INITIAL STUDY

LEAD AGENCY:	City of Palmdale Planning Division 38250 Sierra Highway Palmdale, CA 93550
CONTACT PERSON:	Megan Taggart Planning Manager Department of Economic and Community Development 38250 Sierra Highway Palmdale, CA 93550 661-267-5213
PROJECT NO:	Site Plan Review 21-002 Density Bonus Agreement 21-001
NAME AND ADDRESS OF APPLICANT:	Mr. John Means Meta Housing Corporation 11150 Olympic Blvd., Suite 620 Los Angeles, CA 90064
LOCATION OF PROJECT:	Southwest Corner of 25th Street East and East Avenue Q-12, Palmdale, CA
APN:	3018-027-036
GENERAL PLAN LAND USE DESIGNATION:	Medium Residential
ZONING:	R-2

June 2021

MITIGATED NEGATIVE DECLARATION/ INITIAL STUDY CHECKLIST

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APPENDIX F: CULTURAL RESOURCES ASSESSMENT REPORT - March 2021

INITIAL STUDY

Section 1. Project Assessment

A. Project Description: Meta Housing (the "Applicant") proposes the construction of a three-story multi-family residential project with 100 percent affordability ("Proposed Project"). The Proposed Project would consist of a three-story building with 149 dwelling units reserved for Low Income Households, with two market rate managers units for a total of 151-units, on-site multi-purpose recreational room, office, and a learning center. Additional onsite amenities may include shared laundry facilities, passive landscape areas with barbeque stations, tot-lots with play equipment and shade structures.

The Proposed Project's total floor area would consist of approximately 175,000 square feet. The Proposed Project will provide onsite parking spaces. The main vehicular access to the project is via a full-access driveway from 25th Street East, and East Avenue Q-12. The Applicant is requesting discretionary approval of a Density Bonus Agreement for the development of a 100% affordable multi-family project that results in an 80% increase in density. The Applicant is also requesting the following incentives: Private Open Space Reduction, Travel Distance to Parking Reduction, and to allow one washer and dryer for every ten dwelling units.

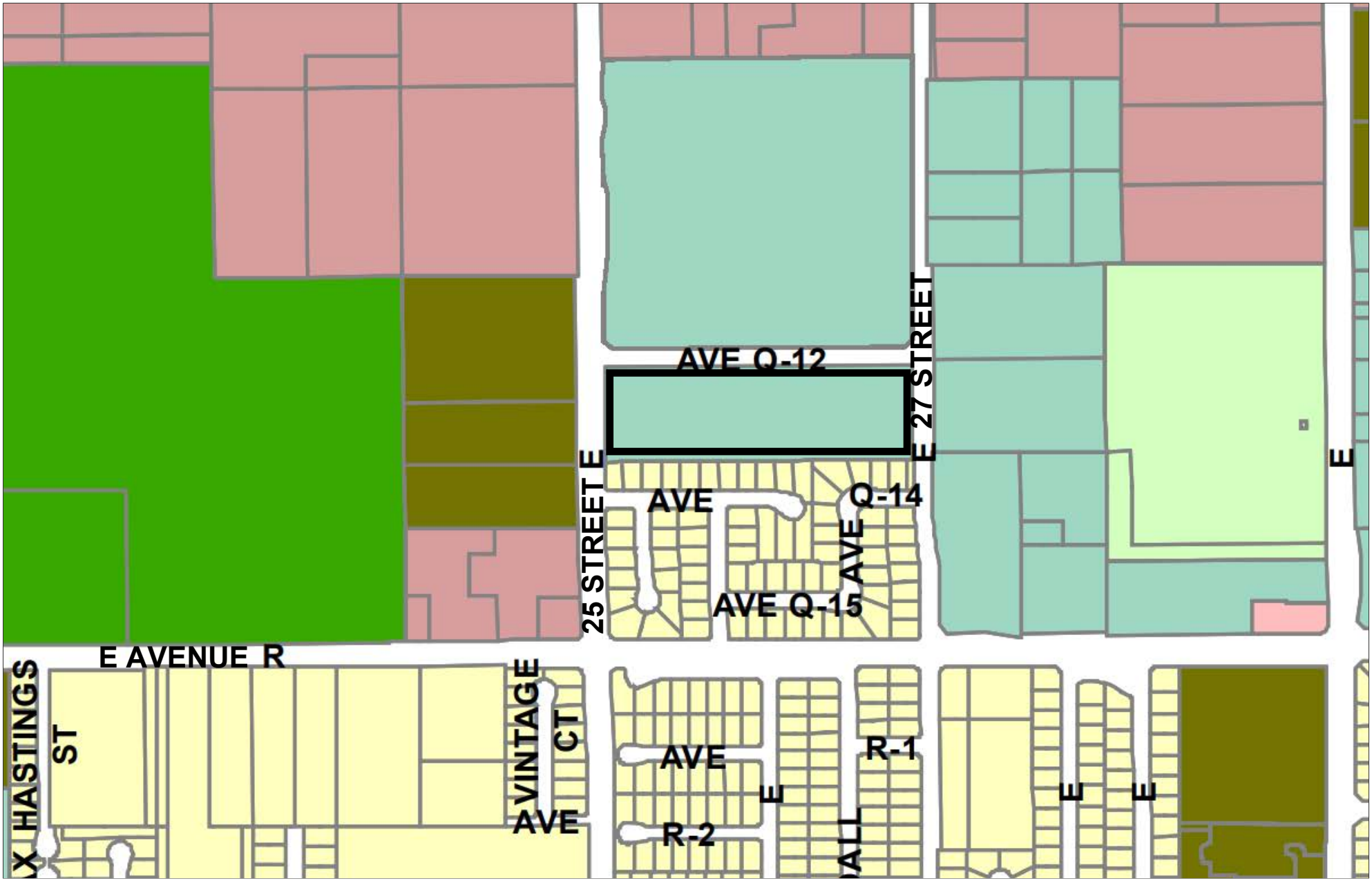
The Project Site totals approximately 8.39 acres in area and is located at the southwest corner of 25th Street East and East Avenue Q-12, with an existing single-family residential development to the north and west, vacant property to the east with existing single-family residential to the south. The Project Site is within the Medium Residential (6.10-10 du/ac) General Plan land use designation and R-2 Zone (Medium Residential Zone). The Project area is relatively flat, sloping slightly to the east at an approximate one to two percent gradient. The Project Site is vacant and not previously developed. Curb and gutter improvements exist along 25th Street East and East Avenue Q-12 across the Project frontages.

0 188 376 Feet

Figure 1: Project Location Map

Palmdale Terrace Affordable Multi-Family Project
APN#: 3018-027-036 and 8.39 Acres

ELEVATED ENTITLEMENTS



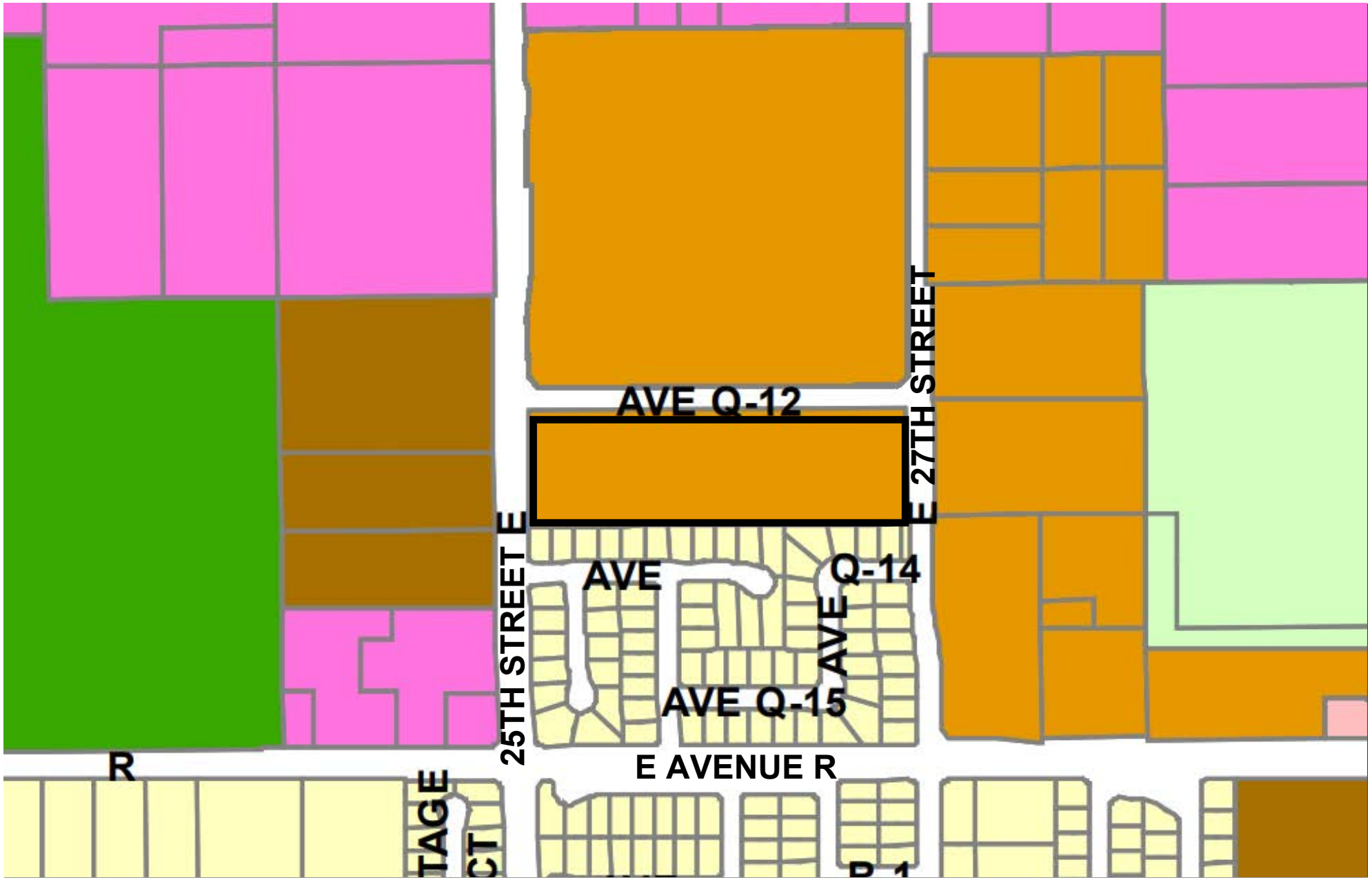
0 188 376 Feet

Figure 2: Zoning Map

Palmdale Terrace Affordable Multi-Family Project
APN#: 3018-027-036 and 8.39 Acres

- Single Family Residential (R-1-15,000)
- Single Family Residential (R-1-20,000)
- Multiple Residential (R-3)

ELEVATED ENTITLEMENTS



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N

Figure 3: General Plan Land Use Map

Palmdale Terrace Affordable Multi-Family Project
APN#: 3018-027-036 and 8.39 Acres

Single Family Residential (SFR-3)
Medium Residential (MR)

ELEVATED ENTITLEMENTS

B. Surrounding Land Uses:

North: Existing planned residential housing across East Avenue Q-12
East: Vacant land across 27th Street East
South: Existing single-family housing
West: Existing multi-family housing across 25th Street East

0 188 376 Feet

Figure 4: Project Site Photos

Palmdale Terrace Affordable Multi-Family Project

APN#: 3018-027-036 and 8.39 Acres

ELEVATED ENTITLEMENTS

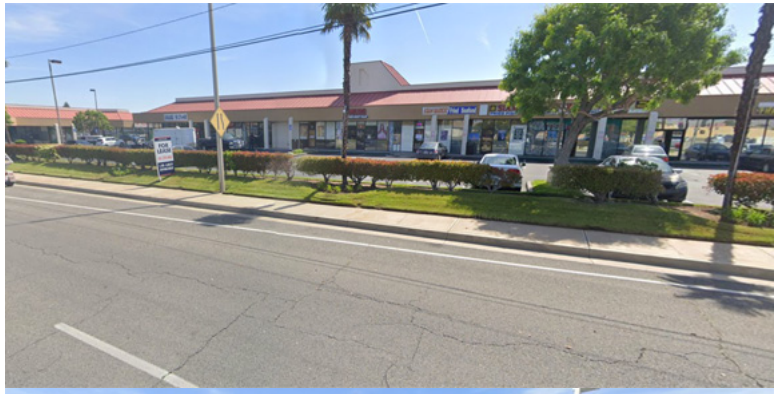

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Figure 5: Surrounding Land Use Photos

Palmdale Terrace Affordable Multi-Family Project

APN#: 3018-027-036 and 8.39 Acres

ELEVATED ENTITLEMENTS

0 188 376 Feet

Figure 5: Surrounding Land Use Photos

Palmdale Terrace Affordable Multi-Family Project

APN#: 3018-027-036 and 8.39 Acres

ELEVATED ENTITLEMENTS

B. Have any of the following studies been submitted?

☐ Geology Report	☐ Native Vegetation Preservation Plan	☐ Line of Sight Exhibits
☒ Geotechnical Report	☐ Solid Waste Generation Report	☐ Visual Analysis
☒ Hydrology Report	☐ Public Services/ Infrastructure Report	☐ Slope Map
☒ Traffic Study	☐ Historical Report	☐ Fiscal Impact Analysis
☒ Noise Study	☒ Archaeological Report	☒ Air Quality Report
☒ Biological Study	☐ Paleontological Study	☐ Hazardous Materials/Waste

INITIAL STUDY

Section 2. Executive Summary

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.

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

DETERMINATION (to be completed by Lead Agency)

On the basis of this initial evaluation:

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

☒ **I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.**

☐ **I find the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.**

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

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

PRINTED NAME | **TITLE**

SIGNATURE | **DATE**

EVALUATION OF ENVIRONMENTAL IMPACTS:

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

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

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less that 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 a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross referenced).

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

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

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

c) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

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

7) Supporting Information Sources: A sources 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 whichever format is selected.

9) The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

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

INITIAL STUDY

Environmental Checklist and Impact Analysis

This section of the Initial Study contains an assessment and discussion of impacts associated with the environmental issues and subject areas identified in the Initial Study Checklist Appendix G to the State CEQA Guidelines, (C.C.R. Title 14, Chapter 3, 15000-15387).

I. Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099 would the Project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a) Have a substantial adverse effect on a scenic vista?

No Impact. Exhibit ER-1 (Antelope Valley Scenic Highway) of the Environmental Resources Element of the City's General Plan identifies the following Scenic Routes: Barrel Springs Road, Tierra Subida Avenue, Sierra Highway south of Avenue S, Elizabeth Lake Road, Pearblossom Highway, Bouquet Canyon Road, Godde Hill Road, and the Antelope Valley Freeway south of Rayburn Road. The closest scenic route to the Project Site is Sierra Highway south of Avenue S, which is located approximately 2.80 miles southwesterly of the Project site. The Proposed Project will be located on a vacant property that is surrounded by existing established development and will not be visible from Sierra Highway south of Avenue S. Therefore, the Proposed Project would have no impact on a scenic vista.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a state scenic highway?

No Impact. The Project Site is located on the valley floor of the Antelope Valley. Approximately four miles to the west of the Project Site, the topography transitions between the valley floor and the ridgelines of the San Gabriel Mountains, which form a scenic backdrop for the City as recognized in the General Plan. From the valley floor, the long-range view of the ridgelines of the San Gabriel Mountains will be unaffected by future development within the boundaries of the Project Site. The Project Site does not include any rock outcroppings and no historic buildings within a state scenic highway are present on-site. Therefore, there would be no impact to scenic resources.

c) In non-urbanized areas, substantially degrade the existing visual character or quality 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?

No Impact. The Project Site is located adjacent to and immediately north of existing planned residential development, east of an existing multi-family development and south of an existing single-family residential development, and west to a vacant lot. The existing visual character of the Project area has been shaped by significant urban development surrounding the Project Site. The proposed affordable multi-family residential development will continue to complement the existing single and multi-family residential development in the area. Furthermore, the Proposed Project will be required to comply with the City's Municipal Code and Community Design Element of the General Plan with respect to building design. The Proposed Project has been designed to integrate with the existing buildings located within the vicinity of the Project Site providing a compatible and attractive design. Therefore, implementation and development of this Project would not conflict with the zoning and would not have an impact on the existing visual character or quality of the site and its surroundings.

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

Less Than Significant Impact. The Project Site consists of an undeveloped vacant land. The residential developments to the north, south, and west include a variety of both on-site and off-site l lighting. The property to the east is vacant. Development of the Proposed Project would involve street lighting as required by the Project's street improvements. In addition, landscape lighting and security lighting will be utilized for parking areas around the Project site. However, due to the urbanized nature of the area, future development would not significantly change the existing lighting environment visible from other areas within the vicinity of the Project Site.

The introduction of new light sources will result from development of this Proposed Project. The applicant will be required to submit photometric lighting plans demonstrating that proposed illumination will be maintained on the Project's Site and minimizing potential light glare beyond

the property lines. The Proposed Project is required to comply with the lighting requirements provided in Palmdale Municipal Code Section 17.86.030 for fixture height and design standards. Exterior lighting standards and fixtures must be located and designed to minimize direct glare beyond the site boundaries. Lighting fixtures shall have cutoff fixtures to contain light spread within the site boundaries. Compliance with the Palmdale Municipal Code would reduce the potential impacts from lighting to a less than significant level.

II. Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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?

No Impact. The Project Site is within the R-2 (Medium Residential) Zone and is surrounded by planned residential to the north, multi-family residential to the east, single-family residential to the south, and a vacant lot to the west. According to Exhibit ER-1A Farmland Map Categories of the City of Palmdale General Plan, the Project Site is not located within a Sensitive Agricultural Area. In addition, the California Department of Conservation's Important Farmland Finder, confirms the Project Site is not located within a Sensitive Agricultural Area. Therefore, the Proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance and the Proposed Project would have no impact.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project Site is within the R-2 (Medium Residential) Zone and has a General Plan land use designation of MFR (Multi-family Residential 6.1-10 du/ac). The Project Site is not zoned

for agricultural production, and there is no farmland at the Project Site. In addition, no Williamson Act Contracts are in effect for the Project Site. Therefore, no impacts would occur.

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

No Impact. The Project Site is within the R-2 (Medium Residential) Zone and has a General Plan Land Use designation of MFR (Multi-family Residential 6.1-10 du/ac). The Project Site is not zoned as forest land or timberland, and there is no timberland production at the Project Site. Therefore, no impacts would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No forested lands exist on or in the vicinity of the Project Site. The Proposed Project will not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact would occur.

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?

No Impact. Neither the Project Site, nor nearby properties, are currently utilized for agricultural or forestry uses. As discussed above, the Project Site is not classified in any Farmland category designated by the State of California according to the California Department of Conservation's Important Farmland Finder. The Proposed Project would not result in the loss of forest land or conversion of forest land to a non-forest use. Therefore, no impacts would occur.

III. Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

The following section summarizes and incorporates by reference information from the following reports:

Air Quality Study – Palmdale Terrace Apartments, Palmdale, CA, Prepared by MS Hatch Consulting, LLC, February 5, 2021. A copy of the report is provided in Appendix A of this document.

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The City of Palmdale is located within the Mojave Desert Air Basin (MDAB), which includes the desert portions of Los Angeles and San Bernardino Counties, the eastern desert portion of Kern County, and the northeastern desert portion of Riverside County. The air quality of the MDAB is managed by the Antelope Valley Air Quality Management District (AVAQMD).

The AVAQMD set forth a comprehensive program that would lead the area into compliance with all Federal and State air quality standards through its adoption of the 2004 Ozone Attainment Plan (April 20, 2004) and the Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Nonattainment Area. The documents demonstrate that the AVAQMD would meet the primary Federal and State ozone planning milestones, attainment of the ozone National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS).

According to AVAQMD, California Environmental Quality Act and Federal Conformity Guidelines, a Project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A Project is conforming if it complies with all applicable AVAQMD rules and regulations, complies with all Proposed control measures that are not adopted from

applicable plans, and is consistent with the growth forecasts in the applicable plan(s). Conformity with growth forecasts can be established by demonstrating that the Project is consistent with the land use plan that was used to generate the growth forecast (i.e., City of Palmdale General Plan).

As demonstrated in Table 1, estimated emissions of criteria pollutants for each year of construction and total operational emissions for the Project would be well below the applicable AVAQMD Significant Emissions Thresholds, and therefore, would not have a significant air quality impact on the environment or conflict with the goals of the AQMP. As the Project would be compliant with the applicable AQMP, the Project would not result in a long-term impact on the region's ability to meet State or federal air quality standards.

Table 1. Annual Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (tons per year)						
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2e
Year 1 Construction Emissions (2021)	3.97	40.55	25.49	0.08	9.24	5.79	8,549
Year 2 Construction Emissions (2022)	2.67	21.12	24.61	0.06	2.78	1.30	5,832
Year 3 Construction Emissions (2023)	71.03	18.84	23.83	0.06	2.66	1.20	5,731
Total Operational Emissions	7.34	8.62	36.15	0.08	6.23	1.78	8,603
Significant Emissions Threshold	**137**	**137**	**548**	**137**	**82**	**65**	**548,000**

The Proposed Project is not considered one of the project types that the AVAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations.[1] As such, hazardous air pollutants (HAP) emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors (MS Hatch Consulting, 2021). Based upon this information, the Project would not conflict or obstruct the implementation of an air quality plan and will have a less than significant impact.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The Project Site is located within the Los Angeles County portion of the MDAB, which is under the jurisdiction of the AVAQMD. As discussed below, the Proposed Project would not generate construction or operational emissions that exceed the AVAQMD's

[1] Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion): any industrial project within 1,000 feet; a distribution center (40 or more trucks per day) within 1,000 feet; a major transportation project (50,000 or more vehicles per day) within 1,000 feet; a dry cleaner using perchloroethylene within 500 feet; or a gasoline dispensing facility within 300 feet.

recommended regional thresholds of significance. Therefore, the Proposed Project would have less than significant impacts to air quality.

Sources of Emissions

The emissions associated with the Proposed Project consist of construction and operational emissions from the apartment complex. Construction emissions are temporary and include emissions of criteria pollutants and greenhouse gases from construction activities during site preparation, grading, paving, building construction, and the application of architectural coatings. Operational emissions consist of area sources (i.e., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., commuting), solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

Construction Emissions

For purposes of analyzing impacts associated with air quality, this analysis assumes a construction schedule of approximately 24 months, with a final buildout year in 2023. This construction schedule is conservative and yields the maximum daily impacts. Construction activities associated with the Proposed Project would be undertaken in four main steps: (1) Site preparation; (2) building construction; (3) paving; and (4) architectural coating/finishing. The building construction phase includes the construction of the Proposed building, connection of utilities to the building, and landscaping the Project Site. Construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Construction activities involving foundation preparation would primarily generate PM2.5 and PM10 emissions. Mobile sources (such as diesel-fueled equipment on site and traveling to and from the Project Site) would primarily generate NOx emissions. The application of architectural coatings would primarily result in the release of Reactive Organic Gases (ROG) emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time. The Proposed Project's construction emissions were quantified utilizing the California Emissions Estimator Model (CalEEMod Version 2016.3.2) as recommended by the AVAQMD.

Table 2 and 3 present the annual and daily emissions summaries from the construction and operation of the proposed project, respectively. Emissions were estimated using CalEEMod Version 2016.3.2. The detailed emissions model outputs are included in the Air Quality Study in Appendix A.

Table 2. Annual Construction and Operational Emissions Summary

Emissions Source	Total Emissions (tons per year)						
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$	CO_2e
Construction Emissions							
Year 1 Construction Emissions (2021)	0.06	0.71	0.50	<0.01	0.09	0.05	140
Year 2 Construction Emissions (2022)	0.33	2.76	3.08	0.01	0.36	0.17	667
Year 3 Construction Emissions (2023)	0.98	2.18	2.68	0.01	0.30	0.14	576
Operational Emissions							
Area Sources	0.91	0.01	1.12	<0.01	0.01	0.01	2
Energy	0.01	0.09	0.04	<0.01	0.01	0.01	305
Mobile	0.30	1.46	3.75	0.01	1.07	0.29	1,191
Waste	N/A	N/A	N/A	N/A	0.00	0.00	35
Water	N/A	N/A	N/A	N/A	0.00	0.00	96
Total Operational Emissions	**1.22**	**1.57**	**4.91**	**0.01**	**1.08**	**0.31**	**1,629**
Significant Emissions Threshold	**25**	**25**	**100**	**25**	**15**	**12**	**100,000**

Table 3. Daily Construction and Operational Emissions Summary

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$	CO_2e
Construction Emissions							
Year 1 Construction Emissions (2021)	3.97	40.55	25.49	0.08	9.24	5.79	8,549
Year 2 Construction Emissions (2022)	2.67	21.12	24.61	0.06	2.78	1.30	5,832
Year 3 Construction Emissions (2023)	71.03	18.84	23.83	0.06	2.66	1.20	5,731
Operational Emissions							
Area Sources	5.17	0.14	12.46	<0.01	0.07	0.07	23
Energy	0.06	0.51	0.22	<0.01	0.04	0.04	656
Mobile	2.11	7.96	23.47	0.08	6.12	1.67	7,925
Waste	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Operational Emissions	**7.34**	**8.62**	**36.15**	**0.08**	**6.23**	**1.78**	**8,603**
Significant Emissions Threshold	**137**	**137**	**548**	**137**	**82**	**65**	**548,000**

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_X: oxides of nitrogen; CO: Carbon monoxide; SO_X: Oxides of sulfur; $PM_{2.5}$: particulate matter less than 2.5 micrometers in diameter; PM_{10}: particulate matter less than 10 micrometers in diameter; CO_2e: Carbon dioxide equivalent

As indicated within Table 3, construction-related daily emissions associated with the Proposed Project would be below the peak daily regional AVAQMD significance thresholds for criteria pollutants during the construction phases. Therefore, construction impacts are considered to be less than significant.

This Project is not considered one of the project types that the AVAQMD CEQA Guidelines require to be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations.

As such, Hazardous Air Pollutants (HAP) emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

During construction grading on windy days significant fugitive dust emissions could be generated contributing to particulate matter that degrades air quality. Site watering and suspension of grading operations can significantly reduce particulates during periods of high winds that are standard requirements of grading permit issuance. Additionally, construction will be required to comply with all current and future applicable regulations of the California Air Resources Board and the Antelope Valley Air Quality Management District. Rule 403 requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust. This rule also requires activities defined as "large operations" to notify the AVAQMD by submitting specific forms. A large operation is defined as any earth moving operation with a daily earth-moving or throughput volume of 3,850 cubic meters (5,000 cubic yards), three times during the most recent 365-day period. Therefore, with the implementation of standard conditions of approval with regards to Project Site construction, any potential air quality impacts would be reduced to a level of less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The Proposed Project includes the construction of a 151-unit three-story apartment complex, resident and guest parking, and landscaped amenity areas on 8.39 acres of land. Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the Proposed Project. Area source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the Project Site.

A significant impact may occur if a Project were to generate pollutant concentrations to a degree that would significantly affect sensitive receptors. Sensitive receptors are populations that are more susceptible to the effects of air pollution than are the population at large. The following sensitive receptors have been identified within 500 feet of the Project Site.

- Planned Residential building to the north of the Project Site
- Single Family Residential buildings to the south of the Project Site
- Multi-Family Residential buildings to the east of the Project Site

The AVAQMD is currently in non-attainment for Eight-Hour Ozone (Federal 84 ppb), Eight-Hour Ozone (Federal new standards, 75 ppb}, Ozone (State) and PM10 (State). The estimated air quality emissions of the proposed project, as depicted in Table 2 and 3, do not exceed the significant emissions thresholds for criteria pollutants, as provided within the AVAQMD California Environmental Quality Act and Federal Conformity Guidelines (August 2011).

The analysis of annual operational emissions associated with the Proposed Project has been prepared utilizing CalEEMod (Version 2016.3.2). The results of these calculations are presented in Table 2, Annual Construction and Operational Emissions Summary. As shown, the operational

emissions generated by the Proposed Project would not exceed the daily regional thresholds of significance set by the AVAQMD. Therefore, impacts associated with regional operational emissions from the Proposed Project would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the Proposed Project involves no elements related to these types of activities, no odors from these types of uses are anticipated. Garbage collection areas for the Proposed Project would have the potential to generate foul odors if the areas are located in close proximity to habitable areas. The trash/recycling center will be located indoors, within the Proposed Project's building. Good housekeeping practices would be sufficient to prevent nuisance odors. In addition, AVAQMD Rule 402 (Nuisance) and AVAQMD Best Available Control Technology Guidelines would limit potential objectionable odor impacts during the Proposed Project's long-term operations phase. Therefore, potential operational odor impacts would be less than significant.

IV. Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☐	☒
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?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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

Less Than Significant Impact with Mitigation Incorporated. A Project would normally have a significant impact on biological resources if it could result in: (a) the loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, candidate, or sensitive species or a Species of Special Concern; (b) the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community; or (c) interference with habitat such that normal species

behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

The Project Site is located in an urbanized area in the City of Palmdale and is currently vacant and not previously developed. The site is surrounded by residential development to the north, south, and east. According to the Biological Assessment prepared by Elevated Entitlements, the Project Site does not contain any critical habitat or support any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Based on the Proposed Project's Biological Assessment, dated March 31, 2021 (Appendix B to this IS/MND), the dominant vegetation community on the site consists of invasive non-native grass and weeds, in addition to Desert Scrub communities. This vegetation is common for the western Mojave Desert region, and these species degrade native habitats by outcompeting important native annual species. Annual non-native grassland communities were also identified on the Project Site. As such, no native vegetation exists on the Project Site. Due to the limited vegetative diversity on the Project Site, it is not expected to support the full range of organisms within the region. Additionally, according to Exhibit ER-5 of the City of Palmdale General Plan, the Project Site is not located within a Sensitive Ecological Area.

Elevated Entitlements reviewed the potential for the subject site to support sensitive, threatened, and endangered species and sensitive habitats known to occur in the vicinity of the subject property by querying the California Natural Diversity Database (CNDDB). The CNDDB analysis entailed a species accounts query of a 1-mile radius around the Project site, within the Palmdale Quadrangle. The Biological Assessment Report included in Appendix B depicts the results of the CNDDB analysis. Mohave Ground Squirrel (MGS) is a species recognized as State Threatened by the State of California. As the CNDDB species occurrence information reveals, there are several records of this species within the Project area. MGS preferred habitat includes open desert scrub, alkali desert scrub, Joshua tree woodlands and sparse annual grasslands. Although the site supports sparse desert scrub vegetation, the Project Site does not support creosote bush scrub vegetation, which is the preferred habitat for this species. Additionally, the Project Site is an open site and is subject to periodic disturbances by humans. Predation from animals (such as feral cats), from the adjacent residential communities, habitat fragmentation and adjacent roadways further preclude these species from occurring on site. However, because of the potential occurrence records of this species within the Project area, Mitigation Measure BIO-1 is proposed, which will ensure that impacts to this species are avoided or mitigated. In addition to the MGS, nesting birds and burrowing owls have a low probability of occurrence on the Project Site. Mitigation Measures BIO-2 and BIO-3 have been incorporated to ensure that these sensitive biological resources will also be accounted for, prior to any ground disturbance. Based upon this, it is not anticipated that the Project will have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. A Project would normally have a significant impact on biological resources if it could result in: (a) the loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, candidate, or sensitive species or a Species of Special Concern; (b) the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community; (c) the alternation of an existing wetland habitat; or (d) interference with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

A review of the USGS map, Palmdale Quadrangle revealed that no blue-line stream, natural drainage course, spring, seep or wetland area is located on the Project Site. The closest water body of natural resource significance is Anaverde Creek, a USGS-designated blueline stream located approximately 2.78 miles west of the Project Site. Palmdale Lake, a man-made reservoir is located approximately 2.33 miles southwest of the Project Site. The Project Site is located in a highly urbanized area that is surrounded by existing development and city streets. Project implementation will not result in modifications to a local drainage (including streams, creeks or other water bodies), and there will be no loss or change to significant stands of riparian vegetation. No riparian or other sensitive natural community is located on or adjacent to the Project Site. Therefore, implementation of the Proposed Project would not result in any adverse impacts to riparian habitat or other sensitive natural communities.

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?

No Impact. A Project would normally have a significant impact on biological resources if it could result in the alteration of an existing jurisdictional waters, including wetlands. A field inspection of the Project Site conducted on date March 7, 2021, determined that the Project does not support any waters subject to state or federal jurisdiction. Proposed Project implementation will not have adverse effects 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. Therefore, no impacts would occur.

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?

Less Than Significant Impact with Mitigation Incorporated. A Project would normally have a significant impact on biological resources if it could result in the interference with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species.

The Project Site is bounded by East Avenue Q-12 and planned residential to the north, single-family residential development to the south, a vacant lot to the east, and 25th Street East and multi-family residential to the west. The Project Site is also located approximately 2.7 miles east of the Antelope Valley Freeway (State Route 14). According to the Proposed Project's Biological Assessment (Appendix B to this IS/MND), the Project Site is located on a relatively flat area of the western Mojave Desert with very little topographic variation. The Project Site maintains some potential for the downward and outward movement of a number of highly mobile organisms. Because the property is located within the western Mojave Desert, an area which is often considered generally inhospitable to people, natural connective desert scrub and desert wash habitats remain intact throughout much of the surrounding area. However, increasing development in the area has contributed to the reduction in large contiguous tracts of natural lands. This is also true specifically in the Project area where much of the area surrounding the subject property has been developed, which has significantly constrained animal movement in the vicinity of the Project Site. The Proposed Project does not obstruct a wildlife corridor nor movement pathway since there is no connectivity to open space corridors.

Desert scrub and annual non-native grassland habitats within the subject property may serve as a stopover, resting, and foraging area for some migratory birds moving along the Pacific Flyway. Birds which typically migrate through the desert include, but are not limited to, black-throated sparrow (though considered a short-distance migrant), white-crowned sparrow (*Zonotrichia leucophrys*), long-eared owl (*Asio otus*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsoni)*, and phainopepla (*Phainopepla nitens)*. As such, Mitigation Measure BIO-2 will ensure that any potential migratory stopover onto the Project Site is accounted for and mitigation of grading/construction activities during the nesting season of breeding birds is in place.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. A Project-related significant adverse effect could occur if a Project were to cause an impact that is inconsistent with local regulations pertaining to biological resources. The City of Palmdale's Native Desert Vegetation Preservation Ordinance regulates the removal of Joshua Trees and California junipers. In addition, the California Endangered Species Act (CESA) gives Joshua Trees full protection. The Project Site does not contain any Joshua Trees or California Junipers. Therefore, no impact would occur with implementation of the Proposed Project.

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?

No Impact. A significant impact would occur if the Proposed Project would be inconsistent with mapping or policies in any conservation plans of the types cited. The Project Site and its vicinity are not part of any draft or adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. Therefore, no impact would occur with implementation of the Proposed Project.

Mitigation Measures:

BIO-1: Mohave Ground Squirrel Assessment Surveys/Incidental Take Permit

A week prior to Project grading/construction activities, a focused habitat assessment and presence/absence surveys for MGS shall be conducted by a qualified biologist, to assess the potential for MGS to occur on the Project Site. These surveys shall be conducted in accordance with California Department of Fish and Game's (CDFW's) Mohave Ground Squirrel Survey Guidelines (CDFW, 2003). The surveys shall entail visual assessment of the Project Site to determine if there are MGS on the site or if there are signs of potential MGS presence within the site.

BIO-2: Nesting Bird Surveys

If Project grading/construction activities are scheduled to occur during the nesting season for breeding birds (typically January 15th through September 30th), the following measures shall be implemented:

Within seven days prior to commencement of grading/construction activities, a qualified biologist shall perform a pre-construction survey of all proposed work limits and within 500 feet of the proposed work limits.

If active avian nest(s) of non-special-status species are discovered within or 500 feet from the work limits, a buffer shall be delineated around the active nest(s) measuring 300 feet for passerines and 500 feet for raptors. A qualified biologist shall monitor the nest(s) weekly after commencement of grading/construction to ensure that nesting behavior is not adversely affected by such activities.

If the qualified biologist determines nesting birds are detected, a biologist shall prepare a letter report and mitigation plan in conformance with applicable Federal and State laws (e.g., appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers) to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report/mitigation plan shall be submitted to the City for review/approval and implemented to the satisfaction of the City. In addition, the biologist shall verify in a report to the City that all measures identified in the mitigation plan are in place prior to and/or during construction shall be implemented in consultation with CDFW, to allow such activities to proceed. Once the young have fledged and left the nest(s), then grading/construction activities shall proceed within 300 feet (500 feet for raptor species) of the fledged nest(s).

BIO-3: Burrowing Owl Surveys

A burrowing owl survey by a qualified professional shall be accomplished within 30 days prior to any ground disturbing activities to ensure the absence of burrowing owl within the boundaries of disturbance. If occupied burrowing owl burrows are found prior to initiating construction, impacts

shall be minimized by establishing a buffer around the burrow of 160 feet or by completing passive relocation according to Department of Fish and Game (DFG) guidelines during the nonbreeding season (September 1 through January 31). During the breeding season (February 1 through August 31), impacts shall be minimized by establishing a buffer around the burrow of 250 feet for all project-related construction activities until a qualified biologist confirms that the nest is no longer active and DFG concurs, or consultations with DFG specifically allow certain construction activities to continue. The size of the buffer may be adjusted if a qualified biologist and DFG determine that the adjustment would not likely adversely affect the nesting pair. DFG also will be consulted to determine whether it is necessary to temporarily preserve foraging habitat (in addition to the buffer area) until the nest is no longer active. Eviction pending evaluation of breeding status and eviction plans during the nesting season may be permitted upon approval from DFG authorizing the eviction.

V. Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

The following section summarizes and incorporates by reference information from the following reports: Phase 1 Cultural Resources Assessment in Support of the Palmdale Terrace Development Project located in the City of Palmdale.

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to State CEQA Guidelines §15064.5?

No Impact. A significant impact may occur if the Proposed Project would result in a substantial adverse change in the significance of a historic resource. The Project Site is vacant and has not been previously developed. On December 3, 2020, the South-Central Coastal Information Center (SCCIC) was consulted to perform a cultural resources records search for the Project Site and surrounding ½ mile radius. The records search investigation included a review of all listings in the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), and the California State Historic Properties Directory (HPD) and found that no historical resources exist on the Project Site. As such, the Proposed Project would not directly or indirectly affect a historical resource. Therefore, the Proposed Project would not cause an adverse change in the significance of an historic resource, and no impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines §15064.5?

Less Than Significant Impact with Mitigation Incorporated.

Native American Correspondence

On December 3, 2020, the results of a record search of the CHRIS records located and conducted by the South-Central Coastal Information Center (SCCIC). The search included any previously recorded cultural resources and investigations within the project area and surrounding 0.25-mile

(0.402- km) area. The received results were reviewed, as well as other property-specific historical and ethnographic context research, to identify information relevant to the project area before conducting an intensive pedestrian survey of the project area. All 8.39 acres of the rectangular shaped property were surveyed on December 14, 2020 using walking East to West transects of five meter intervals. The Native American Heritage Commission (NAHC) was contacted to request a review of their Sacred Land File (SLF). A response from the NAHC was received on December 28, 2020. No previously recorded cultural resources were identified during the CHRIS records search within a one mile radius of the project area. No cultural resources were identified within the project area during the pedestrian survey. The NAHC's SLF search did not identify any site-specific information with respect to tribal lands or sites for the project area. However, the presence of deeply buried archaeological material below the disturbed sediments cannot be ruled out.

The City of Palmdale received AB 52 Tribal Consultation from the San Manuel Band of Mission Indians (SMBMI) and the San Fernando Band of Mission Indians (SFBMI). SFBMI requested additional Mitigation Measures, which have been incorporated in this document's Mitigation Monitoring and Reporting Plan. The City of Palmdale as the CEQA Lead Agency will consult with the San Fernando Band of Mission Indians, on the disposition and treatment of any potential Tribal Cultural Resources encountered during all ground disturbing activities throughout construction activities.

Field Investigation

The Proposed Project does not propose any subterranean excavation. However, because the Project would involve surface grading, the potential exists for the accidental discovery of any unknown archaeological materials that may lie below the surface. As such, Mitigation Measure CUL-1 has been incorporated to mitigate impacts to potential archaeological resources within the Project Site. Therefore, compliance with the provisions of Mitigation Measure CUL-1 would ensure that environmental impacts associated with the inadvertent discovery of significant archaeological resources would be reduced to a less than significant level.

Because the presence or absence of such materials cannot be determined until the Project Site is graded, Mitigation Measures CUL-1 and CUL-3 have been incorporated. If archaeological resources are discovered during surface grading or construction activities, work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with Federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Construction activity may continue unimpeded on other portions of the Project Site. The found deposits would be treated in accordance with Federal, State, and local guidelines, including those set forth in California Public Resources Code Section 21083.2. Adherence to regulatory compliance measures and Mitigation Measures CUL-1 and CUL-3 would ensure that if any archaeological resources are encountered during construction, impacts to such resources would remain less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation Incorporated. A Project-related significant adverse effect could occur if grading activities associated with the Proposed Project would disturb previously interned human remains. No known human burials have been identified on the Proposed Project Site or its vicinity. However, it is possible that unknown human remains could occur on the Project Site, and if proper care is not taken during construction, damage to or destruction of these unknown remains could occur. As such, Mitigation Measure CUL-2 has been incorporated to ensure that if any such remains are found during construction of the Proposed Project, they would be handled according to the proper regulations, and impacts to human remains would be less than significant. If human remains are encountered unexpectedly during construction demolition and/or grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to California Public Resources Code Section 5097.98. Compliance with regulatory compliance measures and Mitigation Measure CUL-2 would ensure any potential impacts related to the disturbance of unknown human remains would be less than significant.

Mitigation Measures:

CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2: If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly**.**

CUL-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

VI. Energy

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Less Than Significant Impact. A significant impact would occur if the Project results in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. The Proposed Project would develop a three-story multi-family building with 151 dwelling units. The Proposed Project is required to comply with the energy conservation standards established in Title 24 of the California Administrative Code. California's Energy Efficiency Standards for Residential Buildings located in Title 24, Part 6 of the California Code of Regulations and commonly referred to as "Title 24," which was established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2019 Standards will continue to improve upon the 2016 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

The effective date of the 2019 Standards was January 1, 2020. The Energy Efficiency Standards are a specific response to the mandates of AB 32 and to pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs. The Proposed Project includes energy efficiency components to conserve energy, which are detailed below:

Existing Infrastructure

Electricity

The Project Site is located in an urbanized area in the City of Palmdale. The availability of electricity is dependent upon adequate generating capacity and adequate fuel supplies. The estimated power requirements for the Proposed Project are part of the total load growth forecast for the City of Palmdale and has been taken into account in the planned growth of the City's power system. In addition, the Project will include solar panels on site to meet California Green Building Code standards.

Natural Gas

Southern California Gas Company (SCG) provides natural gas resources to the City through existing gas mains located under the streets and public rights-of-way. Natural gas services are provided in accordance with SCG's policies and extension rules on file with the California Public Utility Commission (CPUC) at the time contractual agreements are made. Natural gas is delivered to the Project Site through natural gas facilities underneath the adjacent public streets. Construction of the Proposed Project would necessitate closing off existing service connections to the Project Site and re-establishing new service connections to the Proposed structures. Such infrastructure improvements would be conducted on-site and within the right-of-way easements serving the Project area, and would not create a significant impact to the physical environment. This is largely due to the fact that (a) any disruption of service would be short-term, (b) upgrades would be localized to the Project Site, and (c) any foreseeable off-site improvements would be limited to the right-of-way easements in the immediate Project vicinity. Therefore, potential impacts resulting from natural gas infrastructure improvements would be less than significant.

Energy Consumption

Construction

Energy would be consumed during the site grading and construction phases of the Proposed Project for grading and materials transfer by heavy-duty equipment, which is usually diesel powered. Construction of the Proposed Project would require the export of soil from the Project Site during the site grading phase. Construction worker travel to and from the Project Site would result in the additional consumption of vehicular unleaded gasoline fuel during the construction period. In addition to diesel fuel and vehicular fuel, an unquantifiable amount of electricity and natural gas would be consumed as a result of the temporary construction process.

Due to the relatively short duration of the construction process, and the fact that the extent of fuel consumption is inherent to construction Projects of this size and nature, fuel consumption impacts would not be considered excessive or substantial with respect to regional fuel supplies. The energy demands during construction would be typical of construction projects for Projects of this

size and would not necessitate additional energy facilities or distribution infrastructure or cause wasteful, inefficient or unnecessary consumption of energy. Accordingly, energy demands during construction would be less than significant.

Operation

Electricity

As discussed above, the Proposed Project would be required to comply with energy conservation standards pursuant to Title 24 of the California Administrative Code. Therefore, compliance with Title 24 of the California Administrative Code would reduce the Proposed Project's energy consumption. Additionally, as discussed above, electric service is available and would be provided to the Project Site. The availability of electricity is dependent upon adequate generating capacity and adequate fuel supplies. The estimated power requirements for the Proposed Project are part of the total load growth forecast for the City of Palmdale and has been taken into account in the planned growth of the City's power system.

The Proposed Project would include energy conservation features. Specifically, the residential units would include energy efficient lighting fixtures, low-flow water features, and energy efficient mechanical heating and ventilation systems. Thus, the Proposed Project would incorporate energy conservation features. Therefore, the development of the Proposed Project would not cause wasteful, inefficient, or unnecessary consumption of electricity.

Natural Gas

Natural gas for the Project Site is provided by Southern California Gas Company ("SCG"). Gas supply available to SCG from California sources averaged 323 million cubic feet (cf)/day in 2017. SCG projects total natural gas demand to decrease at an annual rate of 0.74 percent per year from 2018 to 2035. This decrease is due to modest economic growth, CPUC-mandated energy efficiency (EE) standards and programs, tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI). Thus, with the natural gas consumption becoming more efficient and decreasing, the SCG's Projection for natural gas also decreases. Interstate pipeline delivery capability into SCG on any given day is theoretically approximately 6,665 million cf/day based on the Federal Energy Regulatory Commission (FERC) Certificate Capacity or SCG's estimated physical capacity of upstream pipelines. SCG's storage fields attain a combined theoretical storage working inventory capacity of 137.1 billion cubic feet; of that, 112.5 billion cubic feet is allocated to residential, small industrial and commercial customers. The natural gas consumption as a result of the operation of the Proposed Project would represent a very small fraction of one percent of the SCG's existing natural gas storage capacity and therefore, would be within the SCG's existing natural gas storage capacity of 112.5 billion cubic feet as of 2021.

As discussed above, the Proposed Project would be required to comply with energy conservation standards pursuant to Title 24 of the California Administrative Code. Therefore, compliance with Title 24 of the California Administrative Code would reduce the Proposed Project's energy consumption. Therefore, the development of the Proposed Project would not cause wasteful, inefficient or unnecessary consumption of natural gas.

Fossil Fuels

The Proposed Project would use renewable energy sources including solar power to decrease reliance on fossil fuels, including coal, natural gas and oil. Public transportation within the Project Site consists primarily of multiple-stop, local-serving bus lines that provide access to employment, shopping, business, and entertainment destinations in the Project vicinity. The bus service in the Project vicinity is operated by the Antelope Valley Transit Authority (AVTA).

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. A significant impact could occur if the Project has the potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency. With respect to renewable energy, all of the Proposed Project's energy demands will be served by Southern California Edison. As the Proposed Project would derive its electricity from Southern California Edison, the Proposed Project's energy demands will primarily be derived from renewable energy sources including solar panels onsite. The utilities within the Project Site will largely by electric use including stove, oven, washer and dryer.

Solid Waste Reduction. California Green Building Code Section 4.408.1, imposes mandatory measures for residential Projects that require developers to recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance. Diversion efforts would be accomplished through source reduction, recycling, and composting. Finally, the Proposed Project is required by the California Solid Waste Reuse and Recycling Access Act of 1991 to provide adequate storage areas for collection and storage of recyclable waste materials. As such, a 50 percent reduction of a Project's waste stream to the local landfill would reduce methane emissions and thus lower the Project's contribution to global Greenhouse Gas (GHG) emissions. In addition, the Project Site is raw land with no existing structure to demolish.

Water Conservation. The Proposed Project's water budget for landscape irrigation use must conform to the California Department of Water's Resources' Model Water Efficient Landscape Ordinance (MWELO). Such landscape water reduction methods include, but are not limited to, use of captured rainwater, recycled water, graywater, or water treated for irrigation purposes and conveyed by a water district or public entity. It must also provide irrigation design and controllers that are weather- or soil moisture-based and automatically adjust in response to weather

conditions and plants' needs. Furthermore, measures associated with minimizing water usage will be applied to the Proposed Project, including water efficient landscape requirements and compliance with Title 24 Building Code requirements for efficient appliances and fixtures. This is consistent with current City Ordinances, including the Water Efficient Landscape Ordinance (PMC Chapter 14.05).

Electric Vehicle Supply Equipment. The Proposed Project would provide Electric Vehicle stalls in an amount as required by California Green Building Code standards. The incorporation of Electrical Vehicle Supply Equipment (EVSE) into the Proposed Project is consistent with State and City GHG policies to encourage and support alternative clean fuel supplies for vehicles and would further serve to reduce GHG emissions attributable to the vehicle trips generated by the Project.

With adherence to state and local ordinances, the Proposed Project would not cause wasteful, inefficient or unnecessary consumption of energy and thus would not result in any significant environmental effects with respect to renewable energy.

VII. Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

The following section summarizes and incorporates by reference information from the *Geotechnical Investigation Report,* prepared by Bruin Geotechnical Services, Inc., dated December 22, 2020. A copy of the Geotechnical Investigation Report for APN # 3018-027-036 is included as Appendix C to this IS/MND.

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?

Less Than Significant Impact. A significant impact may occur if a Project Site is located within a State-designated Alquist-Priolo Zone or other designated fault zone. The Geotechnical Investigation concluded that no known active faults or potentially active faults underlie the Project Site. The report also concluded that the proposed development site is feasible from a geotechnical standpoint. The Project Site is not located within an Alquist-Priolo Earthquake Fault Zone. General Plan Exhibit S-3 (Earthquake Fault Zones) identifies the relative location of earthquake faults and Alquist-Priolo Fault Zones that affect the City. Within the vicinity of the Project Site, the main San Andreas Fault is located approximately 2.50 miles southwest, diagonally cutting across the northern half of Lake Palmdale. A smaller slip of the San Andreas fault line traverses approximately 1.35 miles Southwest of the Project site, south of Avenue S. The Alquist-Priolo Special Studies Act identifies “Special Studies Zones” for areas located within one-eighth of a mile of an active fault. According to the Official Maps of Alquist-Priolo Earthquake Fault Zones, published by the Department of Conservation, Geological survey, the Proposed Project Site is located more than one mile from identified fault traces and the special studies zone. Therefore, the Project will not expose people or structures to rupture of a known earthquake fault and impacts will be less than significant. Therefore, the potential for surface ground rupture due to faulting occurring beneath the Project Site during the design life of the Proposed structure is considered less than significant.

ii) Strong seismic ground shaking?

Less Than Significant Impact. A significant impact may occur if a Project represents an increased risk to public safety or destruction of property by exacerbating existing hazardous environmental conditions by exposing people, property, or infrastructure to seismically induced ground shaking hazards that are greater than the average risk associated with other locations in Southern California. As discussed above, the Project Site is not located within an Alquist-Priolo Earthquake Fault Zone and was concluded to have a low potential for surface rupture beneath the Project Site.

General Plan Exhibit S-3 (Earthquake Fault Zones) identifies areas subject to seismic ground shaking and failure. Development within the Proposed Project area would be subject to intense ground shaking during a major earthquake along the San Andreas Fault. The intensity of the ground shaking would depend on the distance to the epicenter and the geology of the areas between the epicenter and the Project area. In accordance with the 2019 California Building Code, seismic structure design requirements will be based on the Seismic Design Category (SOC) for the Proposed structures, which is based on the Occupancy Category for the structure and on the

level of expected soil modified seismic ground motion. The majority of structures in Palmdale will have a Seismic Design Category (SDC) of D (High seismic vulnerability) or E (Very high seismic vulnerability and near a major fault) based on the proximity of the City to the San Andreas Fault and soil types in the City. The Project's Geotechnical Report identified the SDC as D or high seismic vulnerability. Compliance with these seismic design requirements will reduce the potential impacts from seismic ground shaking and ground failure on building occupants and structures to a less than significant level.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. A significant impact may occur if a Project Site is located within a liquefaction zone. Liquefaction is a phenomenon in which saturated silty to cohesionless soils below the groundwater table are subject to a temporary loss of strength due to the buildup of excess pore pressure during cyclic loading conditions such as those induced by an earthquake. Liquefaction-related effects include loss of bearing strength, amplified ground oscillations, lateral spreading, and flow failures.

According to General Plan Exhibit PS-1 (Aquifers and Groundwater Surface), the Proposed Project area is not within the Aquifer Boundary. Additionally, according to the Geotechnical Investigation Report, groundwater was not encountered within 30 feet below the ground surface. Additionally, Bruin GSI reviewed reports by the County of Los Angeles, Department of Public Works Water Resources Division electronic database, and noted that the historic highest groundwater levels in the immediate site vicinity are over 100 feet below ground surface. Based upon the depth to groundwater, liquefaction is unlikely to occur during a seismic event. The USGS Seismic Hazard Zones Palmdale Quadrangle (October 17, 2003) does not identify the Proposed Project area as having the potential for liquefaction. Potential impacts associated with liquefaction would therefore be less than significant.

iv) Landslides?

No Impact. A Project-related significant adverse effect may occur if the Project is located in a hillside area with soil conditions that would suggest a high potential for sliding. Palmdale General Plan Exhibit S-9 (Slope Categories) characterizes the Proposed Project area as having slopes of 15 percent or less. The Geotechnical Investigation Report stated the Project Site contains no major landforms and is relatively flat, sloping slightly to the northeast with drainage by sheet flow at approximately one to two percent across the site. In addition, the Proposed Project would not have the potential to exacerbate current environmental conditions that would create a significant hazard with respect to landslides. Therefore, no impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. A Project would normally have significant sedimentation or erosion impact if it would: (a) constitute a geologic hazard to other properties by causing or accelerating instability from erosion; or (b) accelerate natural processes of wind and water erosion and sedimentation, resulting in sediment runoff or deposition which would not be contained or controlled on-site. The Geotechnical Investigation Report indicated that soils on the Project Site

and vicinity consist mainly of interbedded layers of silty sand (SM) and poorly graded sands (SP) with occasionally sandy silt (ML). The upper four to five feet of soils were found to be relatively loose, non-uniform and of low relative compaction. The Geotechnical Investigation Report provides specific recommendations for re-compaction of the upper five to six feet of soil on the Project Site and grading of the Project Site.

Construction associated with the Project area would occur in accordance with all rules and regulations of the City of Palmdale. This would include the regulations contained within PMC Section 8.04.265 (Excavation and Grading), which establish regulation for the control of excavation, grading and earthwork construction, including fills and embankments, and for the control of grading site runoff, including erosion, sediments and construction related pollutants. In addition, construction associated with future development would be required to comply with the requirements of the Municipal National Pollutant Discharge Elimination System (NPDES) Construction Permit and would implement City grading permit regulations that include compliance with erosion control measures, including grading and dust control measures. Specifically, construction associated with future development Projects would be required to have erosion control plans approved by the City of Palmdale Engineering Division, as well as Storm Water Pollution Prevention Plans (SWPPP). As part of these requirements, Best Management Practices (BMP's) would be implemented during construction activities to reduce soil erosion to the maximum extent possible. Given that the Project would be subject to City Code and NPDES requirements for erosion control grading and soil remediation, the Project would not result in substantial soil erosion or the loss of top soil. These requirements, when combined with standard City requirements for grading, will reduce impacts from soils to a level of less than significant.

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?

Less Than Significant Impact. A Project would normally have a significant geologic hazard impact if it could cause or accelerate geologic hazards causing substantial damage to structures or infrastructure, or expose people to substantial risk of injury. For the purpose of this specific issue, a significant impact may occur if the Proposed Project is built in an unstable area without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. The Proposed Project is not located adjacent to steep slopes or areas that would otherwise be subject to landslides, debris flow, and/or rock fall. As such, there is no potential for a landslide to occur within the Project area.

Lateral spreading results from liquefaction or plastic deformation of soil occurring on gently sloping ground during an earthquake. The conditions occur when blocks of mostly intact surficial soil are displaced down slope along a sheer zone that has formed within liquefied sediment. Due to the City's relatively flat topography of the valley floor and lack of significant slopes in the Project area, the Project area is not subject to lateral spreading conditions.

According to General Plan Exhibit S-14 (Subsidence), there is no data for subsidence potential

within the Project area. Although the General Plan does not map areas of collapsible soils in the City, generally desert soils are considered collapsible in the first few feet. The design, construction and engineering of structures associated with the Proposed Project will be subject to compliance with all City rules and regulations. Pursuant to PMC Section 8.04.202, Section 110.2.2, Permits, work requiring a building or grading permit by the Palmdale Building Code (PBC) is not permitted in an area determined by the Building Official or City Engineer to be subject to hazard from landslide, settlement, or slippage. With compliance with Code requirements, Project implementation would result in less than significant impacts involving damage to building and improvements from subsidence or collapse.

Furthermore, according to the Geotechnical Investigation Report, the groundwater level within the Proposed Project area is in excess of 100 feet below the surface and potential for on-site liquefaction or seismically induced dynamin settlement is negligible. Potential impacts associated with liquefaction would therefore be less than significant.

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?

Less Than Significant Impact. A significant impact may occur if the Proposed Project is built on expansive soils without proper site preparation or design features to provide adequate foundations for buildings, thus posing a hazard to life and property. Expansive soils contain significant amounts of clay particles that swell considerably when wetted and which shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result.

According to General Plan Exhibit S-10 (Soil Expansion Potential), the Project Site is identified as having no expansion potential (Expansion Index = 0). The Geotechnical Investigation Report includes an expansion index test which indicated the soils on the Project Site are within the “very low” expansion category. Development on expansive soils can cause land slippage and structural damage to foundations. Grading and engineering methods that provide a stable foundation for building construction, as required by the PMC and California Building Code, will reduce impacts to a less than significant level.

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?

No Impact. This question would apply to the Proposed Project only if it was located in an area not served by an existing sewer system. In accordance with Policy PS2.2.4 of the Public Services Element of the General Plan, the Proposed Project must be connected to the public sewer system and a private sewer disposal system. Therefore, there will be no impact from soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems.

VIII. Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Air Quality Study prepared by M.S. Hatch Consulting on February 5, 2021

California Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006, widely known as AB 32, requires the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is directed to set a statewide GHG emission limit, based on 1990 levels, to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. As previously determined by CARB, California Projected it needed to reduce GHG emissions to a level approximately 28.4% below CARB's 2020 "business-as-usual" GHG emission Projections (as set forth in the 2008 Scoping Plan) to achieve this goal.[2] The bill requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Future development of the Project Site will generate carbon dioxide, which is the primary component of greenhouse gases (GHG). Thus, the Project will contribute to global warming as described by the Intergovernmental Panel on Climate Change. The total volume of GHG that will be generated by development of the Project Site is consistent with the residential use of the property anticipated within the City's General Plan. The relative size of the Project in comparison to the estimated greenhouse gas reduction goal as adopted by the California Air Resources Board of 174 million tons of CO_2 equivalent ($MMTCO_2e$) by 2020 means

[2] *CARB has not calculated the percent reduction required to achieve AB 32's mandate of returning to 1990 levels of GHG emissions by 2020. The value of 28.4% is the required reduction to achieve 1990 emissions in 2020 is an approximate value. Based on the Scoping Plan estimates and conservative rounding, the value could be 28.5%.*

that its incremental effect is not cumulatively considerable. Development of the Project Site must also meet the City's Green Building Ordinance and therefore is inherently energy efficient and GHG emission will be reduced to the extent feasible through compliance with the Green Building Ordinance. Based upon the information contained above, the Project will have a less than significant impact due to the generation of greenhouse gas emissions.

Construction

Construction of the Proposed Project would emit GHG emissions through the combustion of fossil fuels by heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the Project Site. These impacts would vary day to day over the approximate 24-month duration of construction activities. Emissions of GHGs were calculated using CalEEMod (*Version 2016.3.2*) for each year of construction of the Proposed Project and the results of this analysis are presented in Table 4, Proposed Project Construction-Related Greenhouse Gas Emissions. As shown in Table 4, the total GHG emissions from construction activities related to the Proposed Project would be approximately 1,629 metric tons with the greatest annual emissions occurring in 2022.

Table 4
Proposed Project Construction-Related Greenhouse Gas Emissions

Year	CO_2e Emissions (Metric Tons per Year) [a]
2021	140
2022	667
2023	576
Total Construction GHG Emissions	**1,629**

[a] Construction CO_2 values were derived using CalEEMod Version 2016.3.2 Calculation data and results are provided in Appendix A Greenhouse Gas Emissions Worksheets.

Operation

Project GHG Emissions

The GHG emissions resulting from operation of the Proposed Project, which involves the usage of on-road mobile vehicles, electricity, natural gas, water, landscape equipment and generation of solid waste and wastewater, were calculated under two separate scenarios in order to illustrate the effectiveness of the Proposed Project's compliance with the mitigating features that would be effective in reducing GHG emissions. The Proposed Project's emissions were calculated using CalEEMod for a base Project without the energy conservation measures and with GHG reduction measures for purposes of quantifying the net benefit of code compliance measures in terms of a reduction in GHG emissions. As shown in Table 5, below, the increase in GHG emissions generated by the Proposed Project under the Project Without GHG Reduction Measures would be 1,001.30 CO_2e MTY, and the Proposed Project scenario with GHG reduction measures would result in an increase of 982.35 CO_2e MTY. For purposes of this comparison, it should be noted

that the Proposed Project's structural and operational features such as installing energy efficient lighting, low flow plumbing fixtures, and implementing an operational recycling program during the life of the Proposed Project would reduce the Project's GHG emissions by approximately 2 percent. The Proposed Project's GHG emissions would equal 982.35 CO_2e MTY after realizing a 2 percent reduction in GHG emissions as compared to a base Project of the same size without GHG reduction measures.

Table 5: Proposed Project Operational Greenhouse Gas Emissions

Emissions Source	Estimated Project Generated CO_2e Emissions (Metric Tons per Year)		
	Base Project Without GHG Reduction Features	Proposed Project	Percent Reduction [a]
Area	1.26	1.26	0%
Energy	203.37	203.37	0%
Mobile (Motor Vehicles)	691.25	691.25	0%
Stationary	4.59	4.59	0%
Waste	23.36	11.68	50%
Water	51.09	43.82	14%
Construction Emissions [c]	26.38	26.38	--
Proposed Project Total:	**1,001.30**	**982.35**	**2%**

Notes:

[a] *The Percent Reduction is not a quantitative threshold of significance, but shows the efficacy of the Project's compliance with the various regulations, plans and policies that have been adopted with the intent of reducing GHG emissions.*

[b] *The total construction GHG emissions were amortized over 30 years and added to the operation of the Project.*

[c] *The total construction GHG emissions were amortized over 30 years and added to the operation of the Project.*

Calculation data and results provided in Appendix A, Greenhouse Gas Emissions Worksheets.

The percent reduction calculated above is not a quantitative threshold of significance, but shows the efficacy of the Proposed Project's compliance with the various regulations, plans, and policies that have been adopted with the intent of reducing GHG emissions in furtherance of the State's GHG reduction targets under SB 32. While neither AVAQMD nor the City have adopted this screening threshold, the fact the Proposed Project's GHG emissions are below the threshold provides further substantial evidence that the Proposed Project's GHG impacts are less than significant.

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

Less Than Significant Impact. As described above and in Section VIII(a), the Proposed Project would be consistent with local and statewide goals and policies aimed at reducing the generation of GHGs, including AB 32, SB 375, and CARB's 2017 Scoping Plan aimed at achieving 40 percent below 1990 GHG emission levels by 2030. Therefore, the Project's generation of GHG emissions would not make a Project-specific or cumulatively considerable contribution to conflicting with an applicable plan, policy or regulation for the purposes of reducing the emissions of greenhouse gases, and the Proposed Project's impact would be less than significant.

IX. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or Proposed school?	☐	☒	☐	☐
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 create a significant hazard to the public or the environment?	☐	☐	☒	☐
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?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. A significant impact may occur if a Project would involve the use or disposal of hazardous materials as part of its routine operations, or would have the potential to generate toxic or otherwise hazardous emissions that could adversely affect sensitive receptors. The Proposed Project includes the construction of a multi-family residential development on a 8.39 acre parcel. During the operation of the Proposed Project, no hazardous materials other than modest amounts of typical cleaning supplies and solvents used for janitorial purposes would routinely be transported to the Project Site. The acquisition, use, handling, storage, and disposal of these substances would comply with all applicable federal, state, and local requirements. Further, the Project Site is not located within a hazardous waste site or an area which might be at risk of explosion or release of hazardous substances. Therefore, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and impacts would be less than significant.

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?

Less Than Significant Impact. A Project would normally have a significant impact to hazards and hazardous materials if: (a) the Project involved a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation); or (b) the Project involved the creation of any health hazard or potential health hazard. The construction of the Proposed multi-family residential development would not create any risk of explosion or release of hazardous substances in the event of an accident or upset condition because the Project will be required to comply with standard requirements for storage of hazardous substances or chemicals by the applicable regulatory agencies this will ensure potential impacts will be less than significant. Construction activities would not involve the demolition of any structures and therefore, would not expose individuals or the environment to asbestos containing materials or lead based paint. During operations, residents and management staff of the multi-family development would utilize typical household cleaners, fertilizer, and potentially limited use of common pesticides. These uses would be similar to other residential uses in the area. Therefore, impacts would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or Proposed school?

Less Than Significant with Mitigation Incorporated. A Project would normally have a significant impact to hazards and hazardous materials if: (a) the Project involved a risk of accidental explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation); or (b) the Project involved the creation of any health hazard or potential health hazard. The determination of significance shall be made on a case-by-case basis considering the following factors: (a) the regulatory framework for the health hazard; (b) the

probable frequency and severity of consequences to people or property as a result of a potential accidental release or explosion of a hazardous substance; (c) the degree to which Project design would reduce the frequency or severity of a potential accidental release or explosion of a hazardous substance; (d) the probable frequency and severity of consequences to people from exposure to the health hazard; and (e) the degree to which Project design would reduce the frequency of exposure or severity of consequences of exposure to the health hazard. There is one school located approximately one-quarter mile from the Project Site:

- Palmdale High School, located at 2137 East Avenue R
- Sage Intermediate School, located at 38060 20th Street East

The Proposed Project has the potential to expose students and staff of the identified schools to potentially hazardous materials, substances, or waste during the construction period. Localized construction impacts associated with noise, dust and localized air quality emissions, and construction traffic/hauling activities generally occur within an area of 500 feet or less of the Project Site. As such, Palmdale High School is located approximately 800 feet from proposed Project Construction activities. Potential impacts would be minimized because the Proposed Project would include appropriate construction measures, such as adhering to the permissible hours of construction and not idling or staging haul trucks in proximity to school facilities to reduce the Proposed Project's impacts upon the nearby school. Implementation of Mitigation Measure HAZ-1 would reduce any construction impacts related to nearby schools to less than significant levels. Further, no hazardous materials other than the modest amounts of typical cleaning supplies and solvents used for maintenance and janitorial purposes would be present at the Project Site, and the acquisition, use, handling, storage, and disposal of these substances would comply with all applicable federal, state, and local requirements. Therefore, the operational activities of the Proposed Project would not create a significant hazard through hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or Proposed school. Operational impacts on nearby schools would be less than significant.

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?

Less Than Significant Impact. California Government Code Section 65962.5 requires various state agencies to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells, and solid waste facilities from which there is known migration of hazardous waste, and submit such information to the Secretary for Environmental Protection on at least an annual basis. A significant impact may occur if the Project Site is included on any of the above lists and poses an environmental hazard to surrounding sensitive uses. Review of the Department of Toxic Substances Control (DTSC) EnviroStor database and the EPA's Superfund Enterprise Management System (SEMS) database, show that the Project Site is not located on an active or closed hazardous waste site

or Superfund Site. Therefore, the Proposed Project will not have a significant impact due to hazardous materials sites.

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?

Less Than Significant Impact. A significant impact may occur if the Proposed Project were located within an airport land use plan and would introduce substantial new sources of noise or substantially add to existing sources of noise within or in the vicinity of the Project Site. The Project Site is not located within two miles of a private airstrip or public use airport. The Project Site is located approximately 4 miles away from the nearest airport. The Proposed Project would not expose people to excessive noise levels associated with airport uses as it is not located within the vicinity of a public airport or public use airport or airport land use plan area. Therefore, impacts from exposure to airport noise would be less than significant.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. A Project would normally have a significant impact to hazards and hazardous materials if: (a) the Project involved possible interference with an emergency response plan or emergency evacuation plan. The Proposed Project would not cause permanent alterations to vehicular circulation routes and patterns, impede public access, or travel upon public rights-of-way. Immediate evacuation routes within public streets in the vicinity of the Proposed Project Site include East Avenue Q-12 to the north and 25th Street East to the east. Plans would be provided to the Los Angeles County Fire Department for review and comment. Review by applicable public agencies would ensure implementation of the Proposed Project would not interfere with an emergency response plan or emergency evacuation plan. Therefore, the Proposed Project would not be expected to interfere with an adopted emergency response plan or emergency evacuation plan, and a less than significant impact would occur.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project Site is located in an urbanized area of Palmdale and does not include wildlands or high fire hazard terrain or vegetation. The Proposed Project area is located approximately 1.5 miles northeast of the high fire hazard area, as shown on General Plan Exhibit S-16 (Wildfire Hazard Zones) of the General Plan and located in an urbanized area east of the California Aqueduct. Therefore, no wildfire hazard impact would occur with implementation of the Proposed Project and there would be no impact.

Mitigation Measure:

HAZ-1: Construction Activity Near Schools

- The Applicant and contractors shall maintain ongoing contact with the administrator of Palmdale High School and Sage Intermediate School approximately .25 miles from the Proposed Project Site and copy the City on all correspondence. The administrative offices shall be contacted when demolition, grading and construction activity begin on the Project Site so that students and their parents will know when such activities are to occur in the vicinity. Construction activities may create a minor disruption for school pedestrian and bus traffic along 25th Street to the east of the school. The timeline for construction activities will be relayed to students and parents by the administrative office.
- The Owner/Developer shall be responsible to install appropriate traffic signs around the site to ensure pedestrian and vehicle safety to the satisfaction of the City Engineers.
- There shall be no staging or parking of construction vehicles, including vehicles to transport workers on 25th Street East or East Avenue Q-12.

X. Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off-site;				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				
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				
iv. Impede or redirect flood flows?				
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Percolation Report for Proposed Storm Water Basins prepared by Bruin Geotechnical Services on December 28, 2020

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. A Project would normally have a significant impact on surface water quality if discharges associated with the Project would create pollution, contamination, or nuisance as defined in Section 13050 of the California Water Code (CWC) or that cause regulatory standards to be violated, as defined in the applicable National Pollution Discharge Elimination System (NPDES) stormwater permit or Water Quality Control Plan (WQCP) for the receiving body of water. A significant impact may occur if a Project would discharge water which does not meet the quality standards of agencies which regulate surface water quality and water

discharge into stormwater drainage systems. Significant impacts would also occur if a Project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB) through its nine Regional Boards.

Construction

Three general sources of potential short-term, construction-related stormwater pollution associated with the Proposed Project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

The City requires that all Projects be designed and constructed in accordance with the stormwater pollution control requirements of the Lahontan Region of the California Regional Water Quality Control Board. Furthermore, prior to the issuance of a grading permit, the applicant will be required to file a Notice of Intent with the Lahontan Region of the California Regional Water Quality Control Board to comply with the applicable National Pollution Discharge Elimination (NPDES) requirements as specified within the Conditions of Approval for the Project. Given that this development would be subject to City Ordinances and NPDES requirements for erosion control grading and soil remediation, development of the Proposed Project will not violate any water quality standards or waste discharge requirements and there will be a less than significant impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. A Project would normally have a significant impact on groundwater level if it would change potable water levels sufficiently to: (a) reduce the ability of a water utility to use the groundwater basin for public water supplies, conjunctive use purposes, storage of imported water, summer/winter peaking, or respond to emergencies and drought; (b) reduce yields of adjacent wells or well fields (public or private); (c) adversely change the rate or direction of flow of groundwater; or (d) result in demonstrable and sustained reduction in groundwater recharge capacity.

The Project Site is located within the boundaries of Palmdale Water District. Construction of the Project would require service from Palmdale Water District, which has not indicated that water supplies are unavailable to support the Project. Furthermore, measures associated with minimizing water usage will be applied to the Proposed Project, including water efficient landscape requirements and compliance with Title 24 Building Code requirements for efficient appliances and fixtures. This is consistent with current City Ordinances, including the Water Efficient Landscape Ordinance (PMC 14.05). With the implementation of the applicable codes, impacts to groundwater would be reduced to a less than significant level.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

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

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

iv. Impede or redirect flood flows?

Less Than Significant Impact. A Project would normally have a significant impact on surface water hydrology if it would result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of water flow. The Project Site is located in a urbanized area of Palmdale, and no streams or river courses are located on or within the Project vicinity. PMC Chapter 3.38, Drainage Fee Requirements, requires development projects to mitigate the impacts of the development on the City's drainage facilities. The City requires developers to construct drainage facilities in accordance with the City of Palmdale Drainage Master Plan (DMP) or pay drainage fees that will be used to construct drainage facilities pursuant to the Drainage Master Plan. Therefore, the Project would have a less than significant impact on the existing drainage patterns.

The Project Site does not contain a stream or river. The proposed development will not have any negative effects on the existing hydrologic condition of the Project Site and any downstream facilities. The City will require the applicant to pay drainage fees that will be used to construct drainage facilities pursuant to the DMP. In addition, in accordance with the latest Los Angeles County Hydrology Manual and City of Palmdale's DMP requirements, flows greater than 85 percent of the existing pre-developed peak flow conditions will be retained onsite. Therefore, development of this Project will not result in a potential for a significant adverse impact associated with the alteration of the existing drainage pattern.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?

Less Than Significant Impact. A significant impact may occur if the Project was located within a 100-year flood zone, which would impede or redirect flood flows. The Project Site is not in an area designated as a 100-year flood hazard area. The Project Site is located in an urbanized area and has no existing drainage structures, and all runoff is conveyed via sheet flow. The Project Site lies within Zone "X" according to FEMA map number 06037C0700F dated September 26,

2008, with historical flood depths from 1-3 feet. While there may be a significant increase in the amount of runoff volume, there should be no negative impacts on the storm drain system since the peak flow of the Proposed development is 15 percent lower than the existing condition. As such, a less than significant impact would occur.

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

Less Than Significant Impact. A Project would result in a significant impact if it has the potential to conflict with a water quality control plan or sustainable groundwater management plan. Per Los Angeles County requirements, the overflows from the proposed BMP must connect either to a catch basin or to a storm drain main. As part of the development, landscaping will be added which will reduce the overall imperviousness and thereby lower the site's overall runoff. Additionally, the Project Site will no longer convey runoff via sheet flow, but rather via non-erosive means to a proposed detention basin.

In accordance with the latest LA County Hydrology Manual and City of Palmdale's DMP requirements, flows greater than 85% of the existing pre-developed peak flow conditions will be retained onsite. While there is a significant increase in the amount of runoff volume, there should be no negative impacts on the storm drain system since the peak flow of the proposed development is 15 percent lower than the existing condition. Furthermore, the City requires that all Projects be designed and constructed in accordance with the stormwater pollution control requirements of the Lahontan Region of the California Regional Water Quality Control Board. Furthermore, prior to the issuance of a grading permit, the applicant is required to file a Notice of Intent with the Lahontan Region of the California Regional Water Quality Control Board to comply with the applicable National Pollution Discharge Elimination System (NPDES) requirements. Based upon the Proposed stormwater drainage system and given that the Proposed Project would be subject to City Ordinances and NPDES requirements for erosion control grading and soil remediation, the Project will not violate any water quality standards or waste discharge requirements and there will be a less than significant impact.

XI. Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Physically divide an established community?

No Impact. A significant impact may occur if the Proposed Project would be sufficiently large enough or otherwise configured in such a way as to create a physical barrier within an established community. The determination of significance shall be made on a case-by-case basis considering the following factors: (a) the extent of the area that would be impacted, the nature and degree of impacts, and the types of land uses within that area; (b) the extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions; and (c) the number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the Proposed Project.

The Proposed Project Site is located within an urbanized area of the City of Palmdale and is consistent with the existing physical arrangement of the properties within the vicinity of the Project Site. No separation of uses or disruption of access between land use types would occur as a result of the Proposed Project. The Project Site is currently vacant, and the Proposed is within the R-2, (Medium Residential) Zone and proposes a three-story multi-family residential development. The proposed use will complement existing surrounding uses that include multi-family residential development to the east, existing planned residential project to the north and south, and vacant property to the east (see Figure 1, Project Location Map). The implementation of the Proposed Project would not disrupt or divide the physical arrangement of the established community, and no impact would occur.

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?

Less Than Significant Impact. A significant impact may occur if a Project is inconsistent with the General Plan or zoning designations currently applicable to the Project Site, and would cause adverse environmental effects, which the General Plan and zoning ordinance are designed to avoid or mitigate. The Project Site is within the R-2 (Medium Residential) zone and a General Plan land use designation of MR (Medium Residential, 6.1-10 du/ac). The Project will result in 151 dwelling units within an urbanized area of the City. The Proposed Density Bonus Agreement (PMC 17.25.110) will provide an 80 percent density bonus and will increase the number of

dwelling units per acre over that permitted as of right within the R-2 zone. The Project Site is currently zoned to permit a maximum 10 du/ac, which allows for the development of 84-units on the Project Site. However, the approval of the Density Bonus Agreement will permit an additional 67 units for a total 151 dwelling units to be developed. The Applicant is also requesting to obtain density bonus incentives in conjunction with the Proposed affordable housing development. The incentives are permitted under State law and the City's Zoning Ordinance for housing designated for low-income residents. The Proposed Project will provide 100 percent of the units reserved for occupancy by low and very low households, exclusive of two managers units.

The plans for the Proposed Project have been reviewed and found to be consistent with the requirements of the General Plan land use designation of MR (Medium Residential, 6.1-10 du/ac) and the R-2 zone (Medium Residential) with respect to density and the standards of development for a multi-family residential development, subject to the approval of the Density Bonus Agreement. Therefore, development of the Project will not conflict with any plan, policy or regulation and there will be a less than significant impact.

XII. Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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?

No Impact. A significant impact may occur if the Project Site is located in an area used or available for extraction of a regionally-important mineral resource, or if the Project development would convert an existing or future regionally-important mineral extraction use to another use, or if the Project development would affect access to a site used or potentially available for regionally-important mineral resource extraction. The determination of significance would be made on a case-by-case basis considering: (a) whether, or the degree to which, the Project might result in the permanent loss of, or loss of access to, a mineral resource that is located in a State Mining and Geology Board Mineral Resource Zone MRZ-2 zone or other known or potential mineral resource area, and (b) whether the mineral resource is of regional or statewide significance, or is noted in the Conservation Element as being of local importance. The Project Site is not located within a Mineral Resource Zone 2 (MRZ-2) Area, an Oil Drilling/Surface Mining Supplemental Use District, or an Oil Field/Drilling Area. The Project Site is not currently used for the extraction of mineral resources, and there is no evidence to suggest that the Project Site has been historically used for the extraction of mineral resources. Furthermore, according to Palmdale General Plan Exhibit LU-6 (Sand and Gravel Resource Area) and Exhibit ER-1B (Regionally Significant Construction Aggregate Resource Areas), the Proposed Project area is not located within a mineral resource extraction district or an area with existing quarry operations. Therefore, development of the Project Site would not result in adverse impacts due to a significant depletion or loss of availability of mineral resources. No impact associated with the loss of availability of a known mineral resource would occur.

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?

No Impact. A significant impact may occur if the Project Site is located in an area used or available for extraction of a regionally-important mineral resource, or if the development would convert an existing or future regionally-important mineral extraction use to another use, or if the development would affect access to a site used or potentially available for regionally-important mineral resource extraction. As discussed above, the Project Site is not currently used for the extraction of mineral resources, and there is no evidence to suggest that the Project Site has been historically used for the extraction of mineral resources. Therefore, no impact associated with the loss of availability of a known mineral resource would occur.

XIII. Noise

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c. For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☒	☐

The following section summarizes and incorporates the reference information from the following report (contained in Appendix D to this IS/MND): Christopher Jeans & Associates, Inc., Acoustical Analysis, Palmdale Terrace Apartments, City of Palmdale, January 20, 2021.

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?

Less Than Significant with Mitigation Incorporated. A significant impact may occur if the Proposed Project would generate excess noise that would cause the ambient noise environment at the Project Site to exceed noise level standards set forth in the PMC. Implementation of the Proposed Project would result in an increase in ambient noise levels during both construction and operation, as discussed in further detail below. The increased noise from construction activities would be temporary and limited by the PMC Section 8.28.030 that restricts construction activity on Sunday and any other time between the hours of 8:00 p.m. and 6:30 a.m.

Further, General Plan Policy N1.2.2 restricts construction hours during the evening, early morning, and Sundays. Based upon compliance with the requirements of the Municipal Code, short-term construction noise impacts would be reduced to less than significant levels. Therefore, impacts associated with the exposure of persons to noise levels in excess of standards contained within the General Plan will be less than significant. The construction of the Proposed residential use would generate short term noise impacts. Construction activities have a short and temporary duration, lasting from a few days to a period of several months. Groundborne noise and other

types of construction related noise impacts would typically occur during the initial site preparation, which can create the highest levels of noise. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include earthmoving and soils compaction. High groundborne noise levels can occur during this phase due to haul trucks, backhoes, and other heavy-duty construction equipment. Construction activities have the potential to expose adjacent land uses to noise levels between 70 and 90 decibels at 50 feet from the noise source. The degree of noise impact would be dependent upon the distance between the construction activity and the noise receptor. With compliance of the Municipal Code and Mitigation Measure NOI-1, short-term construction noise impacts would be reduced to a less than significant level.

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

Less Than Significant Impact with Mitigation Incorporated. Excavation and earthwork activities for the Proposed Project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate through the ground and diminishes in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. Thus, construction activities associated with the Proposed Project could have an adverse impact on sensitive structures (i.e., building damage).

Construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 25 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. The closest single-family residences to the Project Site are located more than 50 feet to the south of the Proposed Project. This is the closest residence in general to the Project Site. The generation and/or exposure of persons or structures to excessive groundborne vibration could result in significant impacts due to the short distance from the Project Site. Therefore, Mitigation Measure NOI-2 have been proposed. The Proposed Project would have a less than significant impact with mitigation incorporated.

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

Less Than Significant Impact. A significant impact may occur if the Proposed Project were located within an airport land use plan and would introduce substantial new sources of noise or substantially add to existing sources of noise within or in the vicinity of the Project Site. The Project Site is not located within two miles of a private airstrip or public use airport. The Project Site is

located approximately 4 miles from the Palmdale Regional Airport. The Proposed Project would not expose people to excessive noise levels associated with airport uses as it is not located within the vicinity of a public airport or public use airport or airport land use plan area or public airport or public use airport. Therefore, impacts from exposure to airport noise would be less than significant.

Mitigation Measure:

NOI-1: For all construction-related activities, noise attenuation techniques shall be employed, as appropriate, to reduce noise levels to the extent feasible during the construction phase. The following noise attenuation techniques shall be incorporated to reduce potential impacts of construction noise:

- Ensure that construction equipment is equipped with properly operating and maintained mufflers consistent with manufacturer's standards.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive receptors, where feasible.
- Schedule high noise-producing activities between the hours of 7:00 a.m. and 5:00 p.m. to minimize disruption to sensitive receptors.
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
- All stationary construction equipment (e.g., air compressor, generators, impact wrenches, etc.) shall be operated as far away from residential uses as possible and shall be shielded with temporary sound barriers, sound aprons or sound skins.
- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.
- During all construction activities, the job superintendent shall limit all construction-related activities to between the hours 6:30 a.m. and 8:00 p.m. Monday through Saturday excluding holidays.
- The construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow the surrounding property owners/occupants to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective actions and report the actions to the complainant.

NOI-2: The following noise attenuation walls (sound barriers) shall be constructed during the operational phase:

- Sound walls at least six feet high shall be constructed around the perimeters of all first-floor patios with any view to 25th Street East and within 200 feet of the centerline of 25th Street East.
- Sound walls at least five and half feet high shall be constructed around the perimeters of all second-floor balconies with any view of 25th Street East and within 200 feet of the centerline of 25th Street East.
- Sound walls at least five feet high shall be constructed around the perimeters of all third-floor balconies with any view to 25th Street East and within 200 feet of the centerline of 25th Street East.

These noise barriers will be constructed as specified in the Acoustical Analysis, Christopher Jeans and Associates, Inc., January 20, 2021.

XIV. Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

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)?

Less Than Significant Impact. A significant impact may occur if the Proposed Project would locate new development such as homes, businesses, or infrastructure, with the effect of substantially inducing growth in the Proposed Project area that would otherwise not have occurred as rapidly or in as great a magnitude. The Proposed Project will result in 151 dwelling units reserved for low-income households within an urbanized area of the City. The Applicant is also requesting to obtain incentives in conjunction with the proposed affordable housing development. The Applicant is requesting discretionary approval of a Density Bonus Agreement for the development of a 100% affordable multi-family project that results in an 80% increase in density. The Applicant is also requesting development incentives. The incentives are permitted under State law and the PMC for housing designated for low-income residents. The Proposed Project will provide 100 percent of the units reserved for occupancy by low-income households, exclusive of two manager units. Based upon this, it is not anticipated that this development will significantly alter where people locate or the residential density within this area. Therefore, development of the Proposed Project would not induce substantial population growth in the area and impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. A significant impact may occur if the Proposed Project would result in the displacement of existing housing units, necessitating the construction of replacement housing elsewhere. The Proposed Project would consist of the development of a multi-family residential development on a site that is currently vacant and not previously developed. No displacement of existing housing would occur with the Proposed Project. Thus, no impact would occur.

XV. Public Services

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

a) Fire protection?

Less Than Significant Impact. A Project would normally have a significant impact on fire protection if it requires the addition of a new fire station or the expansion, consolidation or relocation of an existing facility to maintain service.

Fire Station 131, located at 2629 East Avenue S, is located approximately 1.1 miles (driving distance) southeast of the Project Site. In addition, Los Angeles County Fire Department Station (LAFD) #37 is located on 38318 9th Street East, approximately 1.6 miles northeast from the Project Site. The LAFD has previously indicated that there are service deficiencies within certain areas due to the incremental growth that has occurred over the years. However, the City of Palmdale has adopted a Fire Facilities Impact Fee Ordinance that mitigates impacts to fire protection services as the fee helps to pay for new facilities and upgrades to existing facilities. Additionally, the Applicant is required to comply with all standards including public and private fire hydrants which provide water pressure and durations as specified by the Los Angeles County Fire Department. Therefore, this does not constitute the potential for a significant adverse impact to fire protection.

b) Police protection?

Less Than Significant Impact. A significant impact may occur if the Los Angeles County Sheriff's Department could not adequately serve a Project, necessitating a new or physically altered station that would result in a physical adverse impact upon the environment.

The Palmdale Sheriff's Station, located at 750 East Avenue Q, is located approximately 2 miles northwest of the Project Site. Standard conditions of approval, developed by the Public Safety

Office in conjunction with the Los Angeles County Sheriff's Department, will be applied to the Project requiring adequate lighting, maintenance of landscaping and other security measures. In addition, the Applicant would be required to pay development impact fees to the City for police protection services. These fees are intended to offset any potential increase in services required by a project. Based upon the implementation of identified standards and conditions, impacts to police protection would be less than significant.

c) Schools?

Less Than Significant Impact. A significant impact may occur if a Project includes substantial employment or population growth, which could generate a demand for school facilities that would exceed the capacity of the Palmdale School District or the Antelope Valley Union High School District.

Prior to issuance of a building permit, the Applicant must pay all applicable School Facility Development Fees in accordance with California Government Code Section 65995. Both the Palmdale School District and the Antelope Valley Union High School District have established school impact fees. Pursuant to Government Code Section 65995, payment of development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." With the payment of School Facility Development Fees, the Proposed Project's potential impact upon public school services would be less than significant.

d) Parks?

Less Than Significant Impact. A significant impact would occur if the recreation and park services available could not accommodate the Projected population increase resulting from implementation of a Project or if the Proposed Project resulted in the construction of new recreation and park facilities that create significant direct or indirect impacts to the environment.

A significant impact generally occurs if a Project includes substantial population growth through residential development that could generate an increased demand in recreational and park facilities. The Proposed Project includes the development of a three-story affordable multi-family residential development. Any incremental need for open space as a result of the Proposed Project would be met by the Proposed Project's Proposed landscaping and open space areas. The Proposed Project would provide open space such as a break room, library, community room, fitness room, as well as a open space amenities such as a children's play area, garden courtyard, fenced dog park, and passive recreation area. As such, the Proposed Project would not be expected to increase demand on the surrounding area and surrounding recreation and park facilities. In addition, residents of the Proposed Project would likely use park facilities at William J. McAdam Park, due to its proximity to the Project Site, approximately 0.16 miles east. Other Parks in the vicinity include the Melville J. Courson Park and the Poncitlan Square, both located within 2 miles of the Project Site. Development of the Project Site is anticipated to increase the City's population and thereby increase demand for parks and recreational programs. This increase was anticipated in adoption of the City's General Plan and determined to be mitigated

through payment of park impact fees by developers of residential property. These parkland development fees would prevent overuse and deterioration of existing parks and recreational facilities as the Project would fund improvements to existing park and recreational facilities. Any increase in recreation and park facilities use would be minimal, and a less than significant impact would occur.

e) Other public facilities?

Less Than Significant Impact. A significant impact may occur if a Project includes substantial employment or population growth that could generate a demand for other public facilities, which would exceed the capacity available to serve the Project Site.

Review of the Project indicates that this development will not create any unique public facilities which require extensive maintenance. The property owner will maintain all landscaping and buildings on-site. No portion of this Project is expected to have a significant impact on maintenance of public facilities as the Project will be assessed for drainage, sewer, and traffic impact fees to offset such impacts. The Project will also be required to pay a General Public Facility Development Impact Fee to mitigate impacts for public facilities. Therefore, the Proposed Project would have a less than significant impact to public services and facilities.

XVI. Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

a) Would the Project Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?

Less Than Significant Impact. For the purpose of this IS/MND, a significant impact may occur if the Project would include substantial employment or population growth, which would 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.

As discussed above, the Proposed Project proposes a three-story multi-family residential development. The Proposed Project would contribute to some population growth in the area but would also provide on-site open space for the proposed residential uses. As such, the Proposed Project is not expected to result in the substantial increase in use of recreation and park facilities. As discussed in Section XV Recreation, there are sufficient Park facilities in the vicinity of the Proposed Project such that there would not be an undue amount of increased burden on the regional parks. In addition, the City of Palmdale requires the payment of park dedication fees from all new residential developments. Payment of such fees is intended to support future acquisition of land and improvement of parks and recreational facilities within the City. At times, the City may also allow a developer the option for the dedication of park land in lieu of park fees. Accordingly, the impacts of the Proposed Project upon parks and recreational facilities would be less than significant.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. A significant impact may occur if a Project includes or requires the construction or expansion of park facilities and such construction would have a significant adverse effect on the environment. Development of the Project Site is anticipated to increase the

City's population and thereby increase demand for parks and recreational programs. This increase was anticipated in the City's General Plan and determined to be mitigated through payment of park impact fees by developers of residential property. In addition, as stated in Section a), there are sufficient park facilities in the vicinity of the Proposed Project such that there would not be an undue amount of increased burden on regional parks. As such, the Proposed Project would not result in a substantial increase in use of recreational and park facilities and does not require the construction or expansion of recreational facilities that might have an adverse impact on the environment. Therefore, a less than significant impact would occur.

XVII. Transportation/Traffic

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☒	☐
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

The following section summarizes and incorporates by reference the information provided in the Palmdale Terrace Vehicle Miles Traveled Screening Analysis, prepared by Translutions, dated March 24, 2021. The VMT Screening Analysis is provided as Appendix E to this IS/MND.

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant Impact. The County of Los Angeles Guidelines includes an assessment of Vehicle Miles Traveled (VMT), thresholds of significance, and mitigation measures for

development projects and land use plans. The guidelines also include screening criteria to determine if a non-significant transportation impact can be made on the facts of a Proposed Project. The screening criteria includes a tool for residential land uses that further the State's affordable housing goals. Section 3.1.2.4 of the guideline's states that if 100% of the units, excluding manager's units are set aside for lower income households, further VMT analysis is not required, and a less than significant determination can be made. The project consists of 100% affordable housing units. Therefore, the Proposed Project would have a less than significant impact on VMT and would not conflict with an applicable plan, ordinance, or policy.

b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. A significant impact would occur if the Proposed Project conflicts with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. The County of Los Angeles Guidelines includes an assessment of VMT thresholds of significance and states that if 100% of the units, excluding manager's units are set aside for lower income households, further VMT analysis is not required, and a less than significant determination can be made. The project consists of 100% affordable housing units. Therefore, the Proposed Project would have a less than significant impact on VMT and would not conflict with an applicable congestion management program.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. A significant impact would occur if the Proposed Project would cause a change in air traffic patterns that would result in a substantial safety risk. The Proposed Project does not include any aviation-related uses and would have no airport impact. It would also not require any modification of flight paths for the existing airport. The Project Site is not located within the U.S. Air Force, Plant 42, Air Installation Compatible Use Zone (AICUZ) designated areas and the Proposed Project will not result in direct impact to air traffic. The project site is located approximately 4 miles away from the Palmdale Regional Airport. Therefore, no impact would occur.

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

No Impact. A significant impact may occur if the Proposed Project includes new roadway design or introduces a new land use or features into an area with specific transportation requirements and characteristics that have not been previously experienced in that area, or if project site access or other features were designed in such a way as to create hazardous conditions because it would

meet the design requirement of the Palmdale Municipal Code. The Proposed Project would not include unusual or hazardous design features. Therefore, no impacts would occur.

e) Result in inadequate emergency access?

Less Than Significant Impact. A significant impact may occur if the Project design would not provide emergency access meeting the requirements of the LAFD, or in any other way threatened the ability of emergency vehicles to access and serve the project site or adjacent uses. As previously discussed in Section VIII(g), the Project Site is not located in a disaster route according to the Palmdale General Plan. Development of the project site may require temporary and/or partial street closures due to construction activities. Nonetheless, while such closures may cause temporary inconvenience, they would not be expected to substantially interfere with emergency response or evacuation plans. The Proposed Project would not cause permanent alterations to vehicular circulation routes and patterns, impede public access or travel upon public rights-of-way. Further, the Proposed Project would be developed in a manner that satisfies the emergency response requirements of the LAFD. There are no hazardous design features included in the access design or site plan for the Proposed Project that could impede emergency access. Furthermore, the Proposed Project would be subject to the site plan review requirements of the LAFD and the Los Angeles County Sheriff's Department to ensure that all access roads, driveways and parking areas would remain accessible to emergency service vehicles. Therefore, the Proposed Project would not be expected to result in inadequate emergency access and impacts would be less than significant.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

No Impact. A significant impact may occur if the Proposed Project would conflict with adopted policies or involve modification of existing alternative transportation facilities located on- or off-site. The three bus lines closest to the project site (AVTA Routes 1, 2, and 3) all experience ridership levels well below capacity on weekdays. The daily and peak-hour levels of Project transit ridership are anticipated to have a minimal impact on transit service in the study area. The Proposed Project would not require the disruption of public transportation services or the alteration of public transportation routes. The incremental transit riders resulting from the Proposed Project are not anticipated to result in a significant impact on transit lines serving the area. Since the Proposed Project would not modify or conflict with any alternative transportation policies, plans or programs, it would have no impact on such programs.

XVIII. Tribal Cultural Resources

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
c. **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.**	☐	☒	☐	☐

The following section summarizes information from the Phase 1 Cultural Resources Assessment Report, prepared by: BioCultural.

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: 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)?

Less Than Significant with Mitigation Incorporated. Public Resources Code Section 21084.2 establishes that "[a] Project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a Project that may have a significant effect on the environment." A Project would cause a substantial adverse change in the significance of a tribal cultural resource with cultural value to a California Native American tribe if such resource is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or if such resource is 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. PRC 5024.1(c) states that "[a] resource may be listed as an historical resource in the California Register if it meets any of the following National Register of Historic Places criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

As discussed in response to Section V(b), BioCultural, was retained to research the prior archaeological studies recorded in the project vicinity and perform a site-specific cultural resources investigation report for the Proposed Project Site. The Cultural Resources Assessment Report includes a detailed description of the regional prehistory and ethnography of the Mojave Desert. The Cultural Resources Assessment Report concluded that no previously or newly recorded resources were identified during either the records search or the field survey. Based on these findings, BioCultural concluded that no further cultural resources studies are recommended. However, it is possible that unknown tribal cultural resources could be discovered on the project dite, and if proper care is not taken during construction, damage to or destruction of these unknown remains could occur. Mitigation Measure TCR-1 has been incorporated because the presence or absence of such materials cannot be determined until the site is excavated. Periodic monitoring during construction is required to identify any previously unidentified archaeological resources uncovered by Project construction activity. With the implementation of Mitigation Measure TCR-1, potential impacts to tribal cultural resources would be less than significant.

b) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A 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?

Less Than Significant Impact with Mitigation Incorporated. The Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a Proposed Project. Based on the project site's lack of any known Native American resources or cultural or sacred sites at the project site, the probability for the discovery of a known site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe is considered low. Notwithstanding the lack of evidence of archaeological resources within the Project area, mitigation measure TCR-1 is recommended to address the discovery of

inadvertent finds. With the mitigation measures referenced above, impacts to tribal cultural resources would be less than significant during Project construction.

Mitigation Measure:

TCR-1: The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resource Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

TCR-2: Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

XIX. Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. A significant impact may occur if a Project would increase water consumption or wastewater generation to such a degree that the capacity of facilities currently serving the Project Site would be exceeded.

The Project Site will be served by the Palmdale Water Reclamation Plant. In 2000, the Regional Water Quality Control Board, Lahontan Region (RWQCB- LR) revised the Waste Discharge Requirements for the Palmdale Water Reclamation Plant. The RWQCB-LR ordered the Sanitation District to remedy suspected nitrate contamination resulting, in part, from historical land application and agricultural practices. As a result, the District has implemented several recommendations, including restrictions that have eliminated two previous disposal methods for wastewater. They have also entered into a 20-year lease with Los Angeles World Airports in 2002 for 2,680 acres located north and east of the reclamation plant to provide additional disposal area

for wastewater. Based upon the ongoing compliance with RWQCB-LR requirements, the Project will not individually or cumulatively cause the wastewater treatment requirements to exceed those specified within the Water Quality Control Plan for the Lahontan Region (Basin Plan) and impacts will be less than significant.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. A significant impact may occur if a project would increase water consumption to such a degree that new water sources would need to be identified.

The Proposed Project's water supply will come from the Palmdale Water District. The Palmdale Water District will review and comment on copies of the Proposed Project plans. City General Plan policies required that any water infrastructure necessary to serve the site would be financed and constructed by the Project. Based on the District's present system capacity and planned improvement Projects, sufficient water facilities are available to serve the Project and the construction of new facilities or the expansion of existing facilities will not be required.

The Palmdale Sewer Maintenance District owns, operates, and maintains the City's wastewater collection system. Wastewater flows are discharged to local collector and lateral sewer lines for conveyance to trunk mainlines. The County Sanitation Districts of Los Angeles County Districts own, operate, and maintain only the trunk mainline sewers that form the backbone of the regional wastewater conveyance system. The wastewater generated by the Project Site will be collected by the Districts and conveyed for treatment to the Palmdale Water Reclamation Plant District 20.

The County Sanitation Districts have been provided copies of the Proposed plans for review, in order to determine if adequate capacity exists within the District's wastewater treatment facilities to serve the development and if District's facilities would be impacted. Additionally, PMC Section 13.08.010, Sanitary Sewer Policy, requires that all new buildings constructed for human occupancy in the City of Palmdale be connected to a public sewer unless the parcel complies with General Plan Policy PS 2.2.4. In addition, Section 13.08.090, Sewer Permit - Determination of Capacity - Agreement on Future Assessments, states that no sewer permit shall be issued for the direct connection of any lot to a public sewer, which was not designed for and intended to directly serve such lot. However, if the City determines that there is additional capacity available in such sewer beyond that required to serve the property for which it was designed, then any person desiring to connect to a public sewer shall, as a prerequisite to obtaining the permits required by PMC Chapter 13.08, pay all fees or charges, which may be required by the City of Palmdale. Therefore, the Proposed Project would not require or result in the construction of new water or wastewater treatment facilities and impacts would be less than significant.

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?

Less Than Significant Impact. A significant impact would occur if a project exceeds wastewater treatment requirements of the applicable Regional Water Quality Control Board. Section 13260 of the California Water Code states that persons discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file a Report of Waste Discharge (ROWD) containing information which may be required by the appropriate Regional Water Quality Control Board (RWQCB). The RWQCB then authorizes an NPDES permit that ensures compliance with wastewater treatment and discharge requirements.

Wastewater from the Project Site is conveyed via municipal sewage infrastructure maintained by the Palmdale Water Reclamation Plant (PWRP), which has a capacity of 12 mgd and currently produces an average recycled water flow of 8 mgd. The expected average wastewater flow from the Project is 15,756 gallons per day. The PWRP is a public facility and, therefore, is subject to the State's wastewater treatment requirements. Wastewater from the Project Site is and would continue to be treated according to the wastewater treatment requirements enforced by the RWQCB. Therefore, a less than significant impact would occur.

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?

Less Than Significant Impact. A significant impact may occur if a project were to increase solid waste generation to a degree such that the existing and projected landfill capacity would be insufficient to accommodate the additional solid waste. State law (AB 341) currently requires at least 50% solid waste diversion and establishes a state-wide goal of not less than 75% of solid waste generated be source reduced, recycled, or composted by the year 2020. Moreover, state law requires mandatory commercial recycling in all businesses and multi-family complexes and imposes additional reporting requirements on local agencies. The Proposed Project would utilize the Antelope Valley Public Landfill. The Proposed Project would follow all applicable solid waste policies and objectives that are required by law, statute, or regulation. Under the requirements of the hauler's AB 939 Compliance Permit from the Bureau of Sanitation, all construction debris would be delivered to a Certified Construction and Demolition Waste Processing Facility. In compliance with AB 341, recycling bins shall be provided at appropriate locations to promote recycling of paper, metal, glass and other recyclable material. These bins shall be emptied and recycled accordingly as a part of the Proposed Project's regular solid waste disposal program. Therefore, compliance with City Ordinances associated with minimizing water usage, impacts to water supplies will be reduced to a less than significant level.

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

Less Than Significant Impact. Solid waste management in the State is primarily guided by the California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource

conservation through reduction, recycling, and reuse of solid waste. The PMC mandates that all residential developments within the City limits maintain trash service with the City's franchise, Waste Management, Inc. The Proposed Project will be required to participate in regional source reduction and recycling programs further reducing the amount of solid waste to be disposed of at the Antelope Valley Public Landfill. In order for the County Sanitation Districts to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by SCAG. Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the SCAQMD and the AVAQMD in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CCA. All expansions of the Districts' facilities must be sized, and service phased in a manner that will be consistent with the SCAG regional growth forecasts. The Proposed Project will therefore comply with Federal, State and local statutes and will not result in any significant impacts related to solid waste.

XX. Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Responses from a. through d:

No Impact. A potential significant impact upon wildfire hazards could occur if the project site were to be located on state responsibility areas or lands classified as very high fire hazard severity zones. A review of the California Fire Hazard Severity Database was conducted, which revealed that the Proposed Project is not located within a state responsibility area or land classified as a very high fire hazard severity zone. Therefore, this checklist question is not applicable to the Proposed Project and no impact would occur.

XXI. Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?	☐	☒	☐	☐
c. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. A significant impact would occur only if the Proposed Project results in potentially significant impacts for any of the above issues. The Proposed Project is located in an urban area and would have no unmitigated significant impacts with respect to biological resources or California's history or pre-history. As noted in the analysis above, the project site is vacant, however, it does not support any substantial habitat of a fish or wildlife species. No native vegetation exists on the project site. Compliance with standard regulatory compliance measures would reduce potential impacts upon migratory bird species, should construction commence during the breeding season.

Additionally, although no known direct impacts to historic resources are anticipated, compliance with existing regulations and Mitigation Measures CUL-1 and CUL-3 would ensure any impacts upon cultural resources are at a less than significant level in the unlikely event any such historic, or archaeological materials are accidentally discovered during the construction process.

With respect to paleontological resources, Mitigation Measure CUL-2 has been incorporated. Excavations that extend down below five feet may encounter significant fossil vertebrate specimens. The Proposed Project does not propose any subterranean levels, however, any substantial excavation below the uppermost layers in the Proposed Project area is required to be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. With adherence to regulatory compliance measures and Mitigation Measures MM-BIO-1 and BIO- 3, any impacts to biological resources would be mitigated to a less than significant level. Therefore, with mitigation and adherence to regulatory compliance measures, the Proposed Project would not have the potential to degrade the quality of the environment, reduce or threaten any fish or wildlife species (endangered or otherwise), or eliminate important examples of the major periods of California history or pre-history.

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

Less than Significant with Mitigation Incorporated. A significant impact may occur if the Proposed Project, in conjunction with other related projects in the area of the project site, would result in impacts that would be less than significant when viewed separately, but would be significant when viewed together. As concluded in this analysis, the incremental contribution by the Proposed Project to cumulative impacts would be less than significant with the incorporation of mitigation measures BIO-1, BIO-2, BIO-3, CUL-1, CUL-2, CUL-3, HAZ-1, NOI-1, NO-2, TCR-1, and TCR-2. As such, the Proposed Project's contribution to cumulative impacts would be less than significant.

c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant with Mitigation Incorporated. A significant impact may occur if the Proposed Project has the potential to result in significant impacts, as discussed in the preceding sections. Based on the preceding environmental analysis, the Proposed Project would not have significant environmental effects on human beings, either directly or indirectly after mitigation Thus, with Mitigation Measures HAZ-1, NOI-1, NOI-2, any potentially significant impacts to humans would be less than significant.

Section 5. Preparers and Persons Consulted

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