey, no further measures are required.</p>	Prior to Construction	Applicant/ Qualified Biologist	

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
<p>MM-BIO-3: Stephens' Kangaroo Rat Fee Area Prior to the issuance of a development permit, the applicant shall pay an impact and mitigation fee of \$500 per gross acre for impacts to 9.41 acres within the Stephens' Kangaroo Rat fee area. This mitigation fee is intended to include all impacts located within the parcel to be developed and the area disturbed by related off-site improvements.</p>	Prior to Construction	Applicant/ Qualified Biologist	
Tribal Cultural Resources			
<p>MM-TCR-1 Archaeological Monitoring Prior to the issuance of a grading permit, the applicant 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 YSMN, the Contractor, and the City, shall develop a CRMP as defined in MM-TCR-3. 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 for 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>	Prior to Construction	Applicant/ Qualified Archaeologist	
<p>MM-TCR-2: Native American Monitoring Prior to the issuance of a grading permit, the Developer shall secure agreements with the YSMN 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, the 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>	Prior to Construction	Applicant/ Qualified Archaeologist	
<p>MM-TCR-3: Cultural Resource Monitoring Plan The Project Archaeologist, in consultation with the Consulting Tribe(s), the Contractor, and the City, shall develop a CRMP in consultation pursuant to the</p>	Prior to Construction	Applicant/ Qualified Archaeologist	

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
<p>definition in AB 52 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 AB 52 consultation process, and has completed AB 52 consultation with the City as provided for in California Public Resources Code Section 21080.3.2(b)(1) of AB 52. Details in the CRMP shall include:</p> <ul style="list-style-type: none"> a. Project description and location; b. Project grading and development scheduling; c. Roles and responsibilities of individuals on the project; d. The pre-grading meeting and Cultural Resources Worker Sensitivity Training details; e. 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; f. The type of recordation needed for inadvertent finds and the stipulations of recordation of sacred items; g. Contact information of relevant individuals for the project. 			
<p>MM-TCR-4: 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> <ul 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 Planning Department: <ul 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. On-site reburial of the discovered items as detailed in the treatment plan required pursuant to MM-TCR-1. This shall include measures and provisions to protect the future reburial area from any future 	<p>During Construction</p>	<p>Applicant/ Qualified Archaeologist</p>	

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
<p>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 MM-TCR-3 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>			
<p>MM-TCR-5: Grading Plan Notes 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>Prior to Construction</p>	<p>Applicant/ Qualified Archaeologist</p>	
<p>MM-TCR-6: 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 Code of Federal Regulations 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</p>	<p>During Construction</p>	<p>Applicant/ Qualified Archaeologist</p>	

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
<p>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 and any and all Consulting Native American Tribes as defined in MM-TCR-2 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>MM-TCR-7: 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 NAHC 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) (General Plan Objective 23.3, CEQA).</p>	During Construction	Applicant/ Qualified Archaeologist	
<p>MM-TCR-8: 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>	During Construction	Applicant/ Qualified Archaeologist	
<p>MM-TCR-9: 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.</p>	During Construction	Applicant/ Qualified Archaeologist	

Table 19 Mitigation, Monitoring, and Reporting Program			
Mitigation Measure	Timing of Verification	Responsible for Verification	Status/Date/Initials
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 at the University of California Riverside, and one (1) copy shall be submitted to the Consulting Tribe(s) Cultural Resources Department(s).			

6.0 Preparers

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Jennifer Gutierrez, Production Specialist

7.0 Sources Consulted

Aesthetics

Moreno Valley, City of

- 2021 City of Moreno Valley General Plan 2040. Adopted June 15. Prepared by Dyett & Bhatia.
https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf

Agriculture and Forest Resources

Moreno Valley, City of

- 2021 Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan. SCH # 2020039022, May 20.

State of California, Department of Conservation

- 2016 California Important Farmland Finder. <https://maps.conservation.ca.gov/dlrp/ciff/>.

Air Quality

California Air Pollution Control Officers Association (CAPCOA)

- 2021 California Emissions Estimator Model (CalEEMod). User's Guide Version 2020.4.0. May.

- 2022 California Emissions Estimator Model (CalEEMod). User's Guide Version 2022.1. April.

California Air Resources Board (CARB)

- 2005 Air Quality and Land Use Handbook: A Community Health Perspective. California Air Resources Board. April.

Moreno Valley, City of

- 2021b Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan. SCH # 2020039022, May 20.

Moreno Valley Electric Utility (MVU)

- 2018 2018 Integrated Resource Plan. Prepared by Joule Megamorphosis Energy Consulting. July 20, 2018.

K2 Traffic Engineering, Inc.

- 2022 Focused Traffic Impact Study: Crystal Cove Multifamily Residential Homes at SWC of Alessandro Blvd and Lasselle St, Moreno Valley. September 6, 2022.

U.S. Environmental Protection Agency (U.S. EPA)

- 1992 Screening Procedures for Estimating the Air Quality Impact of Stationary Sources.

Biological Resources

Beier, P. and S. Loe

- 1992 A Checklist for Evaluating Impacts to Wildlife Movement Corridors. Wildlife Society Bulletin. 20:434-440.

California Department of Fish and Wildlife (CDFW)

- 2022 Natural Diversity Database. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento. RareFind Version 5.2.14. Accessed March.

Riverside County Habitat Conservation Agency (RCHCA)

- 1996 Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County.

U.S. Fish and Wildlife Service (USFWS)

- 2022a All Species Occurrences GIS Database. Carlsbad Fish and Wildlife Office. Accessed December.

- 2022b National Wetlands Inventory. Accessed March.

Western Riverside County Regional Conservation Authority (WRCRCA)

- 2003 Final Western Riverside County Multiple Species Habitat Conservation Plan (Western Riverside County MSHCP). <https://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/>.

- 2006 Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area.

- 2022 MSHCP Informational Map. Accessed from <https://www.wrc-rca.org/rcamaps/>. March.

Energy

California Public Utilities Commission

- 2021 2021 California Renewables Portfolio Standard Annual Report. November. <https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/documents/energy/rps/cpuc-2021-rps-annual-report-to-legislature.pdf>

K2 Traffic Engineering, Inc.

- 2022 Focused Traffic Impact Study: Crystal Cove Multifamily Residential Homes at SWC of Alessandro Blvd and Lasselle St, Moreno Valley. September 6, 2022.

Greenhouse Gas Emissions

California Air Pollution Control Officers Association (CAPCOA)

- 2008 CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January.

Moreno Valley, City of

- 2021 Climate Action Plan. Adopted June 15, 2021.

South Coast Air Quality Management District (SCAQMD)

- 2008 Interim CEQA GHG Significance Thresholds for Stationary Sources, Rules, and Plans.
- 2010 Greenhouse Gas CEQA Significance Thresholds Stakeholder Working Group 15. September 28.

Hazards and Hazardous Materials

Moreno Valley, City of

- 2021 City of Moreno Valley General Plan 2040. Adopted June 15. Prepared by Dyett & Bhatia. https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf

Hydrology/Water Quality

Eastern Municipal Water District (EMWD)

- 2021 Final 2020 Urban Water Management Plan. Prepared by Water Systems Consulting, Inc. July 1.

Moreno Valley, City of

- 2021 Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan. SCH # 2020039022, May 20.

Mineral Resources

Moreno Valley, City of

- 2021 Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan. SCH # 2020039022, May 20.

Noise

California Department of Transportation

- 2013 2013 Technical Noise Supplement. November.

Federal Highway Administration (FHWA)

- 2006 2006 Roadway Construction Noise Model User's Guide. FHWA-HEP-05-054, SOT-VNTSCFHWA-05-01. Final Report. January.

Federal Transit Administration (FTA)

- 2018 Transit Noise and Vibration Impact Manual. September. Accessed September 2020: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

K2 Traffic Engineering, Inc.

- 2022 Focused Traffic Impact Study: Crystal Cove Multifamily Residential Homes at SWC of Alessandro Blvd and Lasselle St, Moreno Valley. September 6, 2022.

Moreno Valley, City of

- 2021 Final Environmental Impact Report for the MoVal 2040: Moreno Valley Comprehensive Plan Update, Housing Element Update, and Climate Action Plan. SCH # 2020039022, May 20.

Population and Housing

Southern California Association of Governments (SCAG)

- 2020 Demographics and Growth Forecast. Technical Report. Adopted September 3. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial_demographics-and-growth-forecast.pdf?1606001579.

U.S. Census Bureau

- 2020 Moreno Valley Population, Census, April 1, 2020. QuickFacts Moreno Valley City, California. <https://www.census.gov/quickfacts/fact/table/morenovalleycitycalifornia/POP010220#POP010220>

Utilities and Service Systems

California Department of Resources Recycling and Recovery (CalRecycle)

- 2022a SWIS Facility/Site Activity Details Badlands Sanitary Landfill (33-AA-0006). <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367>
- 2022b SWIS Facility/Site Activity Details El Sobrante Landfill (33-AA-0217). <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2256?siteID=2402>
- 2022c SWIS Facility/Site Summary Lamb Canyon Sanitary Landfill (33-AA-0007). <https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2368>

Eastern Municipal Water District (EMWD)

- 2021a Final 2020 Urban Water Management Plan. Prepared by Water Systems Consulting, Inc. July 1. https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721

2021b Moreno Valley Regional Water Reclamation Facility. January.
<https://www.emwd.org/sites/main/files/file-attachments/mvrwrffactsheet.pdf?1620227235>

Wildfire

Moreno Valley, City of

2021 City of Moreno Valley General Plan 2040. Adopted June 15. Prepared by Dyett & Bhatia.
https://www.moval.org/city_hall/general-plan2040/MV-GeneralPlan-complete.pdf