California Environmental Quality Act (CEQA)

Initial Study/Mitigated Negative Declaration

Tentative Tract Map No.20514
NEC of Holly Road and Jonathan Street

Lead Agency
City of Adelanto
Development Services – Planning Division
11600 Air Expressway
Adelanto, CA 92301

Project Proponent:
Joshua Tree 10 Victorville LLC
Synergy Consulting
410 Patti Ann Woods Drive
Henderson, NV 89002

Prepared By

11801 Pierce Street, Ste. 200
Riverside, CA 92505

December 16, 2022

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1.0 Background Information

1. Project Title: Tentative Tract Map (TTM) No. 20514.

2. Lead Agency Name, Address, and Telephone Number: Development Services-Planning Division, 11600 Air Expressway, Adelanto, CA 92301.

3. Description of Project: The applicant is proposing a Tentative Tract Map (TTM) to subdivide approximately 14.51 acres into 83 single-family residential lots with a minimum lot size of 5,000 square feet.

4. Project Location: The proposed project site on the north side of Holly Road, west of Pearmain Street and east of Jonathan Street, and is referred to as APNs: 3128-241-09 and 14.

5. General Plan and Zoning Designation: Medium-Density Residential R-M12. The R-M12 zone district permits a variety of residential development types, including single-family attached townhouses, two-story townhouses, condominiums, and low-density garden apartments. Densities may range up to twelve (12) units per gross acre.

6. Other Public Agencies whose Approval is Required: Recordation of a final map, issuance of building permits, and completion of structures to current building code is required by the City prior to the establishment of the subdivision. Additionally, approvals from the following agencies are required:

- Lahontan Regional Water Quality Control Board (National Pollutant Discharge Elimination System Permit and Report of Waste Discharge).
- Mohave Desert Air Quality Management District (Authority to Construct).

7. Native American Tribal Consultation: The City commenced the AB 52 process by sending out consultation invitation letters to tribes previously requesting notification pursuant to Public Resources Code section 21080.3.1. The Project site is located within Serrano ancestral territory and, therefore, is of interest to the Yuhaaviatam of San Manuel Nation (YSMN) As a result, Mitigation Measure TCR-1 is included in the project/permit/plan conditions.

SIGNIFICANT OR POTENTIALLY SIGNIFICANT ENVIRONMENTAL FACTORS

The following environmental factors have been evaluated in this Initial Study to determine if development of the Project will result in a Significant or Potentially Significant impact(s) to the environment that cannot be mitigated to a level of insignificance. The environmental factors checked below require mitigation measures to reduce impacts to a level of insignificance.

☐ Aesthetics

☐ Agriculture and Forestry Resources

☐ Air Quality

☒ **Biological Resources**

☒ **Cultural Resources**

☐ Energy

☒ **Geology/Soils**

☐ Greenhouse Gas Emissions

☐ Hazards and Hazardous Materials

☐ Hydrology/Water Quality

☐ Land Use/Planning

☒ **Mandatory Findings of Significance**

☐ Mineral Resources

☐ Noise

☐ Population/Housing

☐ Public Services

☐ Recreation

☐ Transportation

☒ **Tribal Cultural Resources**

☒ **Utilities/Service Systems**

☐ Wildfire

Because the environmental factors above have been mitigated to less than significant, the adoption of a Mitigated Negative Declaration is recommended. View Table 2.1 below for further information.

DETERMINATION

Based on this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be recommended for adoption.	☐
I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project Applicant. A **MITIGATED NEGATIVE DECLARATION** will be recommended for adoption.	X
I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets if the effect is a "potentially significant impact" or "potentially significant unless mitigated." 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 potgentially significnat effect (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to all applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures are are imposed upon the proposed Project, nothing further is required.	☐

X Louis Morales
Planning Consultant

Signature	**Lead Agency**
Louis Morales, Contract Planner	12/16/22
Printed Name/Title	**Date**

City of Adelanto

2.0-Introduction

2.1-Purpose of the Initial Study/Mitigated Negative Declaration

An Initial Study is a preliminary analysis conducted by the City of Adelanto (City) to determine if a project may have a significant physical effect on the environment. The Initial Study also aids in determining what type of environmental document to prepare:

- **Negative Declaration**: If the initial study concludes that the project will not cause a significant effect on the environment, the city can prepare a Negative Declaration. (Pub. Res. Code § 21080(c); Guidelines § 15070 et seq. (negative declaration process).) A Negative Declaration is a written statement that an EIR is not required because a project will not have a significant adverse impact on the environment. (Pub. Res. Code §§ 21064, 21080(c).)

- **Mitigated Negative Declaration**: The City may attach conditions to a Negative Declaration for the purpose of mitigating potential environmental effects. This is referred to as a "Mitigated Negative Declaration." (Guidelines § 15070(b); Pub. Res. Code § 21064.5.) A Mitigated Negative Declaration states that revisions in the project made or agreed to by the applicant would avoid the potentially significant adverse impacts, and that there is no substantial evidence that the revised project will have a significant effect on the environment. (Pub. Res. Code § 21064.5; Guidelines § 15070(b).

- **Environmental Impact Report**: If the Initial Study determines that there are potentially significant physical effects on the environment that cannot be mitigated to a less than significant level, the city will prepare an Environmental Impact Report. Environmental Impact Reports are reports to inform the public and City decision-makers of significant environmental effects of proposed projects, identify possible ways to minimize those effects, and describe reasonable alternatives to those projects.

Based on the Initial Study prepared for the Project, it is recommended that a **Mitigated Negative Declaration** be adopted.

2.2- Environmental Impacts Requiring Mitigation

Table 2-1 lists all the Mitigation Measures contained in this ISMND document.

Table 2.1. Summary of Environmental Impacts and Mitigation Measures

Environmental Impact	Mitigation Measures (MM)
4.4 (a) Biological Resources Construction will impact 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.	**MM BIO-1. Western Joshua Tree Incidental Take Permit**. If any western Joshua trees (WJT) are to be relocated, removed, or otherwise taken, the Project Proponent shall obtain an incidental take permit (ITP) from the California Department of Fish and Wildlife (CDFW) under CDFW under §2081 of the California Endangered Species Act (CESA), prior to the relocation, removal, or take. (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of western Joshua tree, a Candidate for Threatened CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related impacts of the taking of CESA-listed species. CDFW recommends permanent protection through either the purchase of conservation or mitigation bank credits or the establishment of a conservation easement, development of a long-term management plan, and securing funding sufficient to implement management plan tasks in perpetuity. These tasks should be completed, or financial security must be provided before starting any Project activities. To execute an ITP, CDFW requires documentation of CEQA compliance. CDFW requires the CEQA document have a State Clearing House number, show proof of filing fees, and proof the document has been circulated. **MM BIO-2. Burrowing Owl Pre-Construction Survey.** Prior to any ground disturbance, pre-construction surveys for Burrowing Owls on the project site and in the surrounding area in accordance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012, shall be conducted no more than 14-days prior to the beginning of project activities, and a secondary survey must be conducted by a qualified biologist within 24 hours prior to the beginning of project construction to determine if the project site contains suitable burrowing owl or sign thereof and to avoid any potential impacts to the species. The surveys shall include 100 percent coverage of the project site. If both surveys reveal no burrowing owls are present or sign thereof, no additional actions related to this measure are required and a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to construction. If occupied active burrows or sign thereof are found within the development footprint during the pre-construction clearance survey, Mitigation Measure BIO-3 shall apply. **MM BIO-3. Burrowing Owl Avoidance/Relocation.** If active burrows or signs thereof are found within the development footprint during the pre-construction clearance surveys, site-specific non-disturbance buffer zones shall

Environmental Impact	Mitigation Measures (MM)
	be established by the qualified biologist and shall be no less than 300 feet. If determined appropriate, a smaller buffer may be established by the qualified biologist following monitoring and assessments of the Project's effects on the burrowing owls. If it is not possible to avoid active burrows, passive relocation shall be implemented if a qualified biologist has determined there are no nesting owls and/or juvenile owls are no longer dependent on the burrows. A qualified biologist, in coordination with the applicant and the City, shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW's Staff Report on Burrowing Owl Mitigation (CDFG 2012) for CDFW review/approval prior to the commencement of disturbance activities onsite and proposed mitigation for permanent loss of occupied burrow(s) and habitat consistent with the 2012 Staff Report on Burrowing Owl Mitigation. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, construction activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW. **MM BIO-4. Mojave Ground Squirrel Pre-Construction Survey.** Pre-construction surveys following the Mohave Ground Squirrel Survey Guidelines (CDFG 2010), or most recent version shall be performed by a qualified biologist authorized by a Memorandum of Understanding issued by CDFW. The pre-construction surveys shall cover the Project Area and a 50- foot buffer zone. Should Mohave ground squirrel presence be confirmed during the survey, the Project Proponent should obtain an ITP for Mohave ground squirrel prior to the start of Project activities. CDFW shall be notified if Mohave ground squirrel presence is confirmed during the pre-construction survey. If a Mohave ground squirrel is observed during Project activities, and the Project Proponent does not have an ITP, all work shall immediately stop, and the observation shall be immediately reported to CDFW. **MM BIO-5. Desert Tortoise Pre-Construction Survey**. A CDFW – approved biologist shall conduct pre-construction presence/absence surveys for desert tortoise during the desert tortoise active season (April to May or September to October) 48 hours prior to initiation of Project activities and after any pause in Project activities lasting 30 days or more. Desert tortoise preconstruction surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) 2019 desert tortoise survey methodology. Preconstruction surveys shall be completed using 100-percent visual coverage for desert tortoise and their sign and shall use perpendicular survey routes within the Project site and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project Activities cannot start until 2 negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Results of the survey shall be submitted to CDFW prior to start of Project activities. If the survey confirms desert tortoise absence, the CDFW approved biologist shall ensure desert tortoise do not enter the Project area.

Environmental Impact	Mitigation Measures (MM)
	Should desert tortoise presence be confirmed during the survey, the Project Proponent shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, the Project Proponent shall not undertake Project activities, and Project activities shall be postponed until appropriate authorization (i.e., California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Fish and Game Code section 2081) is obtained. If complete avoidance of desert tortoise is infeasible, CDFW recommends that the Project Proponent apply for a CESA ITP and prepare a site-specific Desert Tortoise Translocation Plan (Plan) that will provide details on the proposed recipient site, desert tortoise clearance surveys and relocation, definitions for Authorized Biologists and qualified desert tortoise biologists, exclusion fencing guidelines, protocols for managing desert tortoise found during active versus inactive seasons, protocols for incidental tortoise death or injury, and shall be consistent with project permits and current USFWS and CDFW guidelines. The Plan shall also include a requirement for communication and coordination with the Bureau of Land Management (BLM) regarding the desert tortoise recipient site. Prior to construction, the Plan shall be subject to the review and approval of the CDFW and the USFWS. Impacts shall be offset through acquisition of compensatory land within occupied desert tortoise habitat and/or mitigation bank credit purchase from a CDFW-approved mitigation bank mitigated at a ratio determined by CDFW after Project analysis. **MM BIO-6. Worker Environmental Awareness Training:** A qualified biologist must present a biological resource information training for desert tortoise, Mohave ground squirrel, and burrowing owl prior to project activities to all personnel that will be working within the project site. The same instruction shall be provided for any new workers prior to their performing any work on-site. Interpretation shall be provided for any non-English speaking workers. **MM BIO-7. Deceased or Injured Tortoise Within the Project Site:** USFWS and CDFW shall be informed of any injured or deceased desert tortoise (and other special-status species) found on site (verbal notice within 24-hours and written notification within 5-days). **MM BIO-8-Species Avoidance:** If during project activities a desert tortoise is discovered within the project site, all activities shall immediately stop and the CDFW- shall be immediately notified (within 24 hours). Coordination with respective State and Federal resource agencies shall be required prior to

Environmental Impact	Mitigation Measures (MM)
	restarting activities to determine appropriate avoidance, minimization, and mitigation measures. **MM BIO-9. Nesting Bird Pre-Construction Survey.** Regardless of the time of year, a pre-construction sweep shall be performed to verify absence of nesting birds. A qualified biologist shall conduct the pre-activity sweep within the Project areas (including access routes) and a 500- foot buffer surrounding the Project areas, within 2 hours prior to initiating Project activities. Additionally, a nesting bird survey shall be conducted by a qualified biologist no more than three (3) days prior to the initiation of project activities, including, but not limited to clearing, grubbing, and/or rough grading to prevent impacts to birds and their nests. The survey shall be conducted by a qualified biologist. Surveys shall include any potential habitat (including trees, shrubs, the ground, or nearby structures) that may be impacted by activities resulting in nest destruction or abandonment. If nesting bird activity is present, a no-disturbance buffer zone shall be established by the qualified biologist around each nest to prevent nest destruction or abandonment. If nesting bird activity is present, a no-disturbance buffer zone shall be established by the qualified biologist around each nest to prevent nest destruction and disruption of breeding or rearing behavior. The buffer shall be a minimum of 500 feet for raptors and 300 feet for songbirds, unless a smaller buffer is specifically determined by a qualified biologist familiar with the nesting phenology of the nesting species. The buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests, as confirmed by a qualified biologist. A qualified biologist shall inspect the active nest to determine whether construction activities are disturbing the nesting birds or nestlings. If the qualified biologist determines that construction activities pose a disturbance to nesting, construction work shall be stopped in the area of the nest and the 'no disturbance buffer' shall be expanded. If there is no nesting activity, then no further action is needed for this measure.
4.4 (d) Biological Resources Construction will conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Covered by **MM BIO-1.**Western Joshua Tree Incidental Take Permit.
4.5 (b) Cultural Resources Sub-surface archaeological resources may be encountered during ground disturbance.	**MM CR-1: Resource Discovery.** 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

Environmental Impact	Mitigation Measures (MM)
	this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) 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. **MM CR-2: Monitoring and Treatment Plan**. 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 YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
4.7 (f) Geology and Soils Sub-surface paleontological resources may be encountered during ground disturbance.	**MM PALEO-1: Inadvertent Discovery of Paleontological Resources.** If paleontological resources are encountered during implementation of the Project, (including areas impacted by off-site street improvements) ground-disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist (the "Project Paleontologist") shall be retained by the developer to make an evaluation of the find. If the resource is significant, Mitigation Measure PALEO-2 shall apply. **MM PALEO-2: Paleontological Treatment Plan.** If a significant paleontological resource(s) is discovered on the property,(including areas impacted by off-site street improvements), in consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.
4.18 (b) Tribal Cultural Resources Sub-surface tribal cultural resources may be encountered during ground disturbance.	**MM TCR-1. Contact Yuhaaviatam of San Manuel Nation.** The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) 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 resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site. **MM TCR-2: Tribal Cultural Documents.** Any and all archaeological/cultural documents created as a part of the project

Environmental Impact	Mitigation Measures (MM)
	(isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project. Note: Yuhaaviatam of San Manuel Nation realizes that there may be additional tribes claiming cultural affiliation to the area; however, Yuhaaviatam of San Manuel Nation can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.
4.19 (a) Utilities and Service Systems Construction/installation of utilities and service systems will impact Biological Resources, Cultural Resources, Paleontological Resources, and Tribal Cultural Resources.	**MM BIO-1** through **MM BIO-6**,**MM CR-1** through **CR-3**, **MM PALEO-1, MM PALEO-2** and **MM TCR -1** described above are required.

3.0-Project Description/Environmental Setting

3.1 – Project Location

The project site consists of approximately 14.51 acres on the north side of Holly Road, west of Pearmain Street and east of Jonathan Street, and is referred to as Assessor Parcel Numbers: 3128-241-09 and 14. (See Figure 3.1- *Location Map and Aerial Photo*).

3.2 -Project Description

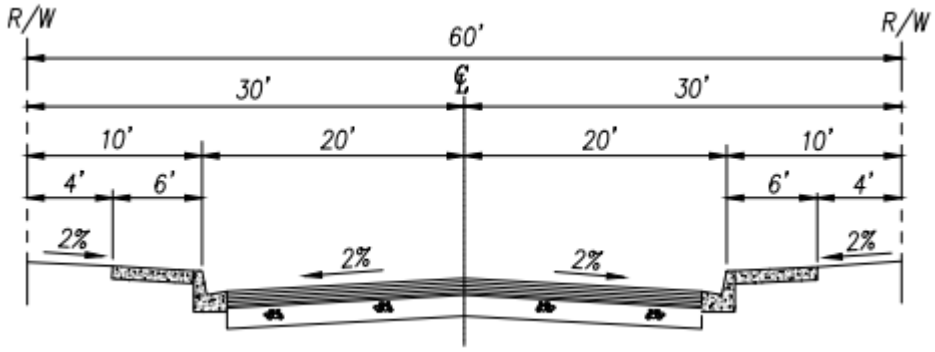
Subdivide approximately 14.51 gross acres into 83 single family residential lots with a minimum lot size of 5,000 square feet.

3.3-Proposed Improvements

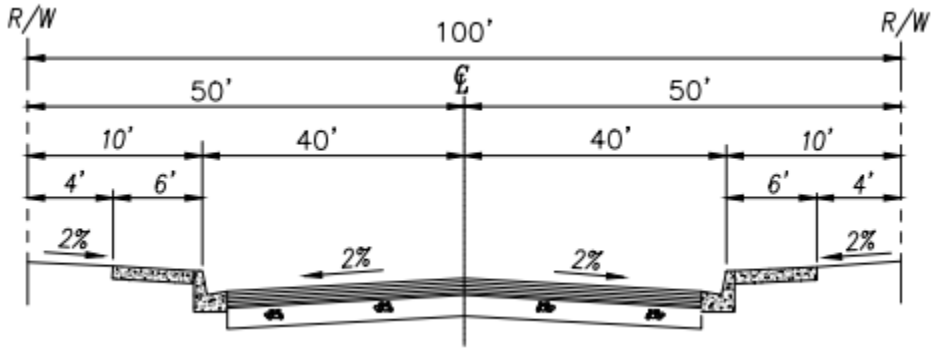
Development of the Project will impact approximately 14.1 acres of undeveloped land, currently covered with desert scrub vegetation, into a residential housing community consisting of 83 lots and one drainage area subdivided into three drainage management areas. Project activities include site preparation (ground clearing and removal of all vegetation); grading of the entire project site and installation of building footings, utility lines, and underground infrastructure, construction (construction of new houses), paving, landscaping, and finishing (paving of streets, installation of perimeter fencing, installation of landscaping, and finishing of the homes).

Street Improvements and Access (not to scale)

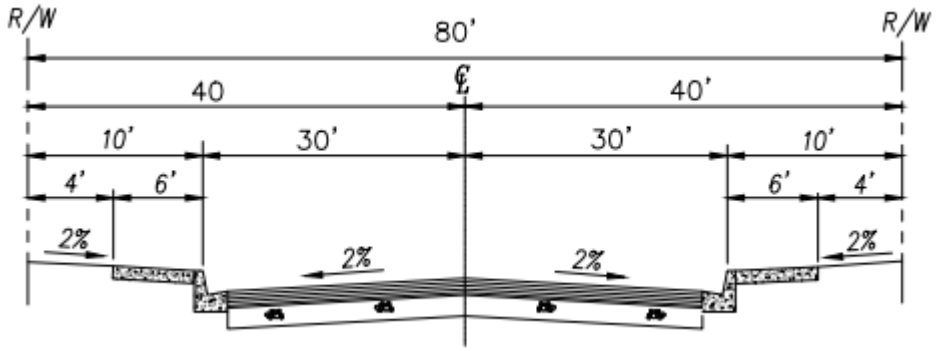
Typical Section for 60' Street ("A", "B", "D", "E", Fremont Street)



Typical Section of Holly Road



Typical Section of Jonathan Street



Water and Sewer Improvements

Water Service

The Project will connect to the existing waterline on Daisy Road.

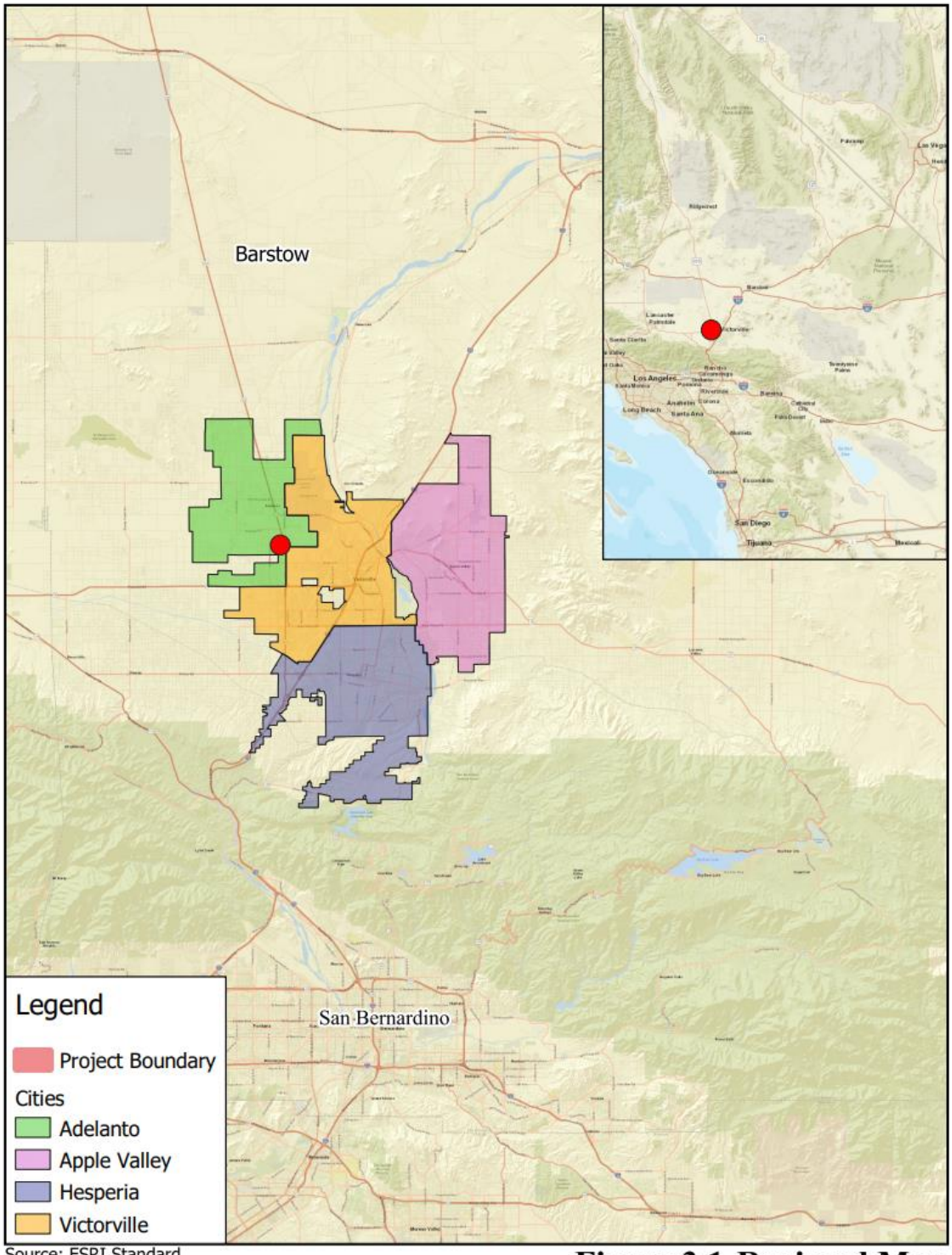
Sewer Service

The Project will connect to the existing 15-inch diameter sewer line in Holly Road.

Storm Drainage Improvements

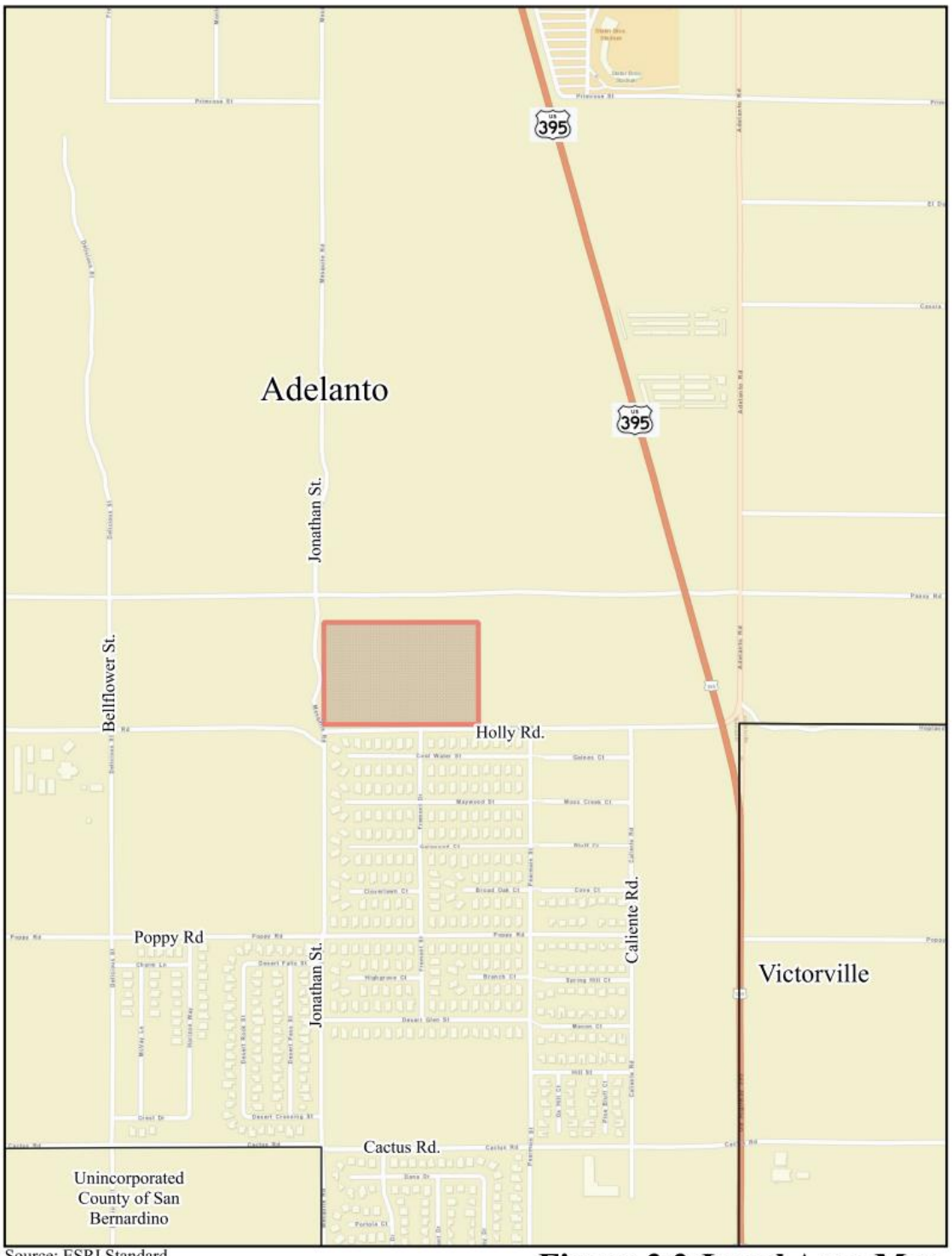
The streets, gutters and storm water pipes will direct flows to a retention basin that will contain the total retention volume required to release 90% of the pre-developed storm flows downstream.

(Refer to Figure 3.4 - Tentative Tract Map No. 20514).



Source: ESRI Standard

Figure 3.1-Regional Map
TTM 20514



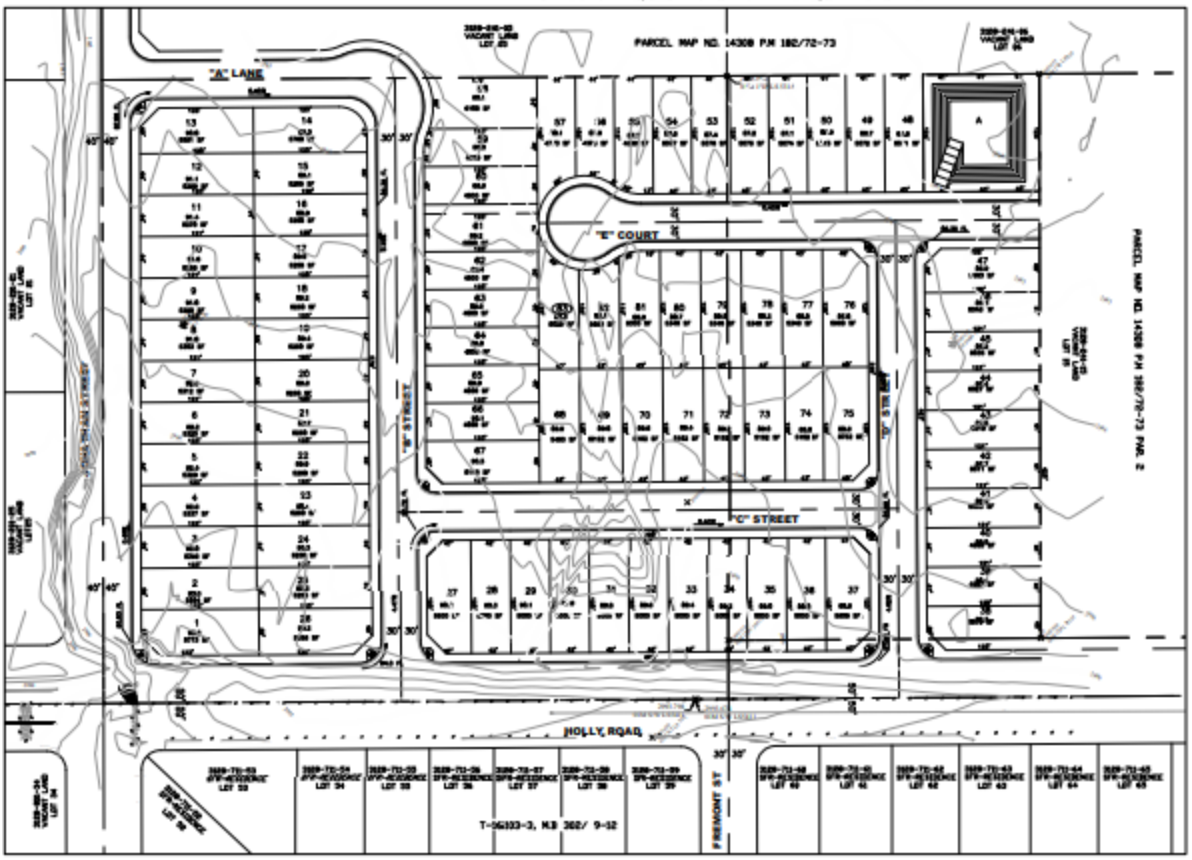
Source: ESRI Standard

Figure 3.2-Local Area Map
TTM 20514

Source: Bing Satellite

Figure 3.3 -Aerial View
TTM 20514

Figure 3.4 - Tentative Tract Map No. 20514



3.4- Construction and Operational Characteristics

Construction Schedule

Construction was estimated for a 380-day construction schedule, which includes site preparation, grading, building construction, paving, and architectural coating. Construction equipment and staging are to occur on-site, and construction vehicle access is planned along Holly Road and Jonathan Street.

Operational Characteristics

The proposed Project would operate as a residential community. Typical operational characteristics would include residents and visitors traveling to and from the site, leisure and maintenance activities occurring on individual residential lots and in the on-site recreational facilities and general maintenance of common areas. Low levels of noise and a moderate level of artificial exterior lighting typical of a residential community is expected.

3.5-Environmental Setting

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "…the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is comme-nced…" (CEQA Guidelines §15125[a]). Because a Notice of Preparation was not required, the environmental setting for the Project is **April 2022**, which is the date that the Project's environmental analysis commenced.

Onsite and adjacent land uses, General Plan land use designations, and zoning classifications are shown in Table 3.1.

Table 3.1: Land Uses, General Plan Land Use Designations, and Zoning Classifications

Location	Current Land Use	General Plan Land Use/Zoning Designations
Site	Vacant land	Medium Density Residential (R-M12)
North	Vacant land	Medium Density Residential (R-M12)
South	Residential development	Medium Density residential (R-M12)
East	Vacant land	Medium Density Residential (R-M12)
West	Vacant land	Medium Density Residential (R-M12)

Source: Field inspection, City of Adelanto -General Plan Land Use & Zoning District Map, March 2022, Google Earth Pro.

4.0-Environmental Analysis

The Project is evaluated based on its potential effect on twenty-one (21) environmental topics. Each of the above environmental topics are analyzed by responding to a series of questions pertaining to the impact of the Project on the topic. Based on the results of the Impact Analysis, the effects of the Project are then placed in one of the following four categories, which are each followed by a summary to substantiate the factual reasons why the impact was placed in a certain category.

Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Significant or potentially significant impact(s) have been identified or anticipated that cannot be mitigated to a level of insignificance. An Environmental Impact Report must therefore be prepared.	Potentially significant impact(s) have been identified or anticipated, but mitigation is possible to reduce impact(s) to a less than significant category. Mitigation measures must then be identified.	No "significant" impact(s) identified or anticipated. Therefore, no mitigation is necessary.	No impact(s) identified or anticipated. Therefore, no mitigation is necessary.

4.1 Aesthetics

Threshold 4.1 (a). Would the Project (Except as	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Have a substantial adverse effect on a scenic vista?			✓	

Impact Analysis

A scenic vista is defined as a publicly accessible vantage point that provides expansive views of a highly valued landscape. The City of Adelanto General Plan identifies scenic vistas within the city[1]. Landforms or features that constitute a scenic vista in Adelanto include the Shadow Hills, located approximately six (6) miles to the north of the Project site and the Mojave River, located approximately eight (8) miles east of the Project site. Impacts to scenic vistas are analyzed from points or corridors that are accessible to the public and that provide a view of a scenic vista. Potential public views and vantage points from the Project site to the Shadow Hills and Mojave

[1] City of Adelanto General Plan, Chapter 7, Conservation and Open Space Element.

River would be from the public-rights- of way of Holly Road, and Jonathan Street, and the internal public streets serving the Project.

Structures within a viewer's line of sight of a scenic vista may interfere with a public view of a scenic vista, either by physically blocking or screening the scenic vista from view, or by impeding or blocking access to a formerly available viewing position. Those viewers may see the scenic areas prior to development; but would have those views blocked post development. Because of distance to the Shadow Hills and Mojave River and intervening development, public views of these scenic vistas would not be blocked by the Project.

In addition, as required by Adelanto Zoning Ordinance §17.20.030, Table 20-1, the maximum lot coverage is 60%, and there are required building setbacks for the front, rear, and side lot lines which will serve to create space between structures. As such, the proposed structures would not block or completely obstruct views from surrounding public vantage to the Shadow Hills. The Mojave River in not visible from the Project Site because of the flat topography and because it is eight (8) miles east. Impacts are less than significant, and no mitigation measures are required.

Threshold 4.1 (b). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓

Impact Analysis

According to the California Department of Transportation, the Project site is not located within a State scenic highway[2]. As such, there is no impact.

[2]California Department of Transportation, State Scenic Highway Program, https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways, accessed June 9, 2022.

Threshold 4.1 (c). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
If located in an Urbanized Area, conflict with applicable zoning and other regulations governing scenic quality?			✓	

Impact Analysis

According to US Census Bureau, Adelanto is located within the Victorville-Hesperia, CA Urbanized Area[3]. As such, the Project is subject to the City's applicable regulations governing scenic quality.[4] After the recordation of the Final Tentative Tract Map, single family residences can be constructed at a future date. The Community Design Element of the General Plan sets forth the characteristics that should be incorporated into the design of single family detached residential housing units. General Plan Section H.2, *Design Regulation and Review*, requires development plans (which include architectural design, site plans, and landscaping) be reviewed and evaluated to determine compliance with the objectives and specific requirements of the General Plan *Community Design Element* and Title 17, *Adelanto Zoning Ordinance*.

As required by §17.15.040, *Single-Family Residential Design Standards* of the Zoning Ordinance, construction of the proposed single-family detached residential housing units are required to demonstrate compliance with the following salient regulations governing scenic quality:

- Site Character - Existing natural amenities (views, mature trees, and/or topographic features) and other amenities (structures of architectural significance and cultural resources) unique to the site shall be preserved and incorporated into the project's design whenever possible.

- Variation of Development Patterns - Variation of development patterns shall be incorporated in new subdivisions to achieve visual diversity and avoid a monotonous appearance by use of at least one (1) of the following options
  - Vary the front yard setback which will create different patterns of open space along the street edge.
  - Vary the side setbacks of houses while maintaining fifteen feet (15') between adjacent structures to result in different types of yards and private patio areas and to create variety and interest.

[3] United States Census Bureau, 2010 Census Urban Area Reference Maps, https://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua90541_victorville--hesperia_ca/DC10UA90541_001.pdf Accessed June 9, 2022.

[4] City of Adelanto General Plan, page XI-4.

- Vary garage location to include the face of garages set more forward and deeper on a lot. Variations can also include front or side entry and attached and detached garages.

□ Landscaping - A residential subdivision's landscaping shall be used to frame, soften, and embellish the quality of the residential environment, to buffer units from noise or undesirable views,

□ Walls/Fences - Walls shall be designed to complement the architectural design of the homes within the neighborhood.

□ Architectural Standards - Residential structures should consider compatibility with surrounding character, including building style, form, size, color, material, and roof line.

Mandatory compliance with the above-described provisions of the General Plan and Zoning Ordinance ensures that the Project will not conflict with regulations governing scenic quality.

Threshold 4.1 (d). Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			✓	

Outdoor Lighting and Glare

The Project would increase the amount of light in the area above what is being generated by the vacant site by directly adding new sources of illumination including security and decorative lighting for the proposed structures. All outdoor lighting is required to be designed and installed to comply with §17.90.040- *Lighting,* of the Zoning Ordinance[5] which stipulates:

"Except for residential light fixtures using less than a 75-watt bulb, the following shall apply to all outdoor lighting fixtures:

(a) All on-site lighting shall be energy efficient, stationary, and directed away from adjoining properties and public rights-of-way.

(b) Light fixtures shall be shielded so no light is emitted above the horizontal plane of the bottom of the light fixture.

[5] Zoning Ordinance.

(c) Light fixtures shall be shielded so no light above 0.5 footcandle spills over onto adjacent properties and rights-of-way. There shall be no spillover (0.0 footcandle) onto adjacent residential used or zoned properties"

Building Material Glare

§17.20.040 (b) of the Zoning Ordinance requires siding material to consist of stucco, wood, brick, stone, or decorative concrete block which are non-reflective materials which do not result in glare. Windows in single family residential housing units are not of the size and scale where a large expanse of glass surface area will produce glare. In addition, single family homes typically have window coverings (shades, blinds etc. that reduce impacts from interior and exterior glare. Compliance with the above referenced Zoning Ordinance requirements will ensure that the Project will not adversely affect day or nighttime views in the area.

4.2 Agriculture and Forestry Resources

Threshold 4.2 (a) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program.[6] As such, the development of the Project will not convert any type of farmland to a non-agricultural use.

Threshold 4.2 (b) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with existing zoning for agricultural use, or a Williamson Act contract?			✓	

Impact Analysis

Agricultural Zoning

The current zoning classification for the site is Medium Density Residential (R-M12). The R-M12 zone district permits a variety of residential development types, including single-family attached townhouses, two-story townhouses, condominiums, and low-density garden apartments. Densities may range up to twelve (12) units per gross acre. The R-M12 zone is not intended for agricultural use. Minimum lot size is 3,500 square feet. Development at this density requires full urban levels of service and public improvements.

[6] https://databasin.org/maps/new/#datasets=b83ea1952fea44ac9fc62c60dd57fe48,accessed on June 9, 2022.

Williamson Act

A Williamson Act Contract enables private landowners to voluntarily enter contracts with local governments for the purpose of establishing agricultural preserves. The Project site is not under a Williamson Act Contract.[7]

Threshold 4.2 (c) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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))?				✓

Impact Analysis

California Public Resources Code §12220(g) defines forest land as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

§4526 of the Code defines timberland as land, other than land owned by the federal government or land designated by the state as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.

The Project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the Project site. Because no land within the Project site is currently zoned or proposed for forestland or timberland, there is no potential to impact such zoning.

Threshold 4.2 (d) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in the loss of forest land or conversion of forest land to non-forest use?				✓

[7] https://sbcountyarc.org/wp-content/uploads/arcforms/NPP874-WilliamsonActParcels.pdf, accessed June 9, 2022.

Impact Analysis

As noted in the response to Threshold 4.2(c) above, the Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the *General Plan*. Because forest land is not present within the Project site or in the immediate vicinity of the site, the Project has no potential to result in the loss of forest land or the conversion of forest land to a non-forest use.

Threshold 4.2 (e) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				✓

Impact Analysis

As noted under Threshold 4.2 (a), the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. In addition, the site is not under agricultural production and there is no land being used primarily for agricultural purposes on or in the vicinity of the site.

4.3 Air Quality

The following analysis is based in part on the following:

- *Air Quality/GHG Assessment.* EPC Environmental Inc., dated August 16, 2022, included as Appendix A to this Initial Study.

- MDAQMD *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, February 2020,* available at: https://www.mdaqmd.ca.gov/rules/overview.

Air Quality Setting

Topography and Climate

The Project site is located within the Mojave Desert portion of the Mojave Desert Air Basin (MDAB) is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel's by the Cajon Pass (4,200 ft). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley). The MDAB is classified as a dry-hot desert (BWh), with portions classified as dry-very hot desert (BWhh), to indicate at least three months have maximum average temperatures over 100.4° F.[8]

Air Pollutants and Health Effects

Air Pollutants are the amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation and/or materials. The Air Pollutants regulated by the MDAQMD that are applicable to the Project are described below.[9]

Carbon Monoxide (CO). A colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. Carbon monoxide is harmful when breathed because it displaces oxygen in the blood and deprives the heart, brain, and other vital organs of oxygen.

Nitrogen Dioxide NOx). Nitrogen dioxide (NO2) is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO2, creating a mixture of NO and NO2 commonly called NOx. NOx can irritate the eyes, nose, throat, and lungs, possibly leading to coughing, shortness of breath, tiredness, and nausea.

Particulate Matter ($PM_{2.5}$ and PM_{10}): One type of particulate matter is the soot seen in vehicle exhaust. Fine particles — less than one-tenth the diameter of a human hair — pose a serious threat to human health, as they can penetrate deep into the lungs. PM can be a primary pollutant

[8] MDAQMD CEQA Guidelines, February 2020, Page 6-7.
[9] http://www.aqmd.gov/home/air-quality

or a secondary pollutant from hydrocarbons, nitrogen oxides, and sulfur dioxides. Diesel exhaust is a major contributor to PM pollution.

Sulfur Dioxide (SO_2). A strong-smelling, colorless gas that is formed by the combustion of fossil fuels. Power plants, which may use coal or oil high in sulfur content, can be major sources of SO_2. Sulfur dioxide irritates the skin and mucous membranes of the eyes, nose, throat, and lungs.

Ozone: Ozone is formed when several gaseous pollutants react in the presence of sunlight. Most of these gases are emitted from vehicle tailpipe emissions. Ozone can reduce lung function and worsen bronchitis, emphysema, and asthma.

Volatile Organic Compounds (VOCs): VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor, and some examples include gasoline, alcohol and the solvents used in paints. Health effects may include eye, nose and throat irritation, headaches, loss of coordination, and nausea.

Non-attainment Designations and Classification Status

The United States Environmental Protection Agency and the California Air Resources Board have designated portions of the district non-attainment for a variety of pollutants. An "attainment" designation for an area signifies that criteria pollutant concentrations did not exceed the established standard. In contrast to attainment, a "nonattainment" designation indicates that a criteria pollutant concentration has exceeded the established standard. Table 4.3-2 shows the attainment status of criteria pollutants in the MDAB.

Table 4.3-1- Attainment Status of Criteria Pollutants in the Mojave Desert Air Basin

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	No Standard
Ozone – 8-hour standard	Nonattainment	Attainment
Respirable Particulate Matter (PM_{10})	Nonattainment	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Unclassified	Attainment
Carbon Monoxide (CO)	Attainment	Unclassified/Attainment
Nitrogen Dioxide (N0x)	Attainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Unclassified /Attainment	Unclassified/Attainment
Lead	Attainment	Attainment

Source: California Air Resources Board, 2015.

As shown in Table 4.3-1 above, the MDAB is classified as Nonattainment for Ozone – 1-hour standard, Ozone – 8-hour standard, Respirable Particulate Matter (PM_{10}) and Fine Particulate Matter ($PM_{2.5}$)

Threshold 4.3 (a). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with or obstruct implementation of the applicable air quality plan?			✓	

Impact Analysis

The following analysis is consistent with the preferred analysis approach recommended by the MDAQMD *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines.*

Conformity with Air Quality Management Plans

The Project is located within the Mojave Desert Air Basin and under the jurisdiction of the Mojave Desert Air Quality Management District. Under the Federal Clean Air Act the Mojave Desert Air Quality Management District has adopted a variety of attainment plans (i.e., "Air Quality Management Plans") for a variety of non-attainment pollutants. A complete list of the various air quality management plans is available from the Mojave Desert Air Quality Management District located at 14306 Park Avenue, Victorville, CA 92392 or on their website at: https://www.mdaqmd.ca.gov/rules/overview.

The Mojave Desert Air Quality Management District is responsible for maintaining and ensuring compliance with the various Air Quality Management Plans. Conformity is determined based on the following criteria:

- A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project may also be non-conforming if it increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan).

- A project is conforming if it complies with all applicable Mojave Desert Air Quality Management District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan).

Consistency with Emission Thresholds

As shown in Tables 4.3.3 and 4.3.4 below, the Project would not exceed Mojave Desert Air Quality Management District significance thresholds for any criteria pollutant during construction or during long-term operation. Accordingly, the Project's air quality emissions are less than significant.

Consistency with Control Measures

The construction contractors are required to comply with rules, regulations, and control measures to control fugitive dust from grading (Rule 403) and the application of architectural coatings during building construction (Rule 1113).

Consistency with Growth Forecasts

The Project site is currently designated as Medium Density Residential (R-M12) by the General Plan Land Use & Zoning Map. The R-M12 zone district is intended for the development of single-family detached housing at a density of up to twelve (12) units per gross acre. Development at this density requires full urban levels of service and public improvements. The R-M12 land use designation was the land use designation that was used by the MDAQMD to generate the growth forecasts for the air quality plans referenced above.

Threshold 4.3 (b). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The following provides an analysis based on the applicable regional significance thresholds established by the Mojave Desert Air Quality Management District to meet national and state air quality standards.

Table 4.3.2. MDAQMD Air Quality Significance Thresholds

Pollutant	Daily Emissions (pounds/day)
Carbon Monoxide (CO)	548
Oxides of Nitrogen (NOx)	137
Volatile Organic Compounds (VOC)	137
Oxides of Sulphur (SOx)	137
Particulate Matter (PM10)	82
Particulate Matter (PM 2.5)	82

Source: MDAQMD CEQA Guidelines, February 2020, Table 6.

Both construction and operational emissions for the Project were estimated based on a worst-case scenario of 83 dwelling units by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model is authorized for use by the Mojave Desert Air Quality Management District.

Construction Emissions

Construction of the Project is assumed to begin in the year 2022 and last approximately 380 days. Construction phases are assumed to consist of site preparation, grading, building construction, paving and architectural coating. The Project is expected to be operational in the year 2024. Construction phases are not expected to overlap. Construction activities produce combustion emissions from various sources (utility engines, tenant improvements, and motor vehicles transporting the construction crew). Exhaust emissions from construction activities envisioned on site would vary daily as construction activity levels change. The Project will be required to comply with several standard fugitive dust control measures, per MDAQMD Rule 403. The following measures were factored into CalEEMod and are based upon data provided from MDAQMD:

- Utilize soil stabilizers - 30% PM_{10} and $PM_{2.5}$ reduction.
- Replace ground cover - 15% PM_{10} and $PM_{2.5}$ reduction.
- Water exposed areas 2x per day.

Daily construction emissions based on the above-described parameters are shown in Table 4.3.3 below.

Table 4.3-3. Construction Emissions

Maximum Daily Emissions	Emissions (pounds per day)					
	NOx	ROG	CO	SOx	PM10	PM2.5
	38.89	47.37	29.66	0.06	21.42	11.63
Regional Threshold	**100**	**75**	**550**	**150**	**150**	**55**
Exceeds Regional Threshold?	NO	NO	NO	NO	NO	NO

Source: MDAQMD and CalEEMod 2020.4.0

Operational Emissions

The Project would be operated as a residential subdivision. Typical operational characteristics include residents and visitors traveling to and from the site, delivery of goods and services to the residents, and maintenance activities. Table 4.3-3 shows the Mojave Desert Air Quality Management District thresholds for operational emissions compared to the Project's maximum daily emissions

Table 4.3.4. Operational Emissions

Maximum Daily Emissions	Emissions (pounds per day)					
	NOx	ROG	CO	SOx	PM10	PM2.5
	4.13	6.48	30.10	0.05	4.90	1.40
Regional Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Regional Threshold?	NO	NO	NO	NO	NO	NO

Source: MDAQMD and CalEEMod 2020.4.0

As shown in Table 4.3.4 above, both construction and operational-related emissions would not exceed Mojave Desert Air Quality Management District thresholds. Accordingly, the Project would not emit substantial concentrations of these pollutants during operation and would not contribute to an existing or projected air quality violation, on a direct or cumulative basis. As such, impacts are less than significant, and no mitigation measures are required.

Threshold 4.3 (d). Would the Project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Expose sensitive receptors to substantial pollutant concentrations?				✓

Impact Analysis

The Project is a residential subdivision and does not produce toxic air emissions such as those generated by industrial manufacturing uses or uses that generate heavy-duty diesel truck emissions. According to the MDAQMD, residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses. The nearest sensitive receptors are the residential neighborhood located adjacent to the Project site to the south approximately 150 feet.

The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated:

- □ 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; and,
- □ A gasoline dispensing facility within 300 feet.

The Project is a proposal to construct 83 single-family units. The Project does not meet the criteria listed above. As such, no impact will occur.

Threshold 4.3 (d). Would the Project	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

Impact Analysis

Potential odor sources associated with the Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's long-term operational uses.

The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

4.4 Biological Resources

The analysis in this section is based in part on the following technical reports*:*

- *General Biological Resources Assessment: RCA Associates, Inc.*, January 5, 2022, included as Appendix B to this Initial Study.
- *Protected Plant Preservation Plan: RCA Associates, Inc., March 21, 2022, included as Appendix C to this Initial Study.*

Threshold 4.4 (a) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		

Impact Analysis

As part of the environmental Process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on January 4, 2022 and March 29, 2022, during which the biological resources on the site and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property and adjoining areas were evaluated for the presence of native habitats which may support populations of sensitive wildlife and plant species. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas. Habitat assessments were also conducted for the Desert Tortoise, burrowing owl, and Mohave ground squirrel based on data from USFWS, CDFW, and a search of the California Natural Diversity Database.

Plant Species

The site supports a slightly disturbed desert scrub plant community which covers the property. Species present on the site included kelch grass, creosote bush, Asian mustard, Western Joshua Tree, Nevada jointfir, and fiddleneck. Only the Joshua tree is considered a sensitive species as further discussed below.

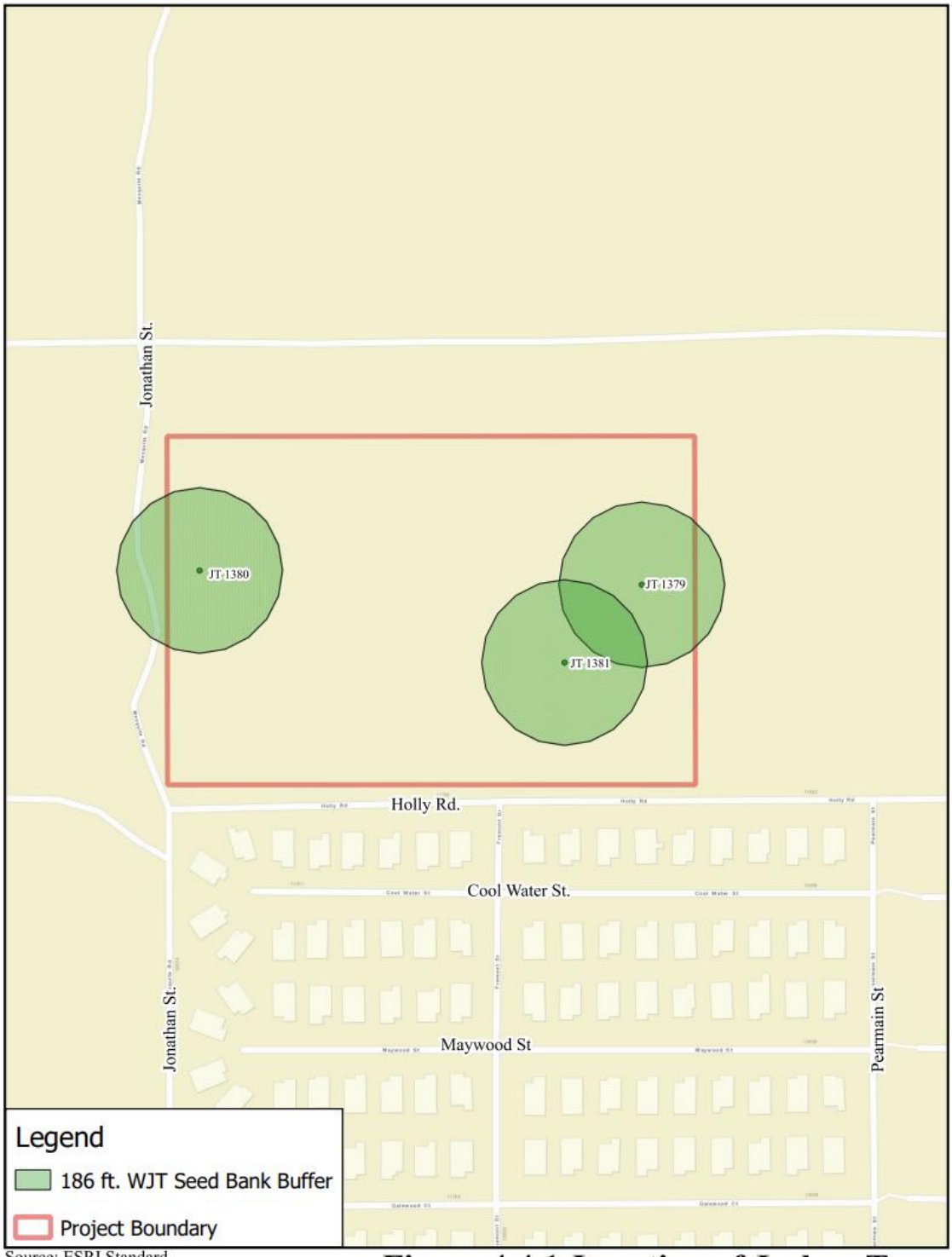
Western Joshua Trees

Western Joshua tree became a candidate species under the California Endangered Species Act (CESA), effective October 9, 2020. The CESA prohibits the take and possession of any species, or any part or product of a species that is designated by the California Fish and Game Commission as an endangered, threatened, or candidate species. As a candidate species, western Joshua tree now has full protection under CESA, and any take of the species (including removal of western Joshua tree or similar actions) will require authorization under CESA.

At its October 12-13, 2022, meeting, regarding whether to list western Joshua tree as threatened or endangered under the California Endangered Species Act (CESA), the Commission continued the agenda item to its February 2023 meeting, keeping the public record open for the specific purpose of continued input from tribal governments. Importantly, the western Joshua tree will remain protected by CESA during this period.

A Joshua Tree Survey was performed in March 2022 as part of the Protected Plant Preservation Plan (Appendix C of this Initial Study). GPS locations are provided in the report and each tree was evaluated based on various criteria such as height, health, leaning, clonal, and age class. Figure 4.4.1, Locations of Western Joshua Trees, shows the dispersal of 3 WJT's on the Project site. The CDFW requires an impact analysis to assess potential impacts to WJT within a 186-foot buffer zone of each WJT individual, the WJT seed bank, and indirect impacts to WJT. Indirect impacts to WJT include the destruction of the yucca moth, WJT's obligate pollinator, during its dormant and flight phases, which would thereby impact the ability of WJT to sexually recruit new individuals. It should also be noted that the destruction or modification of WJT habitat could eliminate critical nurse plants for WJT seedling survival and disrupt the seed dispersal behavior of rodents; the primary way that WJT seeds are buried deep enough for successful seed germination.

As shown on Figure 4.4.1,*Locations of Joshua Trees,* development of the Project will result in impacts to every WJT on the site when considering a 186-foot buffer zone for each WJT and the size of the Project site being 14.5 acres.



Source: ESRI Standard

Figure 4.4.1-Location of Joshua Trees
TTM 20514

Total WJT Seed Bank Buffer Acerage: 6.8 acres

As shown on Figure 4.4.1, *Location of Joshua Trees, ,* preservation or relocation on-site is not a viable option and would essentially prevent development of the site as envisioned under the City's General Plan. Therefore, Mitigation Measure BIO-1 is recommended.

***Mitigation Measure BIO-1. Western Joshua Tree Incidental Take Permit**. If any western Joshua trees (WJT) are to be relocated, removed, or otherwise taken, the Project Proponent shall obtain an incidental take permit (ITP) from the California Department of Fish and Wildlife (CDFW) under CDFW under §2081 of the California Endangered Species Act (CESA), prior to the relocation, removal, or take. (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of western Joshua tree, a Candidate for Threatened CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate project-related impacts of the taking of CESA-listed species. CDFW recommends permanent protection through either the purchase of conservation or mitigation bank credits or the establishment of a conservation easement, development of a long-term management plan, and securing funding sufficient to implement management plan tasks in perpetuity. These tasks should be completed, or financial security must be provided before starting any Project activities. To execute an ITP, CDFW requires documentation of CEQA compliance. CDFW requires the CEQA document have a State Clearing House number, show proof of filing fees, and proof the document has been circulated.*

Wildlife Species

Birds observed included ravens, house sparrow, rock pigeon, California gull, and house finch. Other species that may occur on site or in the surrounding area include rock pigeon, Anna's hummingbird, Say's phoebe, red-tailed hawk, horned larks, and European starling. No reptiles were observed on the property most likely due to current weather conditions but some species that may occur on site include the common side-blotched lizard, desert spiny lizard, and western whiptail lizard. Only one mammal was observed on site, the black-tailed jackrabbit, although California ground squirrel, desert cottontail, antelope ground squirrel, and Merriam's kangaroo rats may also occur on the site given their wide-spread distribution in the region. No distinct wildlife corridors were identified on the site or in the immediate area.

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB) search was performed. Based on this review, it was determined that five special status species have been documented within the Adelanto quad of the property. The following tables provide data on each special status species which has been documented in the area. Table 4.4.1. *Presence of Candidate, Sensitive, or Special Status Wildlife Species*, provides a summary of all wildlife species that may be in the Project area.

Table 4.4.1. Presence of Candidate, Sensitive, or Special Status Wildlife Species

Species	Status	Presence/Absence
Desert Tortoise	Federal: Threatened State: Threatened	**Not Present:** The site is located within the known distribution of the species. An evaluation of the area and property was conducted, and no tortoises or suitable habitat was observed.
Mohave Ground Squirrel	Federal: None State: Threatened	**Not Present:** Site supports marginal habitat for the species. Species is not expected to observations occur on the site.
Swainsain's Hawk	Federal: None State: Threatened	**Not Present.** There is no habitat that the supports the species.
Le Conte's thrasher	Federal: None State: None CDFW: Species of Special Concern	**Not Present**. Site does support suitable habitat for the species. Surveys conducted on site did not identify any thrashers.
Burrowing Owl	Federal: None State: None CDFW: Species of Special Concern	**Not Present/Future Presence Possible.** The site does support suitable habitat for the species; however, no owls or owl sign, or suitable burrows were observed during field surveys.

Wildlife Species Mitigation Measures

Although wildlife 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 were not detected on-site, the site is located within the range of the Burrowing Owl, Mojave Ground Squirrel, Desert Tortoise, and Nesting Birds. Therefore, the following mitigation measures have been included to ensure any impacts are less than significant to these species.

Mitigation Measure BIO-2. Burrowing Owl Pre-Construction Survey. *Prior to any ground disturbance, pre-construction surveys for Burrowing Owls on the project site and in the surrounding area in accordance with the Staff Report on Burrowing Owl Mitigation, State of California Natural Resource Agency, Department of Fish and Game, May 7, 2012, shall be conducted no more than 14-days prior to the beginning of project activities, and a secondary survey must be conducted by a qualified biologist within 24 hours prior to the beginning of project construction to determine if the project site contains suitable burrowing owl or sign thereof and to avoid any potential impacts to the species. The surveys shall include 100 percent coverage of the project site. If both surveys reveal no burrowing owls are present or sign thereof, no additional actions related to this measure are required and a letter shall be prepared by the qualified biologist documenting the results of the survey. The letter shall be submitted to CDFW prior to*

construction. If occupied active burrows or sign thereof are found within the development footprint during the pre-construction clearance survey, Mitigation Measure BIO-3 shall apply.

Mitigation Measure BIO-3. Burrowing Owl Avoidance/Relocation. *If active burrows or signs thereof are found within the development footprint during the pre-construction clearance surveys, site-specific non-disturbance buffer zones shall be established by the qualified biologist and shall be no less than 300 feet. If determined appropriate, a smaller buffer may be established by the qualified biologist following monitoring and assessments of the Project's effects on the burrowing owls. If it is not possible to avoid active burrows, passive relocation shall be implemented if a qualified biologist has determined there are no nesting owls and/or juvenile owls are no longer dependent on the burrows. A qualified biologist, in coordination with the applicant and the City, shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW's Staff Report on Burrowing Owl Mitigation (CDFG 2012) for CDFW review/approval prior to the commencement of disturbance activities onsite and proposed mitigation for permanent loss of occupied burrow(s) and habitat consistent with the 2012 Staff Report on Burrowing Owl Mitigation. When a qualified biologist determines that burrowing owls are no longer occupying the Project site and passive relocation is complete, construction activities may begin. A final letter report shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.*

Mitigation Measure BIO-4. Mojave Ground Squirrel Pre-Construction Survey. *Pre-construction surveys following the Mohave Ground Squirrel Survey Guidelines (CDFG 2010), or most recent version shall be performed by a qualified biologist authorized by a Memorandum of Understanding issued by CDFW. The pre-construction surveys shall cover the Project Area and a 50- foot buffer zone. Should Mohave ground squirrel presence be confirmed during the survey, the Project Proponent should obtain an ITP for Mohave ground squirrel prior to the start of Project activities. CDFW shall be notified if Mohave ground squirrel presence is confirmed during the pre-construction survey. If a Mohave ground squirrel is observed during Project activities, and the Project Proponent does not have an ITP, all work shall immediately stop, and the observation shall be immediately reported to CDFW.*

Mitigation Measure BIO-5. Desert Tortoise Pre-Construction Survey. A CDFW – approved biologist shall conduct pre-construction presence/absence surveys for desert tortoise during the desert tortoise active season (April to May or September to October) 48 hours prior to initiation of Project activities and after any pause in Project activities lasting 30 days or more. Desert tortoise preconstruction surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service (USFWS) 2019 desert tortoise survey methodology. Preconstruction surveys shall be completed using 100-percent visual coverage for desert tortoise and their sign and shall use perpendicular survey routes within the Project site and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project Activities cannot start until 2 negative results from consecutive surveys using perpendicular survey routes for desert tortoise are documented.

Results of the survey shall be submitted to CDFW prior to start of Project activities. If the survey confirms desert tortoise absence, the CDFW approved biologist shall ensure desert tortoise do not enter the Project area.

Should desert tortoise presence be confirmed during the survey, the Project Proponent shall submit to CDFW for review and approval a desert tortoise specific avoidance plan detailing the protective avoidance measures to be implemented to ensure complete avoidance of take (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") to desert tortoise. If complete avoidance of desert tortoise cannot be achieved, the Project Proponent shall not undertake Project activities, and Project activities shall be postponed until appropriate authorization (i.e., California Endangered Species Act (CESA) Incidental Take Permit (ITP) under Fish and Game Code section 2081) is obtained.

If complete avoidance of desert tortoise is infeasible, CDFW recommends that the Project Proponent apply for a CESA ITP and prepare a site-specific Desert Tortoise Translocation Plan (Plan) that will provide details on the proposed recipient site, desert tortoise clearance surveys and relocation, definitions for Authorized Biologists and qualified desert tortoise biologists, exclusion fencing guidelines, protocols for managing desert tortoise found during active versus inactive seasons, protocols for incidental tortoise death or injury, and shall be consistent with project permits and current USFWS and CDFW guidelines. The Plan shall also include a requirement for communication and coordination with the Bureau of Land Management (BLM) regarding the desert tortoise recipient site.

Prior to construction, the Plan shall be subject to the review and approval of the CDFW and the USFWS. Impacts shall be offset through acquisition of compensatory land within occupied desert tortoise habitat and/or mitigation bank credit purchase from a CDFW-approved mitigation bank mitigated at a ratio determined by CDFW after Project analysis.

Mitigation Measure BIO-6. Worker Environmental Awareness Training: A qualified biologist must present a biological resource information training for desert tortoise, Mohave ground squirrel, and burrowing owl prior to project activities to all personnel that will be working within the project site. The same instruction shall be provided for any new workers prior to their performing any work on-site. Interpretation shall be provided for any non-English speaking workers.

Mitigation Measure BIO-7. Deceased or Injured Tortoise Within the Project Site: USFWS and CDFW shall be informed of any injured or deceased desert tortoise (and other special-status species) found on site (verbal notice within 24-hours and written notification within 5-days).

Mitigation Measure BIO-8-Species Avoidance: If during project activities a desert tortoise is discovered within the project site, all activities shall immediately stop and the CDFW- shall be immediately notified (within 24 hours). Coordination with respective State and Federal resource

agencies shall be required prior to restarting activities to determine appropriate avoidance, minimization, and mitigation measures.

Mitigation Measure BIO-9. Nesting Bird Pre-Construction Survey. *Regardless of the time of year, a pre-construction sweep shall be performed to verify absence of nesting birds. A qualified biologist shall conduct the pre-activity sweep within the Project areas (including access routes) and a 500- foot buffer surrounding the Project areas, within 2 hours prior to initiating Project activities. Additionally, a nesting bird survey shall be conducted by a qualified biologist no more than three (3) days prior to the initiation of project activities, including, but not limited to clearing, grubbing, and/or rough grading to prevent impacts to birds and their nests.*

The survey shall be conducted by a qualified biologist. Surveys shall include any potential habitat (including trees, shrubs, the ground, or nearby structures) that may be impacted by activities resulting in nest destruction or abandonment. If nesting bird activity is present, a no-disturbance buffer zone shall be established by the qualified biologist around each nest to prevent nest destruction or abandonment. If nesting bird activity is present, a no-disturbance buffer zone shall be established by the qualified biologist around each nest to prevent nest destruction and disruption of breeding or rearing behavior. The buffer shall be a minimum of 500 feet for raptors and 300 feet for songbirds, unless a smaller buffer is specifically determined by a qualified biologist familiar with the nesting phenology of the nesting species. The buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests, as confirmed by a qualified biologist. A qualified biologist shall inspect the active nest to determine whether construction activities are disturbing the nesting birds or nestlings. If the qualified biologist determines that construction activities pose a disturbance to nesting, construction work shall be stopped in the area of the nest and the 'no disturbance buffer' shall be expanded. If there is no nesting activity, then no further action is needed for this measure.

With the implementation of Mitigation Measures BIO-1 through BIO-9, impacts would be less than significant relating to candidate, sensitive, or special status plant and wildlife species.

Threshold 4.4 (b). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				✓

Impact Analysis

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site or in the adjacent habitats.

Threshold 4.4 (c) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		

Impact Analysis

No blue-line riverine features or wetlands occurring on site. No drainage features with defined bed, bank, channels, or wetland indicators (wetland soils, hydrophytic vegetation, wetland hydrology) were observed during habitat assessment surveys. Ephemeral drainages are not present on site. Therefore, the project would not require regulatory water quality permitting (i.e. – Regional Water Quality Control Board Section 401 of the Clean Water Act (CWA), U.S. Army Corps of Engineers Section 404 of the CWA, or California Department of Fish and Wildlife (CDFW) Section 1602 Lake and Streambed Alteration Agreement).

Threshold 4.4 (d). Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Corridors effectively act as links between different populations of a species. The Project site does not represent a wildlife travel route, crossing or regional movement corridor between large open space habitats. No distinct wildlife corridors were identified on the site or in the immediate area.

Future development of the site will have minimal impact on the general biological resources present on the site, and most, if not all, of the vegetation will likely be removed during future construction activities. Wildlife will also be impacted by development activities and those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. However, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience minimal impacts. Therefore, loss of about 14.5-acres of desert vegetation is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding desert region. No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations

Threshold 4.4 (e) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		✓		

Impact Analysis

Please refer to the discussion under Threshold 4.4 (a) regarding the Joshua trees.

Threshold 4.4 (f) Would the project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

Impact Analysis

Regional multiple species conservation plans offer long-term assurances for conservation of covered species at a landscape scale, in exchange for biologically appropriate levels of incidental take and/or habitat loss as defined in the approved plan. California's NCCP Act (FGC §2800 et seq.) governs such plans at the state level, and was designed to conserve species, natural communities, ecosystems, and ecological processes across a jurisdiction or a collection of jurisdictions. Complementary federal HCPs are governed by the Endangered Species Act (7 U.S.C. § 136, 16 U.S.C.§ 1531 et seq.) (ESA). Regional conservation plans provide conservation for unlisted as well as listed species. According to the *California Natural Community Conservation*

Plans Map maintained by the California Department of Fish and Wildlife, there are no such plans that encompass the Project site.

4.5 Cultural Resources

The analysis in this section is based in part on the following technical report*: Historical/Archaeological Resources Survey Report,* CRM TECH, October 16, 2022, included as Technical Appendix D.

Threshold 4.5 (a) Would the project	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?				✓

Impact Analysis

Records Search

CRM TECH conducted a historical/archaeological resources records search, initiated a Native American Sacred Lands File search, pursued historical background research, and carried out an intensive-level field survey. The purpose of the records search was to compile an inventory of previously identified cultural resources and existing cultural resources studies within a half-mile radius of the project location. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, San Bernardino County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

Through the various avenues of research, this study did not encounter any "historical resources" within or adjacent to the project area. Therefore, CRM TECH recommends to the City of Adelanto a finding of No Impact regarding "historical resources."

Field Survey

On April 8, 2022, CRM TECH archaeologists Hunter O'Donnell and Ashley Conner-Ayala carried out the field survey of the project area. The survey was completed at an intensive level by walking a series of parallel north-south transects spaced 15 meters (approximately 50 feet) apart. In this way, the ground surface in the entire project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic period (i.e., 50 years or older). Ground visibility was excellent (95 percent) throughout the project area due to the sparsity of the vegetation growth

The field survey produced completely negative results for potential cultural resources. The entire project area was closely inspected for any evidence of human activities dating to the prehistoric or historic period, but none was found. Scattered domestic refuse and construction debris was observed on portions of the property, along with some animal remains. A small makeshift dwelling was observed near the center of the property, accompanied by a picnic table and a collection of household items (Fig. 9). All of these items are clearly modern in origin, and none of them demonstrated any historical or archaeological interest.

In conclusion, no surface historic cultural resources would be impacted by the Project.

Threshold 4.5 (b)	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?		✓		

Impact Analysis

Archaeological Setting

Although no surface cultural resources (including historic-period or prehistoric archaeological resources, or historic-period architectural resources) or cultural resource sensitivity were identified on or near the Project site, future ground-disturbing activities have the potential to reveal buried deposits not observed on the surface. Therefore, the following mitigation measure is recommended:

MM CR-1: Resource Discovery. *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 Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) 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.*

MM CR-2: Monitoring and Treatment Plan*. 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 YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Threshold 4.5 (c) Would the Project:	Potentially Significant or Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Impact Analysis

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. If human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq.

4.6 Energy

Threshold 4.6 (a) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	

Impact Analysis

Electricity and Natural Gas

Construction

The Project would require the use of electric power tools. The anticipated construction schedule assumes the Project would require approximately 380 days for completion of the build-out. The consumption of electricity would be temporary in nature and would not represent a significant demand on available supplies. Use of natural gas is not anticipated to be used during construction.

Operations

Occupancy of the single-family residences would result in the consumption of natural gas and electricity. Energy demands are estimated at 2.34782e+006 kBTU/year of natural gas and 661,067 kWh/year of electricity[10]. Natural gas would be supplied to the Project by Southwest Gas Corporation and electricity would be supplied by SCE. The Project proposes single-family homes reflecting contemporary energy efficient/energy-conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other single-family land use projects of similar scale and configuration. The Project will also comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards.

In addition, the Project will be required to provide rooftop solar panels, or sources of on-site renewable energy, per the latest 2019 California Energy Code requirements. The Energy Code requires all new residential construction to achieve net-zero emissions associated with electricity usage using on-site renewable sources. This analysis has conservatively assumed 80% of electricity usage will be captured via on-site renewable sources (i.e., solar panels), as part of the project design.

[10] Appendix A, *TTM20471 CalEEMod Datasheets.*

Motor Vehicle Fuels

Construction

Most activities would use fuel powered equipment and vehicles that would consume gasoline or diesel fuel. Heavy construction equipment (e.g., dozers, graders, backhoes, dump trucks) would be diesel powered, while smaller construction vehicles, such as pick-up trucks and personal vehicles used by workers would be gasoline powered.

The consumption of fuel would be temporary in nature and would not represent a significant demand on available supplies. Given the physical characteristics of the site and the type of development proposed, there are no unusual Project characteristics or construction processes that would require the use of equipment that would use more fuel than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). In addition, as required by state law[11], idling times of construction vehicles are limited to no more than five minutes, thereby minimizing, or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Equipment employed in the construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Operations

Fuel that would be consumed by Project-generated traffic is a function of total vehicles miles traveled (VMT) and estimated vehicle fuel economies of vehicles accessing the Project site. The Project will result in 2,198,687 annual VMT[12] and an estimated annual fuel consumption of 82,437 gallons of fuel.[13]

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT. Location of the Project proximate to regional and local roadway systems tends to reduce VMT within the region, acting to reduce regional vehicle energy demands.

Conclusion

As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

[11] California Code of Regulations Title 13, Motor Vehicles, §2449(d)(3) Idling.
[12] TTM20471 CalEEMod Datasheets.
[13] EPA, *2020 Automotive Trend Report*, https://www.epa.gov/automotive-trends/explore-automotive-trends-data, accessed June 11, 2022.

Threshold 4.6(b). Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			✓	

Impact Analysis

The regulations directly applicable to the Project are *Building Energy Efficiency Standards*, Title 24, Part 6, and CALGreen Title 24, Part 11. These regulations include but are not limited to the use of energy efficient heating and cooling systems, water conserving plumbing and water-efficient irrigation systems. The Project is required to demonstrate compliance with these regulations as part of the building permit and inspection process.

4.7 Geology and Soils

Threshold 4.7(a). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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.				✓

Impact Analysis

Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. (A trace is a line on the earth's surface defining a fault.) Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally fifty feet).[14] According to The California Geological Survey's Earthquake Hazards Zone Application (EQ Zapp), the Project site is not located within an Alquist-Priolo Earthquake Fault zone.[15]

Threshold 4.7(a1). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Strong seismic ground shaking?			✓	

Impact Analysis

The Project site is in a seismically active area of Southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the Southern California area. As a mandatory condition of Project approval, the Project would be required to construct the proposed structures in accordance with the seismic design criteria mandated by the Adelanto Municipal Code Title 14, *Buildings and Construction*. The purpose of this Title is, in part, to provide minimum standards to safeguard life or property by stipulating building and foundation requirements to withstand earthquakes.

[14] https://www.conservation.ca.gov/cgs/alquist-priolo.
[15] https://maps.conservation.ca.gov/geologichazards/#dataviewer, accessed June 10, 2022.

Threshold 4.7(a2). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Seismic-related ground failure, including liquefaction?			✓	

Impact Analysis

According to The California Geological Survey's Earthquake Hazards Zone Application (EQ Zapp), the Project site is not located in a liquefaction zone.[16] Notwithstanding, the Project would be required to comply with Development Code Section 16-5.02.060 (b) (2), *Soils Engineering Report*, which includes data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for corrective measures and other data required by the Building Official.

Threshold 4.7(a3). Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Landslides?				✓

Impact Analysis

The site is relatively flat and is not adjacent to any slopes or hillsides that could be potentially susceptible to landslides.

Threshold 4.7(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in substantial soil erosion or the loss of topsoil?			✓	

Impact Analysis

The Project will not result in substantial soil erosion or the loss of topsoil, because the site will be paved and landscaped after it is developed. To control soil erosion during construction, the Project proponent is required to comply with Chapter 17.93-*Erosion and Sediment Control*, of the Adelanto Municipal Code which serves to implement the National Pollutant Discharge Elimination System requirements applicable to the Project area and prepare a Storm Water

[16] https://maps.conservation.ca.gov/geologichazards/#dataviewer, accessed June 10, 2022.

Pollution Prevention Plan (SWPPP). In addition, a Water Quality Management Plan (WQMP) is required which addresses post-construction soil erosion. Preparation and implementation of these plans is a mandatory requirement.

The SWPPP will identify potential sources of erosion and sedimentation loss of topsoil during construction and identify erosion control measures to reduce or eliminate the erosion and loss of topsoil, such as the use of silt fencing, fiber rolls, or gravel bags, stabilized construction entrance/exit, hydroseeding.

Post construction, much of the site will be covered with paving, structures, and landscaping, which will reduce soil erosion. As detailed in Threshold 4.9 (a), *Hydrology and Water Quality*, stormwater will be controlled using a single basin designed to implement water quality and flood control requirements. Stormwater treatment will be provided by the bottom 1-2 feet of the basin, where the required volume will infiltrate into the ground, and any soil erosion materials will be managed.

(Also see analysis under Issue 4.9, *Hydrology and Water Quality).*

Threshold 4.7(c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Be located on a geologic unit or soil that is unstable, or that would become unstable because of the Project, and potentially result in on-site or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			✓	

Impact Analysis

Landslide/Lateral Spreading

Lateral spread or flow are terms referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. All the land within the Project site is relatively flat and according to the County of San Bernardino Hazard Maps, is not located in areas prone to landslides and thus there are no slopes that may contribute to lateral spreading.

Subsidence

Subsidence is the downward movement of the ground caused by the underlying soil conditions. Certain soils, such as clay soils are particularly vulnerable since they shrink and swell depending on their moisture content. Subsidence is an issue if buildings or structures sink which causes damage to the building or structure. Subsidence is usually remedied by excavating the soil the

depth of the underlying bedrock and then recompacting the soil so that it can support buildings and structures.

Liquefaction or Collapse

Liquefaction may occur during seismic ground shaking of relatively loose, granular soils that are saturated or submerged; this can cause soils to liquefy and temporarily behave as a dense fluid.

Collapse occurs in saturated soils in which the space between individual particles is filled with water. This water exerts a pressure on the soil particles that influences how tightly the particles themselves are pressed together. The soils lose their strength beneath buildings and other structures.

Based on the California Geological Survey, the site is not mapped within a zone of potentially liquefiable soils. Based on groundwater data (http://www.water.ca.gov/waterdatalibrary/), it is estimated that groundwater is at a depth of 235 feet below existing grade. The site is also not included within the San Bernardino County Geologic Hazards Maps as being located within an area with a liquefaction hazard. Liquefaction is not considered to be a hazard at the subject site due to the great depth to groundwater (greater than 235 feet) and the current geologic hazard mapping. As such, impacts would be less than significant, and no impacts related to subsidence, liquefaction and collapse will occur through compliance with the California Building Standards Code also known as California Code of Regulations Title 24.

Threshold 4.7(d) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Be located on expansive soil, as defined in the Uniform Building Code, creating substantial risks to life or property?			✓	

Impact Analysis

Expansive soils generally consist of clay that tend to expand (increase in volume) as it absorbs water, and it will shrink (lessen in volume) as water is drawn away. According to the Natural Resources Conservation Service, United States Department of Agriculture, Web Soil Survey, the Project site primarily consists of soils classified as Cajon Sand (56%) and Helendale Bryman Loamy Sand (44%).[17]

[17] Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: http://websoilsurvey.sc.egov.usda.gov/. Accessed June 15, 2022.

Clay soils are generally classified as "expansive." This means that a given amount of clay will tend to expand (increase in volume) as it absorbs water, and it will shrink (lessen in volume) as water is drawn away. The Cajon and Helendale series of soils consists of very deep, moderately well drained soils that formed in mixed alluvium dominantly from granitic sources. Because they are not clay soils, they are not susceptible to expansion. Notwithstanding, the Project would be required to comply with Adelanto Municipal Code §16.04.050 which sets forth the procedures governing the requirements for soils reports, which includes data regarding the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for corrective measures and other data required by the Building Official.

Threshold 4.7(e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The Project does not propose the use of septic tanks or alternative wastewater disposal systems. The Project would install domestic sewer infrastructure and connect to the City of Adelanto's sewer conveyance and treatment system.

Threshold 4.7(f) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

Impact Analysis

Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine- to medium-grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils. They are also found in coarse-grained sediments, such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion.

The property is situated in the Mojave Desert geomorphic province. The Mojave Desert province is a wedge-shaped area that is enclosed on the southwest by the San Andreas fault zone, the Transverse Ranges province, and the Colorado Desert province, on the north and northeast by the Garlock fault zone, the Tehachapi Mountains and the Basin and Range province, and on the east by the Nevada and Arizona state lines, and the Colorado River. The area is dominated by broad alluvial basins that are mostly aggrading surfaces that are receiving non-marine continental deposits from the adjacent upland areas. More specific to the subject property, the site is in an area geologically mapped to be underlain by Quaternary Alluvium. Alluvium is deposited as lakes, playas, and terraces and has the potential to contain paleontological resources. Therefore, the following mitigation measures are required.

Mitigation Measures

PALEO-1: Inadvertent Discovery of Paleontological Resources. *If paleontological resources are encountered during implementation of the Project, (including areas impacted by off-site street improvements, ground-disturbing activities will be temporarily redirected from the vicinity of the find. A qualified paleontologist (the "Project Paleontologist") shall be retained by the developer to make an evaluation of the find. If the resource is significant, Mitigation Measure GEO-2 shall apply.*

PALEO-2: Paleontological Treatment Plan. *If a significant paleontological resource(s) is discovered on the property,(including areas impacted by off-site street improvements), in consultation with the Project proponent and the City, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find.*

With the implementation of Mitigation Measures PALEO-1 and PALEO-2, impacts are less than significant regarding paleontological resources.

Unique Geologic Feature

The Project site is relatively flat. The site soils generally consist of Quaternary Alluvium (Cajon Sand and Helendale Bryman Loamy Sand), which are common soil types in Adelanto. As such, the Project does not contain a geologic feature that is unique or exclusive locally or regionally.

4.8 Greenhouse Gas Emissions

The following documents were used in the preparation of this analysis:

- *TTM20514 Air Quality/GHG Assessment* (Appendix A).
- Mojave Desert Air Quality Management District, *California Environmental Quality Act (CEQA) And Federal Conformity Guidelines,* February 2020.

Threshold 4.8 (a-b) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	

Impact Analysis

Greenhouse Gas Emissions and Climate Change

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are contributing to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases. The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potentials, and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). No single land-use project could generate enough greenhouse gas (GHG) emissions to change the global average temperature noticeably. Cumulative GHG emissions, however, contribute to global climate change and its significant adverse environmental impacts. Thus, the primary goal in adopting GHG significance thresholds, analytical methodologies, and mitigation measures is to ensure new land use development provides its fair share of the GHG reductions needed to address cumulative environmental impacts from those emissions.

Mojave Desert Air Quality Management District Thresholds of Significance

According to CEQA Guidelines Section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "*lead agency shall have discretion to determine, in the context of a particular project, whether to use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use*." Moreover, CEQA Guidelines section 15064.7(c) provides that "*a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts*" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

The City of Adelanto has not adopted Greenhouse Gas (GHG) thresholds of significance; therefore, the Mojave Desert Air Quality Management District threshold will be utilized. GHG emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations emissions. CalEEMod is authorized for use to assess project emissions by the Mojave Desert Air Quality Management District (MDAQMD). MDAQMD significance thresholds were used for determining the project's impacts. The CalEEMod program outputs annual CO2e emissions in Metric Tons per year (MTCO2e/Year), however the MDAQMD threshold is in tons per year (Tons/Year), therefore the emissions results in the tables are included as both MTCO2e/Year and CO2e Tons/Year. Construction and operation emissions are presented in Table 4.8.1 and summarized in Table 4.8.2.

Table 4.8.1. Project Greenhouse Gas Emissions

Source		GHG Emissions MT/yr		
	N2O	CO2	CH4	CO2e
Area	0.007	122.70	0.08	126.71
Energy	0.004	242.53	0.012	243.88
Mobile Sources	0.040	748.91	0.043	761.95
Solid Waste	0.000	19.72	1.17	48.87
Water/Wastewater	0.004	20.92	0.004	26.67
30-year Amortized Construction GHG				13.23
TOTAL	*Tons/Year / Metric Tons / Year*			*1,346.26/ 1,221.31*
MDAQMD Threshold	*100,000 Tons/Year / 90,718.5 MT/Year* [18]			**100,000/90,718.5**
Exceed Threshold?				**NO**

Table 4.8.2 - Project Greenhouse Gas Emissions Summary

GHG Emissions Source	Daily Emissions	Daily Threshold	Annual Emissions Tons / Metric Tons	Annual Threshold Tons/Metric Tons	Exceeds Threshold?
Construction 2022	6,217.2	**548,000**	180.0 / 163.3	**100,000 / 90,718.5**	**NO**
Construction 2023	3,401.3	**548,000**	437.5 / 396.9	**100,000 / 90,718.5**	**NO**
Construction 2024	2,337.0	**548,000**	26.8 / 24.35	**100,000 / 90,718.5**	**NO**
Operations	9,200.0	**548,000**	1,331.7 / 1.208.1	**100,000 / 90,718.5**	**NO**

As shown in Tables 4.8.1 and 4.8.2, the Project's greenhouse gas emissions on both a daily and annual basis would not exceed the MDAQMD's significance thresholds. Thus, Project-related emissions would not have a significant direct or indirect impact on greenhouse gas emissions that could impact climate change, and no mitigation or further analysis is required.

Threshold 4.8 (b) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Impact Analysis

In 2006, the California legislature passed Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006. The law establishes a limit on greenhouse gas (GHG) emissions for the state of California to reduce state-wide emissions to 1990 levels by 2020. In 2016, the California Assembly and Senate expanded upon AB 32 with Senate Bill (SB) 32, which mandates a 40% reduction in GHG emissions from 1990 levels by 2030. In January 2017, the California Air Resources Board (CARB) developed a plan (SB 32 Scoping Plan1) that charted a path toward the GHG reduction goal using all technologically feasible and cost-effective means.

In response to these initiatives, an informal project partnership, led by the San Bernardino Council of Governments (SBCOG), adopted the *San Bernardino County Regional Greenhouse Gas Reduction Plan*.[19] The Reduction Plan summarizes the actions that 23 jurisdictions selected to reduce jurisdictional GHG emissions, as well as state-mandated actions. The Reduction Plan is not mandatory for partnership jurisdictions. Instead, it provides information that can be used by partnership jurisdictions, if they choose so, to develop individual climate action plans (CAPs).

[19] San Bernardino County Regional Greenhouse Gas Reduction Plan ,available at: https://www.gosbcta.com/wp-content/uploads/2019/09/San_Bernardino_Regional_GHG_Reduction_Plan_Main_Text_Mar_2021.pdf, accessed on June 10, 2022.

Pursuant to the Plan, the City of Adelanto selected a goal to reduce its community GHG emissions to a level that is 40% below its 2020 GHG emissions level by 2030. The city will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective through a combination of state (~60%) and local (~40%) efforts.

At the project level, prior to issuance of a building permit, the Project Proponent is required to submit plans showing that the Project will be constructed in compliance with the most recently adopted edition of the applicable California Energy Code, (Part 6 of Title 24 of the California Code of Regulations) and the California Green Building Standards Code, 2019 Edition (Part 11 of Title 24 of the California Code of Regulations).

Applicable measures to a single-family residential include, but are not limited to:

- *Energy Efficiency* - The Project is required to provide electric vehicle (EV) charging outlets; install energy-efficient appliances and HVAC systems, and overall residential buildings shall meet or exceed the minimum standard design required by the 2019 California Energy Code.

- *Waste Diversion* - The Project's waste hauler would be required to comply with all applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the Project are reduced in accordance with existing regulations. In addition, The Project is required to submit and implement a construction waste management plan to reduce the amount of construction waste transported to landfills.

- *Water Conservation* - Utilize water conservation techniques to conserve water resources, such as the use of low-flow irrigation and plumbing systems.

- *Water-Efficient Landscaping Practices* - Promote low per capita water use using low water consumptive plant materials/desert plants (xeriscape).

Based on the analysis above, the Project will not conflict with regional or State plans to reduce greenhouse gas emissions and will support the 40 percent long-term reduction in greenhouse gas emissions identified in the Reduction Plan.

4.9 Hazards and Hazardous Materials

Threshold 4.9(a) (b)	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
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?			✓	

Impact Analysis

Existing Conditions

The Project site consists of vacant undeveloped land. There have been no previous activities, such as agriculture or industrial uses that resulted in contamination of the Project site.

Construction Activities

Heavy equipment used during the construction of the proposed Project would be fueled and maintained by substances such as oil, diesel fuel, gasoline, hydraulic fluid, and other liquid materials that would be considered hazardous if improperly stored or handled. In addition, materials such as paints, roofing materials, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. The potential for unintentional releases and spills of hazardous materials during construction is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with future development that would be a reasonable consequence of the proposed Project than would occur on any other similar construction site.

Construction contractors are required to comply with all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited to requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, Mojave Desert Air Quality Management District, and the Lahontan Regional Water Quality Control Board. As such, impacts due to construction activities would not cause a significant hazard to the public or the environment through the release of hazardous materials into the environment.

Operational Activities

The Project site would be developed with residential land uses which is a land use not typically associated with the transport, use, or disposal of hazardous materials. Although residential land uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents, these products are usually in low concentration and small in amount and would not pose a significant risk to humans or the environment during transport to/from or use at the Project site.

Threshold 4.9 (c) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	

Impact Analysis

Victoria Magathan Elementary School is located approximately 0.26 miles (1,350 feet) to the southwest of the Project site. As discussed in the responses to Thresholds 4.9 (b) and 4.9 (c) above, all hazardous or potentially hazardous materials would comply with all applicable federal, State, and local agencies and regulations with respect to hazardous materials. Therefore, regardless of the proximity of Victoria Magathan Elementary School, the Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste that would impact the school.

Threshold 4.9 (d) Would the Project	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?				✓

Impact Analysis

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State and local agencies to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites pursuant to

Government Code Section 65962.5. Below are the data resources that provide information regarding the facilities or sites identified as meeting the Cortese List requirements.

- *List of Hazardous Waste and Substances sites from the Department of Toxic Substances Control (DTSC) EnviroStor database.*
- *List of Leaking Underground Storage Tank Sites from the State Water Board's GeoTracker database.*
- *List of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels outside the waste management unit.*
- *List of "active" CDO and CAO from Water Board.*
- *List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC.*

Based on a review of the Cortese List maintained by the California Environmental Protection Agency the Project site is not identified on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. [20]

Threshold 4.9 (e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The following airports are located in or near Adelanto:

Adelanto Airport – This small airfield is located near the intersection of Holly Road and Beaver Road approximately 3.1 miles to the west of the Project site. This airport has two runways. Adelanto Airport is a privately owned airstrip with two unpaved runways. One extends north-south and is 3,930 feet long and 100 feet wide. The other extends east-west and is 5,100 feet long and 100 feet wide. Use of this airstrip is exclusively private, and permission is required prior to any aircraft landing. There is irregular attendance at this facility due to irregular use. All flight

[20] California Environmental Protection Agency, Cortese List Data Resources, https://calepa.ca.gov/sitecleanup/corteselist/ , accessed June 10, 2022.

plans are required to be cleared with SCLA to avoid conflicting traffic. Due to the private nature of the airstrip, the irregularity of flight scheduling, coordination with SCLA, and the distance of the east-west runway in relation to the Project site, impacts related to aircraft operations will be minimal.

Southern California Logistics Airport (SCLA)- SCLA is located approximately 3.3 miles to the northeast of the Project site in the City of Victorville. According to San Bernardino Countywide Plan Policy Map HZ-9, *Airport Safety and Planning Areas*, the Project site is not located within the boundaries of the SCLA *Comprehensive Land Use Plan* Compatibility Review Area for land use safety with respect to both occupants of aircraft and to people on the ground, protection of airspace, and general concerns related to aircraft overflight.

IMPA Adelanto Heliport- The IMPA Adelanto Heliport is privately owned by the Intermountain Power Agency. It consists of a single concrete helipad which is 70 feet by 70 feet. The heliport is managed by the Los Angeles Department of Water and Power and is located at the Adelanto Converter Station near the intersection of Pansy Road and Raccoon Avenue approximately 1.7 miles northwest of the Project site. Permission is required prior to landing at this facility. Due to the irregular use of the heliport, impacts related to aircraft operations and the distance to the Project site, impacts would be minimal.

Threshold 4.9 (f) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	

Impact Analysis

Access to the Project site is proposed from Holly Road and Jonathan Street. The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles from these roadways.

Threshold 4.9 (g) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

Impact Analysis

According to the *California Fire Hazard Severity Zone Viewer* maintained by Cal Fire, the Project site is not located within a high wildfire hazard area[21]. Also refer to analysis under Section 4.20, *Wildfire*.

[21] https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414, accessed on June 10, 2022.

4.10 Hydrology and Water Quality

The following document was used in the preparation of this analysis:

- *Hydrology Study*, Red Brick Solutions, January 12, 2022. (Appendix E).

Threshold 4.10 (a) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			✓	

Impact Analysis

Pre-Development Conditions

The 14.5-acre site is currently pre-developed and consists of sandy and loamy sand, with sparse vegetation. Starting near the southwestern corner property line, the land slopes north as three (3) individual subareas consisting of an initial area and a tributary conveyance directing each storm flow due north to the northern property line without any confluence one with the other. The 1st Drainage Area "A" consists of a 1.49-acres initial Subarea 1A that flows 242.11 ft. to the north creating an elevation change of 5.39 ft. and a slope of 2.23%. Subarea 2A transports these storm flows 443.32 ft to the north creating an elevation change of 3.53 ft. at a slope of 0.79% over 3.75 acres. The 2nd Drainage Area "B" consists of a 1.38-acre Initial Subarea 1B that flows 230.9 ft to the north with an elevation change of 5.86 ft. and a slope of 2.54%. Subarea 2B conveys these flows north 470.51 ft. with an elevation change of 2.94 ft. at a slope of 0.62% over 3.38-acres. The 3rd Drainage Area "C" consists of a 1.03-acre Initial Subarea 1C contains 1.03 acres that flows north 241.11 ft. with an elevation change of 5.87 ft. at a slope of 2.43%. Subarea 2C conveys these storm flows north 358.66 ft, with an elevation change of 3.61 ft. at a slope of 1.00%. over 3.95-acres.

Construction Impacts

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and the installation of landscaping, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction activities in the absence of any protective or avoidance measures.

Chapter 17.93.050 - *Soil Erosion and Sediment Control Plan* of the Adelanto Municipal Code requires the Project to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit for construction activities. The permit is required for all Projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area.

Compliance with the permit requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) will identify construction Best Management Practices (BMPs) that will be implemented to prevent soil erosion and the discharge of sediment into the local storm drains during the project's construction phase. Typical BMPs measures include, but are not limited to, preserving natural vegetation, stabilizing exposed soils, use of sandbags, and installation of temporary silt fencing.

Operational Impacts

Storm water pollutants commonly associated with residential land uses include sediments, nutrients, trash and debris, bacteria and viruses, oil and grease, and pesticides. City of Adelanto Municipal Code Chapter 17.93.060 requires the preparation of a Water Quality Management Plan (WQMP) for managing the quality of storm water or urban runoff that flows from a developed site after construction is completed. The Project will comply with the City of Adelanto and the Phase II Small MS4 General Permit for the Mojave River Watershed as described below.

Post construction, storm water will be controlled using a single basin for water quality and flood control. Storm water run-off will be routed to the basin using the streets, curbs, gutters, and swales. Stormwater treatment will be provided by the bottom 1-2 feet of the basin, where the required volume will infiltrate into the ground. The basin is designed to be compatible with the City of Adelanto Master Plan of Drainage. The development of the subject site will not significantly change area drainage patterns, impact any of the surrounding properties, or change any of the regional master plan facilities. The Project will construct a combination retention and detention basin of sufficient size to handle water quality through infiltration, and flood mitigation through detention. As designed, the basin exceeds the required storage volume.

Threshold 4.10 (b) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	

Impact Analysis

Ground Water Supply Discussion

The Project would be served with potable water by the Adelanto Public Utility Authority. Adelanto has groundwater wells within its distribution system that are actively used to pump groundwater from the Mojave River Groundwater Basin, which lies beneath Victor Valley.[22] The Mojave Basin Area was the subject of a court ordered adjudication in 1993 due to the rapid growth within the area, increased withdrawals, and lowered groundwater levels. The court's Judgment appointed Mojave Water Agency (MWA) as Watermaster of the Mojave Basin Area. The court ordered adjudication of the Mojave Basin Area allocates a variable free production allowance (FPA) to each purveyor that supplies more than 10 AFY, including Adelanto.

Each allocated FPA represents the purveyor's share of the water supply available from the MWA Subarea. FPAs are determined as a percentage of the purveyor's highest verified annual use from 1986 to 1990. The FPA, which is currently set at 80 percent of BAP for agriculture and 60 percent of BAP for municipal and industrial (M&I), can vary from year to year depending on the Watermaster's safe yield projections for the Basin. If Adelanto, or another purveyor, pumps more than its allotted FPA in any year, they are required to purchase replacement water equal to the amount of production in excess of the FPA. Replacement obligations are satisfied by paying MWA and then purchasing unused FPA within the subarea.

Given the City's total reliance on groundwater, the reliability of the City's water supply is thus entirely dependent on the reliability of the groundwater in the Mojave River Basin managed by the Mojave Water Agency. Because almost all the water used within the Mojave Water Agency's service area is supplied by pumped groundwater, to supplement the local groundwater supplies, the Mojave Water Agency recharges the groundwater basins with State Water Project imported water, natural surface water flows, wastewater imports from outside the Mojave Water Agency's service area, agricultural depletion from storage, and return flow from pumped groundwater not consumptively used. The Mojave Water Agency's sources are only used to recharge the groundwater basins and are not supplied directly to any retailers, except for two power plants, the High Desert Power Project, and the LUZ Solar Plant.

Groundwater Recharge Discussion

Development of the Project would increase impervious surface coverage on the Project site which would in turn reduce the amount of direct infiltration of runoff into the ground. The Project proposes to use roads within the Project site to carry runoff to a proposed water quality basin, designed for both retention and detention. As such, the Project will not interfere substantially with groundwater recharge.

[22] *2020 Urban Water Management Plan*, *Victorville Water District*, June 1, 2021, p.6-3, accessed on June 10, 2022.

In addition, according to a review of historical groundwater data (California Department of Water Resources and California State Water Resources Control Board groundwater well data [http://wdl.water.ca.gov and http://geotracker.waterboards.ca.gov]), depth to groundwater is greater than 50 feet below ground surface (bgs) in the general Project site area. As such, the Project will not impact groundwater.

Sustainable Groundwater Management Discussion

California depends on groundwater for a major portion of its annual water supply, particularly during times of drought. This reliance on groundwater has resulted in overdraft and unsustainable groundwater usage in many of California's basins.[23] The Sustainable Groundwater Management Act (SGMA) was enacted to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. The City of Adelanto is located within the Upper Mojave River Valley portion of the Mojave River Basin.

The Mojave River is an adjudicated basin (i.e. water rights are determined by court order).[24] Adjudicated basins are exempt from the SGMA because such basins already operate under a court-ordered management plan to ensure the long-term sustainability of a basin. No component of the Project would obstruct with or prevent the implementation of the management plan for the Mojave River Basin. As such, the Project would not conflict with any sustainable groundwater management plan. Impacts would be less than significant.

Conclusion

Based on the analysis above, the Project is not forecast to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Threshold 4.10 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 that 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 offsite?			✓	

[23] https://www.waterboards.ca.gov/water_issues/programs/gmp/, accessed on June 10, 2022.

[24] https://gis.water.ca.gov/app/bp-dashboard/final/, accessed on June 10, 2022.

Threshold 4.10 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			✓	
(iv) Impede or redirect flood flows?			✓	

Existing Condition/Pre-Development

The Project site is vacant, undeveloped, and undisturbed land with varying slopes. The topography indicates that the runoff drains in a primarily northern direction in the form of sheet flow. The on-site sheet flows are identified on the existing and proposed condition exhibits. On-site runoff outlets the property at Drainage Area A, Drainage Area B, and Drainage Area C. Their peak flow rates are 5.93 cfs, 5.10 cfs, and 7.66 cfs respectively.

Proposed Condition/Post Development

The proposed condition is to utilize a single basin for water quality and flood routing for the site. The design will incorporate a controlled basin outlet at the northeastern corner of the site. This approach will maintain the existing drainage patterns. The site run-off has been routed to the basin using the streets and typical surface collection facilities for water quality and flood control. The post-development 100-year runoff is 16.83 cfs. The post-development runoff is then routed through the proposed basin to confirm post-development runoff can be mitigated to less than predevelopment runoff. The basin is proposed as dual-purpose retention and detention basin. Roughly the bottom 1-2 feet for the basin acts as water quality retention only, with no outfall, relying solely on infiltration. The volume above serves as a detention area for flood storage and volume needed for peak flow mitigation. After routing through the proposed basin, the post-development 100-year runoff is 16.83 cfs as shown in Table 4.10-1, *Pre-Development vs. Post-Development Storm Water Runoff.*

Table 4.10-1. Pre-Development vs. Post Development Storm Water Runoff

Description	Peak Flow Rate cfs (cubic feet per second)
Existing Condition	18.79 cfs
Design Criteria (90% of 18.79 cfs).	16.91 cfs
Post Development	16.83 cfs
Meets Requirement?	**Yes**

Source: Preliminary Hydrology Study, Appendix D.

As shown in Table 4.10-1, *Pre-Development vs. Post Development Storm Water Runoff.* Proposed development can be mitigated as designed to be compatible with the City of Adelanto Master Plan of Drainage. The development of the subject site will not significantly change area drainage patterns, impact any of the surrounding properties, or change any of the regional master plan facilities.

Threshold 4.10 (d). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓

Impact Analysis

According to the Federal Emergency Management Agency (FEMA), the Project site is not located within a flood hazard zone.[25] According to the California Department of Conservation, California Official Tsunami Inundation Maps[26], the site is not located within a tsunami inundation zone. In addition, the Project would not be at risk from seiche because there is no water body around the Project site capable of producing as seiche.

Threshold 4.10 (e) Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			✓	

[25] https://www.fema.gov/flood-maps, accessed on June 10, 2022.
[26] California Department of Conservation, *California Official Tsunami Inundation Maps,* https://www.conservation.ca.gov/cgs/tsunami/maps#:~:text=Coordinated%20by%20Cal%20OES%2C%20California,considered%20tsunamis%20for%20each%20area., accessed June 10, 2022.

Impact Analysis

As discussed under Threshold 4.10 (a) and 4.10 (c), with implementation of the proposed drainage system improvements and features, the Project will not conflict with or obstruct implementation of the *Lahontan Basin Plan*. In addition, as discussed under Threshold 4.10 (b), the Project site is not subject to a Sustainable Groundwater Water Management program and will not substantially impede sustainable groundwater management of the basin

4.11 Land Use and Planning

Threshold 4.11 (a)	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide a community?				✓

Impact Analysis

An example of a Project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The Project site is in an area that consists primarily of vacant undeveloped land. The Project site is bordered on the South by Holly Road, followed by residential development; on the East vacant land; and on the West by Jonathan Street, followed by vacant land. The Project site is planned for residential development by the General Plan. The properties in the immediate area are also planned for residential development. Thus, the development of the Project site is a logical continuation of the development pattern in the area as proposed by the General Plan and will not divide an established community.

Threshold 4.11 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The applicable plans and policies relating to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect are evaluated throughout this Initial Study document as described below.

City of Adelanto General Plan

- *Land Use Element:* The General Plan Land Use and Zoning designation for the Project site is R-M12 (Medium Density Residential) which allows a maximum density of 12 dwelling units (dus) per gross acre (14.51 gross acres x 12 =174 dwellings). The Project is designed with a density of 5.7 dus/ac, which is approximately a 52% decrease in the maximum number of dwelling units allowed. As evidenced throughout this Initial Study, all impacts have been identified as having no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. As such, the Project is consistent with the new General Plan land Use and Zoning.
- *Circulation Element:* Please refer to Section 4. 17, *Transportation*, for the analysis.
- *Conservation/Open Space Element:* Please refer to Sections 4.1, *Aesthetics*, and Section 4.4, *Biological Resources*, for the analysis
- *Noise Element:* Please refer to Section 4.13, *Noise,* for the analysis.
- *Safety Element:* Please refer to Section 4.9, *Hazards and Hazardous Materials,* for the analysis.
- *Community Design Element:* Please refer to Section 4.1, *Aesthetics,* for the analysis.

City of Adelanto Zoning Ordinance

In instances where the Zoning Ordinance applies to an environmental effect, it is identified in the Analysis section for each environmental topic. As detailed in such instances, impacts are less than significant.

Mojave Desert Air Quality Management District Air Quality Management Plan

Please refer to Section 4.3, *Air Quality*, for the analysis

San Bernardino County Regional Greenhouse Gas Reduction Plan

Please refer to section 4.8, *Greenhouse Gas Emissions,* for the analysis

Water Quality Control Plan for the Lahontan Region (Basin Plan)

Please refer to Section 4.10, *Hydrology and Water Quality* for the analysis.

Conclusion

As demonstrated throughout this Initial Study document, the Project would not conflict with any applicable land use plan, policy, or regulation due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, with compliance with mandatory regulatory requirements or mitigation measures.

4.12 Mineral Resources

Threshold 4.12 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The naturally occurring mineral resources within the Planning Area include sand, gravel, or stone deposits that are suitable as sources of concrete aggregate. The Project site has been designated with a Mineral Land Classification of MRZ-3A, which is an area containing known mineral occurrences of undetermined mineral resource significance. This classification was based on a report by the California Department of Conservation, Division of Mines and Geology, entitled *Mineral Land Classification of Concrete Aggregate Resources in the Barstow - Victorville Area, San Bernardino County, California*. A review of the California Department of Conservation interactive web mapping indicates there are no active mines on the Project site[27]. In addition, a review of the California Division of Oil, Gas, and Geothermal Resources well finder indicates that there are no wells located in the vicinity of the Project site.[28]

Accordingly, implementation of the Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California.

Threshold 4.12 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				✓

Impact Analysis

The Project site is not being used for mineral resource recovery. The Project site is designated as Medium Density Residential (R-M12). If the Project site were intended for mineral recovery, it

[27] https://maps.conservation.ca.gov/mineralresources/, accessed on June 10, 2022.
[28] California, State of. Department of Conservation. California Oil, Gas, and Geothermal Resources Well Finder. https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.41448/34.56284/14, accessed on June 10, 2022.

would be designated as such, and not residential. As such, the Project is not delineated on the General Plan, a specific plan, or other land use plan as a locally important mineral resource recovery site.

4.13 Noise

The following analysis is based in part on the following:

- *Noise Assessment.* EPC Environmental Inc., dated November 10, 2022, included as Appendix F to this Initial Study.

Threshold 4.13 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project more than standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			✓	

Impact Analysis

Methodology

In *California Building Industry Association v. Bay Area Air Quality Management District (2015)* 62 Cal.4th 369, Case No. S213478, the California Supreme Court stated "*In light of CEQA's text, statutory structure, and purpose, we conclude that agencies generally subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." Notwithstanding "special CEQA requirements [that] apply to certain airport, school and housing construction projects [,]" the Court held "that ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on projects and its users or residents*

Exceptions to this are housing projects for agricultural workers, affordable housing, and transit priority projects (a type of development that is either 100% residential or a mixed-use development (where 50% of the project is residential), that has a floor area ratio (ratio of total building square footage to total lot square footage) of 0.75, a minimum net density of at least 20 dwelling units per acre).

Moreover, special CEQA requirements apply to certain airport, school, and housing construction projects. In such situations, CEQA requires agencies to evaluate a project site's environmental

conditions regardless of whether the project risks exacerbating existing conditions. The environmental review must consider—and a negative declaration or exemption cannot issue without considering—how existing environmental risks such as noise, hazardous waste, or wildland fire hazard will impact future residents or users of a project. That these exceptions exist, however, does not alter our conclusion that ordinary CEQA analysis is concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents.

Existing Ambient Noise Levels

The Project site is in partially developed area of the City and currently does not generate noise. The existing noise environment in the Project area is characterized by the area's general level of development. The Project is located in a partially developed with residential uses. Ambient noise levels are therefore increased as a result of roadway traffic, industrial activities, and other human activities. Table 4.13.1, *Population Density and Associated Ambient Noise Levels,* summarizes typical ambient noise levels based on level of development. Given the rural nature of the proposed Project area, baseline ambient noise levels are assumed to be approximately 40-50 Ldn.

Table 4.13.1. Population Density and Associated Ambient Noise Levels

Population Density	dBA, Ldn
Rural 40-50	40-50
Small town or quiet suburban residential	50
Normal suburban residential	55
Urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75-80
Area adjoining freeway or near major airport	80–90
Notes: dBA = A-weighed decibels Ldn = day-night level	

Source: Draft Initial Study / Mitigated Negative Declaration Silver Peak Solar Project, February 24, 2022.

Short-term Construction Noise Impact Analysis

The most significant source of short-term noise impact resulting from the Project is related to noise generated during construction activities on the Project site. Construction is performed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. Thus, noise levels will fluctuate depending upon construction phase, equipment type, duration of equipment use, distance between the noise source and receptor, and the presence or absence of noise attenuation structures. As shown on Table 4.13.2, *Typical Construction Equipment Noise levels*, below, noise levels generated by heavy construction equipment can range from approximately 75 dBA to 99 dBA when measured at 50 feet.

Table 4.13.2. Typical Construction Equipment Noise Levels

Type of Equipment	Range of Sound Levels Measured (dBA at 50 feet)
Pile Driver	81 to 96
Rock Drills	83 to 99
Jack Hammers	75 to 85
Pneumatic Tools	78 to 88
Pumps	68 to 80
Dozers	85 to 90
Tractors	77 to 82
Front-End Loaders	86 to 90
Graders	79 to 89
Air Compressors	76 to 86
Trucks	81 to 87

Source: "Noise Control for Buildings and Manufacturing Plants", Bolt, Beranek & Newman, 1987.

Construction noise will have a temporary or periodic increase in the estimated 40-50 Ldn ambient noise level above the existing within the Project vicinity. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during the site preparation and grading phase from the use of a bulldozer, which at 50 feet, ranges from 85 to 90 dBA. For every doubling of distance, the sound level reduces by 6 dBA. Noise generation related to construction activities is addressed in §17.90.020(d) of the Zoning Ordinance which requires construction projects to list general noise reduction practices as "General Notes" on the construction drawings as part of the Project's conditions of approval (COA). These mandatory conditions are described as follows:

17.90.020 (d) Construction Practices

To reduce potential noise and air quality nuisances, the following items shall be listed as "General Notes" on the construction drawings:

(1) Construction activity and equipment maintenance is limited to the hours between 7:00 a.m. to dusk on weekdays. Construction may not occur on weekends or State holidays, without prior consent of the Building Official. Non-noise generating activities (e.g., interior painting) are not subject to these restrictions. City and State construction projects, such as road re-building or resurfacing, and any construction activity that is in response to an emergency, shall be exempt from this requirement.

(2) Stationary construction equipment that generates noise in excess of sixty-five (65) dBA at the project boundaries must be acoustically shielded and located at least one hundred feet (100') from occupied residences. The equipment area with appropriate acoustic shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the

designated location throughout construction activities.(3) Construction routes are limited to City of Adelanto designated truck routes.

(4) Water trucks or sprinkler systems shall be used during clearing, grading, earth moving, excavation, or transportation of cut or fill materials to prevent dust from leaving the site and to create a crust after each day's activities cease. At a minimum, this would include wetting down such areas in the later morning and after work is completed for the day and whenever wind exceeds fifteen (15) miles per hour.

(5) A person or persons shall be designated to monitor the dust control program and to order increased watering as necessary to prevent transport of dust off-site. The name and telephone number of such person(s) shall be provided to the City.

(6) All grading equipment shall be kept in good working order per factory specifications.

With implementation of the above standard conditions of approval, construction noise impacts would be less than significant.

Operational Noise Analysis

Sound levels generated by single-family residential activities are:

- Normal conversation, air conditioner= 60 dBA
- Gas-powered lawnmowers and leaf blowers = 80-85 dBA.
- Motorcycle = 95 dBA
- Very loud radio, stereo, or television =105–110 dBA
- Shouting or barking in the ear = 110 dBA[29]

The USEPA identifies noise levels affecting health and welfare as exposure levels over 70 dBA over a 24-hour period. Noise levels for various levels are identified according to the use of the area. Levels of 45 dbA are associated with indoor residential areas, hospitals, and schools, whereas 55 dBA is identified for outdoor areas where typical residential human activity takes place. According to the USEPA levels of 55 dbA outdoors and 45 dbA indoors are identified as levels of noise considered to permit spoken conversation and other activities such as sleeping, working, and recreation, which are part of the daily human condition.[34] Levels exceeding 55 dbA in a residential setting are normally short in duration and not significant in affecting health and welfare of residents.

[29] Center for Disease Control, "*Loud Noised Can Cause Hearing Loss*". ,https://www.cdc.gov/nceh/hearing_loss/default.html, accessed on June 18, 2022.
[34] USEPA "EPA Identifies Noise Levels Affecting Health and Welfare" https://archive.epa.gov/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.htmlaccessed June 11, 2022.

Traffic Noise Impacts

The primary increase in noise will the result of adding vehicle traffic generated by the Project to Holly Road and Jonathan Street. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed Project does not propose any uses that would require a substantial number of truck trips and the proposed Project would not alter the speed limits that will be established.

Under existing conditions, traffic volumes are very low. The Project is forecasted to generate 1,565 daily vehicle trips[35]. According to Caltrans, the human ear can begin to detect sound level increases of 3 decibels (dB) in typical noisy environments.[36] A doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dBA increase in sound, would generally be barely detectable.

The Project is estimated to generate approximately 1,565 total daily vehicle trips distributed along Holly Road, Mojave Drive, Palmdale Road, and Cactus Road. However, the anticipated increased traffic would not result in a doubling of the daily vehicle traffic to be generated in the area. Therefore, the proposed Project traffic would not result in a substantial permanent increase in ambient roadway noise levels. Noise impacts created by the Project would be less than significant and mitigation is not required.

Conclusion

Through compliance with mandatory requirements to reduce noise during construction, the Project's construction noise impacts will not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project. In addition, as shown above, the Project's operational noise would not be significant either.

Threshold 4.13 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generation of excessive ground borne vibration or groundborne noise levels?			✓	

Impact Analysis

Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. The Project does

[35] ITE Trip Generation Manual, 11th Edition.
[36] Caltrans, Traffic Noise Analysis Protocol, April 2020, p.7-1.

not involve the use of heavy trucks, so vehicle traffic generated by the Project will not generate excessive ground borne vibration.

According to the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018[37], while ground vibrations from construction activities do not often reach the levels that can damage structures, construction vibration may result in building damage or prolonged annoyance from activities such as blasting, piledriving, vibratory compaction, demolition, and drilling or excavation near sensitive structures. The Project does not require these types of construction activities.

Threshold 4.13 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The Project site is approximately 3.5 miles west of the Southern California Logistics Airport. According to San Bernardino Countywide Plan Policy Map HZ-9, *Airport Safety and Planning Areas*, the Project site is not located within an area exposed to excessive noise levels [30].

[37] https://www.transit.dot.gov/research-innovation/transit-noise-and-vibration-impact-assessment-manual-report-0123.
[30] https://cms.sbcounty.gov/lus/Planning/AirportLandUse.aspx, accessed on June 18, 2022.

4.14 Population and Housing

Threshold 4.14 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?			✓	

Impact Analysis

Population Growth

The Project follows the General Plan Land Use and Zoning Map for Medium Density Residential (R-M12) which allows a maximum density of 12 dwellings unit per acre (du/ac). According to the 2022population estimates prepared by the California Department of Finance, there are 3.82 persons per household in Adelanto[38]. Under the current General Plan Land Use and Zoning designation of R-M1, the Project could be developed with 174 dwelling units (14.52 gross acres x 12 du/ac = 174). The potential population is 665.

As proposed, the Project has a density of 5.7 du/ac.
and the current proposed plan, the maximum number of dwellings to be built is 83 with a potential population of 318 persons (83 x 3.82 persons per household = 318). Thus, the Project would result in a population decrease of 52% compared to what was forecasted.

Based on the population estimates prepared by the Southern California Association of Governments (SCAG) for Adelanto, the population of Adelanto is forecast to be 70,000 persons in 2040. As shown in Table 4.14.1 below, the actual population is in line with the SCAG forecast. As such, adequate land development capacity is available to accommodate the anticipated growth in the City

Table 4.14.1. SCAG Population Forecast Compared to Actual Population

	2012	2020	2022	2035	2040
SCAG Population Forecast	31,100	37,600	---	61,900	70,000
Actual Population	31,263	35,652	36,357	---	---

[38] E-5 Population and Housing Estimates for Cities, Counties, and the State, https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022, accessed on July 4, 2022.

Sources: 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction: https://scag.ca.gov/sites/main/files/file-attachments/2016_2040rtpscs_finalgrowthforecastbyjurisdiction.pdf?1605576071, accessed July 4, 2022, and State of California E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2020 with 2010 Census Benchmark, https://dof.ca.gov/forecasting/Demographics/estimates/estimates-e5-2010-2020/, accessed July 4, 2022.

Infrastructure Extensions

Although the Project site is in a relatively undeveloped area, it is adjacent to an existing development. The Project would connect to the existing waterline located to the west in Daisy Road. The Project would connect to the existing sewer line in Holly Road adjacent to the Project site. Gas and electric utilities are available in the vicinity of the Project site. No additional infrastructure will be needed to serve the Project other than to improve the existing dirt roads and connect to infrastructure near the site.

Threshold 4.14 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

Impact Analysis

The Project site consists of undeveloped vacant land. Therefore, implementation of the Project would not displace a substantial number of existing housing, nor would it necessitate the construction of replacement housing elsewhere.

4.15 Public Services

Threshold 4.15 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?			✓	

Fire Protection: The San Bernardino County Fire Department provides fire protection services to the Project area. The Project would be primarily served by the Adelanto Station #322, an existing station located approximately 2.8 roadway miles northwest of the Project site at 10370 Rancho Road. Development of the Project would impact fire protection services by placing an additional demand on existing County Fire Department resources should its resources not be augmented. To offset the increased demand for fire protection services, the Project would be conditioned by the City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system, paved access, and secondary access.

In addition, the city collects a Development Impact Fee to assist the city in providing fire protection facilities. Payment of the Development Impact Fee would be applied to fire facilities and/or equipment, to offset the incremental increase in the demand for fire protection services that would be created by the Project. Therefore, the Project would not result in the need to construct new or physically altered fire facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for fire protection.

Police Protection: The San Bernardino County Sheriff's Department provides community policing to the Project area via the Victor Valley Sheriff Station located at 11613 Bartlett Street in Victorville, approximately 3.4 roadway miles north. Because the Project site is in an area near development, it would be routinely patrolled by the Sheriff's Department. The city collects a Development Impact Fee to assist the city in providing for capital improvement costs for police

protection facilities. Payment of the Development Impact Fee would be applied to police facilities and/or equipment, to offset the incremental increase in the demand for police protection services that would be created by the Project. Therefore, the Project would not result in the need to construct new or physically altered police facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times or other performance objectives for police protection.

Schools: Adelanto is served by two school districts: Adelanto Elementary School District, which provides elementary and middle School services throughout the city, and the Victor Valley Union High School District, which operates Adelanto High School. The nearest schools from the Project site are Adelanto High School (2 miles), Donald E. Bradach Elementary School (0.88 miles), and Victoria Magathan Elementary School (0.3 miles).

The Project is forecast to generate the following number of students as shown in Table 4.15.1, *Student Generation*.

Table 4.15.1. Student Generation Factors

School Level	Student Generation Factor (1) (2)	Number of Students
Elementary School	0.3366	108
Junior High School	0.1041	34
High School	0.1439	46
Total	**---**	**188**

Notes:
1) Elementary and Junior High School generation rates are based upon the *Adelanto Elementary School District, School Facilities Justification Report, June 29, 2021*.

2) High School student rate is based upon the *Victor Valley Union High School District, Residential and Commercial/Industrial Development School Fee Justification Report, April 21, 2020.*

Both school districts are authorized by State law (Government Code § 65995-6) to levy a new construction fee per square foot of industrial construction for the purpose of funding the reconstruction or construction of new school facilities. Pursuant to Section 65995(3) (h) of the California Government Code, the payment of statutory fees is "*deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning use, or development of real property, or any change in governmental organization or reorganization as defined in Section 56021 or 56073, on the provision of adequate school facilities.*" Therefore, the payment of school impact fees for residential development would offset the potential impacts of increased student enrollment related to the implementation of the Project.

Parks: The nearest public park to the Project site is Daisy Park, which is located approximately 1.68 miles to the southwest. The City of Adelanto requires dedication of land, payment of fees in-lieu of parkland dedication, or a combination thereof at a rate of three acres of parkland per

1,000 residents for proposed residential subdivisions, pursuant to *Adelanto Municipal Code Chapter 16.52.* Based on 166 dwelling units, the Project could increase the overall population of the city by 665 persons (assuming all new residents will come from outside the city limits). 631 residents would result in the need of approximately one acre of parkland. Payment of the in-lieu fee would ensure that the Project will not result in a significant impact with respect to parkland

Other Public Facilities: As noted above, development of the Project could result in a direct increase in the population of persons. The current population of the city is 38,118 (assuming all new residents of the Project came from outside the City). It is not anticipated the Project would increase the demand for public services, including public health services and library services to the degree that the construction of new or expanded public facilities would be required based on this small increase in population.

In addition, the Project would be required to comply with the provisions of Municipal Code Chapter 3.75 which requires payment of the Development Impact Fee to assist the City in providing public services. Payment of the Development Impact Fee would ensure that the Project provides a fair share of funds for additional public services. These funds may be applied to the acquisition and/or construction of public services and/or equipment.

4.16 Recreation

Threshold 4.16 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The nearest public park to the Project site is Daisy Park, which is located approximately 1.68 miles to the southwest. The Project could result in the increased use of existing parks and recreation facilities. Substantial deterioration of existing facilities could occur if the level of usage intensifies significantly, and the maintenance of affected facilities does not keep pace with intensified use, and additional park facilities are not provided to meet existing and increased demand.

As noted under Threshold 4.15 (a) above, the development of the Project could result in an increase in the population of 318 persons. This small amount of population increase is not anticipated to increase the use of existing neighborhood and regional parks or other recreational facilities to the degree that substantial physical deterioration of recreational facilities would occur or be accelerated.

In addition, the City of Adelanto requires the dedication of land, payment of fees in-lieu of parkland dedication, or a combination thereof at a rate of three acres of parkland per 1,000 residents for proposed residential subdivisions, pursuant to *Adelanto Municipal Code Chapter 16.52.* Compliance with this mandatory requirement will ensure that the Project will not result in a significant impact with respect to recreational facilities.

Threshold 4.16 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

Impact Analysis

The Project does not propose the construction or expansion of recreational facilities.

4.17 Transportation

Threshold 4.17(a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			✓	

Impact Analysis

A significant impact would occur if the development of the Project would conflict with programs, plans, or ordinances that support transit services, bicycle lanes, sidewalks, and trails.
Future street improvements that are programmed to implement the updated circulation network plan will be designed in accordance with all applicable engineering standards relating to vehicle traffic, bicycles, pedestrian safety, line of site, and other design criteria. Impacts will be less than significant.[31]

The Project would construct the following circulation system improvements:

Roadway Facilities

For CEQA purposes, roadway facilities are viewed in the context of how they reduce the amount of vehicle miles traveled and promote the use of other non-motorized modes of travel such as transit, bicycle, and pedestrian. The proposed roadway improvements will promote a reduction in VMT by constructing sidewalks to facilitate pedestrians and by improving roadway to allow access for transit service.

According to Adelanto North 2035 Comprehensive Sustainable Plan Policy M 1.1, the project should apply complete street strategies whenever practical and feasible, and encourage development designs that integrate multiple modes of access and integrate complete streets in all capital improvement projects and new development projects.

Bicycle and Pedestrian Facilities

In October 2020, the city adopted the *Adelanto Active Transportation Plan. Adelanto in Motion, An Active Transportation Plan* ("Plan") which represents a new commitment to walking and biking in Adelanto. There are no bicycle or pedestrian projects proposed adjacent to the Project site. Thus, the Project would not interfere with proposed bicycle and pedestrian facilities planned

[31] Adelanto North 2035 Comprehensive Sustainable Plan
https://www.ci.adelanto.ca.us/DocumentCenter/View/623/Adelanto-North-2035-Sustainable-Plan

elsewhere in the city. However, the Project would construct streets that meet City standards that provides sidewalks and pavement that would accommodate bicycle travel.

Per the Adelanto North 2035 Comprehensive Sustainable Plan, It is the goal of the city to incorporate into the design of the roadway system a complete and effective pedestrian element. All major roadways shall contain adequate rights-of-way to allow for the implementation of sidewalks and bike lanes. It is also the goal of the city to establish a trails network within open space areas that are part of the land use design of the General Plan. These open spaces are intended to link to the major regional parks that have been established in the General Plan Planning Area.[32]

Policy M 1.5 states that the project should identify and implement necessary pedestrian improvements with special emphasis on providing safer access to schools, parks, community and recreation centers, shopping districts, and other appropriate facilities. Policy 1.9 would require developers to construct or pay their fair share toward improvements for all modes consistent with this mobility chapter, and specific impacts associated with their development. Policy M 3.2 would require sidewalk improvements concurrent with new development where commercial and school uses are planned and where residential densities exceed two units per acre, or as required by the planning commission.[33]

Public Transit Facilities

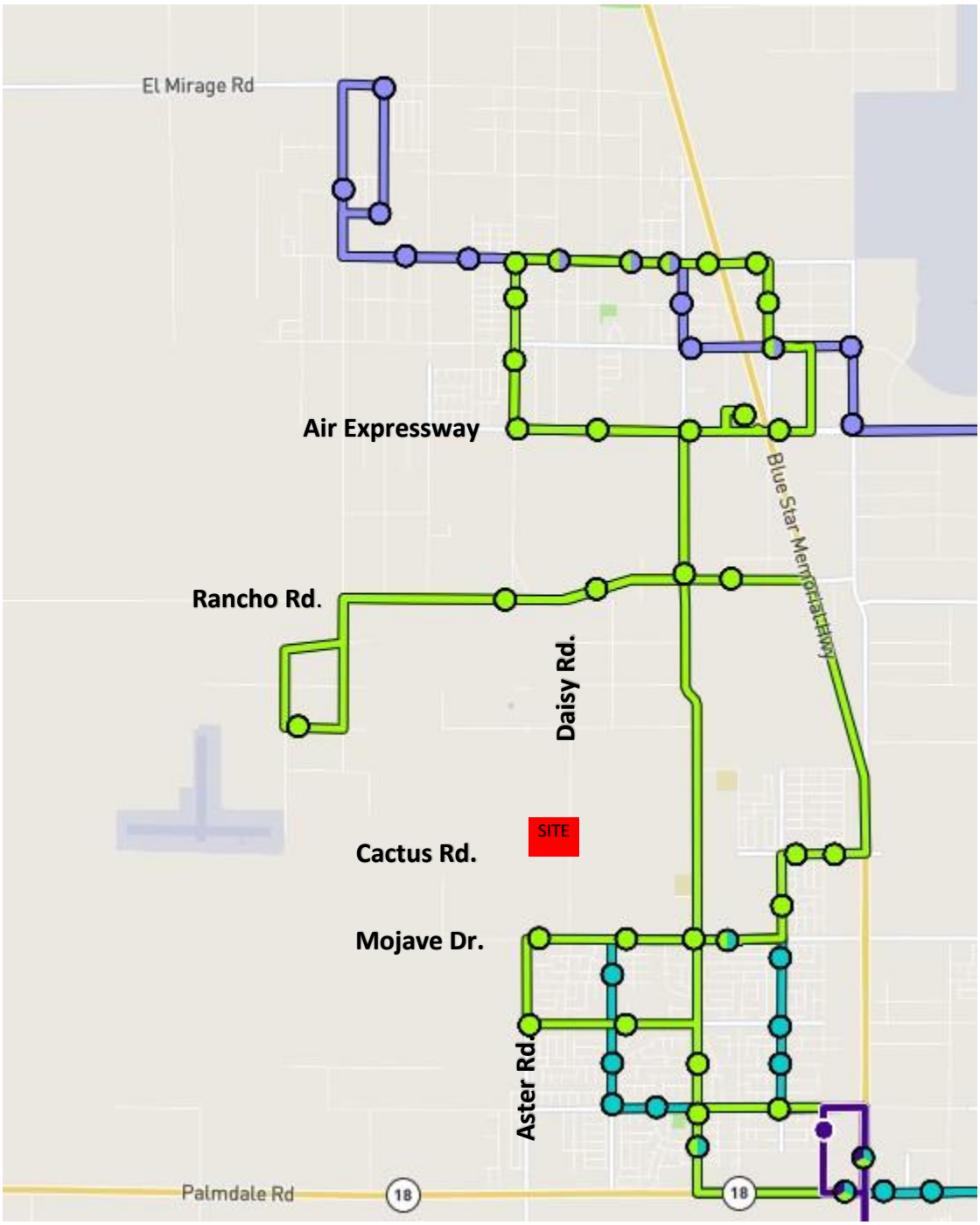
Public transportation services within the City of Adelanto and near the proposed Project are provided by the Victor Valley Transit Authority (VVTA). The closest connection points to the VVTA transit system are Route No. 31 (Mojave DR EB & Twilight Way), located approximately 1.1 miles south. The Project is not proposing any improvements that would conflict with Route No. 33, or any future transit route in the area.

Conclusion

As detailed above, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

[32] Adelanto North 2035 Comprehensive Sustainable Plan
[33] Adelanto North 2035 Comprehensive Sustainable Plan

Figure 4.17.1. Victor Valley Transit Routes-Adelanto



Source: System Map, Victor Valley Transit, https://vvta.org/interactive-map/, accessed July 4, 2022.

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?			✓	

Impact Analysis

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt Vehicle Miles Traveled (VMT) as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate took effect July 1, 2020. Impacts related to LOS will be evaluated through the City's development review process apart from CEQA.

The City of Adelanto City Council adopted Resolution No. 20-41 on June 24, 2020, which approved VMT thresholds for CEQA compliance purposes. On April 27, 2022, Resolution 2041-A-Amended which adopted carbon dioxide equivalent thresholds of significance for purposes of analyzing transportation impacts under CEQA.

Based on Resolution 20-41-A- Amended, the following are anticipated to generate GHG emissions of less than 3,000 metric tons of CO2e and would result in less than significant VMT impacts and are screened out of further analyses and presumed to be less than significant.

- Single Family – 117 Dwelling Units
- Multi Family Low Rise (Up to 2 levels) – 150 Dwelling Units
- Multi Family Mid Rise (between three and 10 levels) – 222 Dwelling Units
- General Office Building – 342,000 square feet
- Retail – 135,000 square feet
- High Cube Short Term Transload Warehouse – 413,000 square feet
- Warehousing (Unrefrigerated) – 306,000 square feet
- Industrial – 256,000 square feet
- Project GHG emissions less than 3,000 Metric Tons of Carbon Dioxide Equivalent (CO2e) as determined by a methodology acceptable to the City.(Use of project specific trip lengths from SBTAM and resulting GHG data from CalEEMod runs are acceptable); or
- Unless specified above, project trip generation is less than 110 trips per day per the ITE Manual or other acceptable source determined by the City.

Because the Project consists of less than 117 dwelling units (83), it screened out from further VMT analyses and impacts are less than significant

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	

Impact Analysis

The proposed roadway improvement will be designed in accordance with the City of Adelanto's *Standard Drawings and Specifications* requirements. In addition, the Project is located in an area planned for residential uses. As such, the Project would not be incompatible with existing development in the surrounding area to the extent that it would create a transportation hazard because of an incompatible use.

Threshold 4.17(b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Result in inadequate emergency access?		✓		

Impact Analysis

The Project would improve Holly Road, Jonathan Street adjacent to the Project site per City standards. Emergency access would be available from these streets connecting to the citywide circulation system. During the preliminary review of the Project, the Project's transportation design was reviewed by the City's Engineering Department, Fire Department, and Sheriff's Department to ensure that adequate access to and from the site would be provided for emergency vehicles.

4.18 Tribal Cultural Resources

Threshold 4.18 (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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?				✓

Impact Analysis

§21074 of the Public Resources Code describes Tribal Cultural Resources as follows:

(a) "Tribal cultural resources" are either of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.

(B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

(b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

(c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

California Register of Historical Resources/Local Register of Historical Resources

A historical resource or archaeological resource may also be a tribal cultural resource if it conforms with the criteria described in Public Resources §21084 (a) above. As discussed in Section 4.5 *Cultural Resources*, based on a records search and a pedestrian field survey, no historic or archaeological resources eligible for listing on the California Register of Historical Resources or a local register were encountered on the surface of the Project site. However, grading, utility trenching, and the construction of the water quality basin have the potential to reveal buried deposits below the surface. Therefore, Mitigation Measures CR-1 through CR-3 under Section 4.5, *Cultural Resources* shall apply. These measures require that the Yuhaaviatam of San Manuel Nation (YSMN) Cultural Resources Department be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the discovery, to provide Tribal input with regards to significance and treatment. In addition, if significant pre-contact cultural resources, as defined by CEQA, 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.

Threshold 5.18 (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:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
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?		✓		

Sacred Lands File Search

A Sacred Lands File request was sent by CRM TECH to the State of California Native American Heritage Commission (NAHC) for a records search. The NAHC is the State of California's trustee agency for the protection of "tribal cultural resources," as defined by California Public Resources Code §21074 and is tasked with identifying and cataloging properties of Native American cultural value, including places of special religious, spiritual, or social significance and known graves and cemeteries throughout the state. The Sacred Lands File yielded negative results for Native American cultural resources in the vicinity of the project area.

Assembly Bill (AB) 52

The Legislature added requirements regarding tribal cultural resources for CEQA in Assembly Bill 52 (AB 52) that took effect July 1, 2015. AB 52 requires consultation with California Native American tribes and consideration of tribal cultural resources in the CEQA process. By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process. To help determine whether a project may have such an effect, 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. The city commenced the AB 52 process by sending out consultation invitation letters March 23, 2022, to the following tribes who previously requested notification pursuant to Public Resources Code section 21080.3.1.

- Morongo Band of Mission Indians
- Yuhaaviatam of San Manuel Nation (YSMN) (formerly San Manuel Band of Mission Indians)
- Agua Caliente Band of Cahuilla Indians

No tribes requested consultation, however, because the Project site is located within the ancestorial territory of Yuhaaviatam of San Manuel Nation (YSMN), the possibility exists that Native American Tribal Cultural Resources may be discovered during ground disturbing activities. Mitigation Measures TCR-1 is made a part of the project/permit/plan conditions.

Mitigation Measure TCR-1. Contact Yuhaaviatam of San Manuel Nation.

1. The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) 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 resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

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 YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

Note: Yuhaaviatam of San Manuel Nation realizes that there may be additional tribes claiming cultural affiliation to the area; however, Yuhaaviatam of San Manuel Nation can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.

4.19 Utilities and Service Systems

Threshold 4.19 (a). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		

Impact Analysis

The Project would require new construction of new utility infrastructure as described below.

Water Service

The Project will connect to the existing waterline located immediately south in Daisy Road.

Sewer Service

The Project will connect to the existing sewer line in Holly Road adjacent to the project site.

Storm Drainage Improvements

The post-developed the site will consist of a residential tract with 83 residential dwelling units with a minimum lot size of 5000 sq. ft. Considering the accompanying streets and gutters, this will add a total impervious area of about 50%. The streets, gutters and storm water pipes will direct flows to a retention basin that will contain the total retention volume required to release 90% of the pre-developed storm flows downstream.

Electric Power Facilities

The Project will connect to the existing Southern California Edison electrical distribution facilities available in the vicinity of the Project site.

Natural Gas Facilities

The Project will connect to the existing Southwest Gas Corporation natural gas distribution facilities available in the vicinity of the Project site.

Telecommunication Facilities

Telecommunication facilities include a fixed, mobile, or transportable structure, including, all installed electrical and electronic wiring, cabling, and equipment, all supporting structures, such as utility, ground network, and electrical supporting structures, and a transmission pathway and associated equipment in order to provide cable TV, internet, telephone, and wireless telephone services to the Project site. Services that are not provided via satellite will connect to existing facilities maintained by the various service providers.

Conclusion

Construction or installation of utilities and service systems may impact Biological Resources, Cultural Resources, Paleontological Resources, and Tribal Cultural Resources. Mitigation Measures BIO-1 through BIO-9, CR-1 through CR-3, PALEO-1, PALEO-2, and TCR-1 are required.

Threshold 4.19 (b). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple years?			✓	

Impact Analysis

The Project would be served with potable water by the Adelanto Public Utility Authority. The City's 2020 Urban Water Management Plan indicates the gallons per capita water use at 116 gallons per day per capita (GPCD)[34]. The Project is estimated to increase the population by approximately 318 persons, which would create an additional water demand of 36,888 gallons per day (41.3-acre feet per year).

Adelanto has groundwater wells within its distribution system that are actively used to pump groundwater from the Mojave River Groundwater Basin, which lies beneath Victor Valley.[35] The Mojave Basin Area was the subject of a court-ordered adjudication in 1993 due to the rapid growth within the area, increased withdrawals, and lowered groundwater levels. The court's Judgment appointed Mojave Water Agency (MWA) as Watermaster of the Mojave Basin Area. The court-ordered adjudication of the Mojave Basin Area allocates a variable Free Production Allowance (FPA) to each purveyor that supplies more than 10 AFY, including Adelanto.

[34] *Adelanto 2020 Urban Water Management Plan*, August 25, 2021, p. 5-3, accessed on June 18, 2022

[35] *Adelanto 2015 Urban Water Management Plan*, June 6, 2016, p. 23.

Each allocated FPA represents the purveyor's share of the water supply available from the MWA Subarea. FPAs are determined as a percentage of the purveyor's highest verified annual use from 1986 to 1990. The FPA, which is currently set at 80 percent of the Base Annual Production (BAP) for agriculture and 60 percent of BAP for municipal and industrial and industrial producers, can vary from year to year depending on the Watermaster's safe yield projections for the Basin. If Adelanto, or another purveyor, pumps more than its allotted FPA in any year, they are required to purchase replacement water equal to the amount of production in excess of the FPA. Replacement obligations are satisfied by paying MWA and then purchasing unused FPA within the subarea.

Pursuant to paragraph 24 (o) of the Judgment After Trial dated January 10, 1996, the Watermaster is required to make a recommendation to the Court for adjusting the FPA of each Subarea, if necessary. The city is located within the Alto Subarea. Based on the most recent (2021) annual report, the FPA in the Alto Subarea is within 5% of the Projected Safe Yield (PSY) of BAP (1.3%). Municipal and Industrial producers' FPA is within 5% of the indicated PSY at the current level of 55%. However, it is recommended that Agricultural producers' FPA be reduced by 5% to 60% for Water Year 2021-22. Municipal and industrial producers' FPA will remain at 55% for Water Year 2021-22. As noted above, FPA is within 5% (percentage of BAP) of PSY, and thus, the Watermaster is not compelled to recommend ramp down.[36]

Conclusion

Based on the analysis above, the Project's water demand of 41.3-acre feet per year can be accommodated by the Adelanto Public Utility Authority during normal, dry, and multiple years.

Threshold 4.19 (c). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			✓	

Impact Analysis

The Adelanto Public Utilities Authority is the sole agency for collecting, treating, and discharging wastewater within its service area through the Adelanto Wastewater Treatment Facility.

[36] Mojave Area Basin Watermaster, available at: Watermasterhttps://www.mojavewater.org/files/28AR2021.pdf Annual Report for Water Year 2020-21 accessed on June 9, 2022.

Wastewater from Adelanto's water service area is collected and treated at the City-owned 4.0 MGD activated sludge wastewater treatment facility through an operations and maintenance contract with the PERC Water Corporation.

Municipal wastewater is generated in Adelanto's service area from a combination of residential, commercial, and industrial sources. The quantities of wastewater generated are generally proportional to the population and water usage in the service area. It is estimated that Adelanto's customers generate wastewater roughly proportional to 60 to 70 percent of the City's water demand. Based on a 70% wastewater-to-water calculation the Project is estimated to generate 25,821.6 gallons or 0.026 MGD of wastewater per day.

With the recent expansion of the Adelanto Wastewater Treatment Facility to 4.0 MGD, the City would have adequate capacity to serve the Project's wastewater needs and would not significantly impact existing commitments. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Threshold 4.19 (d). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Generate solid waste more than State or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	

Impact Analysis

Construction Related Impacts

The California Green Building Standards Code ("CAL Green') requires all newly constructed buildings to prepare a Waste Management Plan and divert construction waste through recycling and source reduction methods. The City of Victorville Building and Safety Department reviews and approves all new construction projects required to submit a Waste Management Plan. Mandatory compliance with CAL Green solid waste requirements.

Operational Related Impacts

The Project is estimated to generate 97.17 tons of solid waste per year[37]. The amount of estimated solid waste generated by the Project is derived from the California Emissions Estimator Model, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to

[37] Appendix A-*TTM20471 CalEEMod Datasheets.*

quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model also quantifies the amount of solid waste generated by a project. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses.

Although solid waste may ultimately be disposed of at various landfills, the closest landfill to the Project site is the Victorville Sanitary Landfill located at 18600 Stoddard Wells Road, approximately 7.2 miles to the east. According the CalRecycle website, the Victorville Sanitary Landfill has a daily throughput of 3,000 tons per day and a remaining capacity of 93,400,000 cubic yards. The expected closure is October 1, 2047.[38] As such, there is adequate landfill capacity to serve the Project.

Threshold 4.19 (e). Would the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

Impact Analysis

Avco Disposal (Burrtec) currently provides solid waste collection services to the city. Avco is required to provide these services in compliance with federal, state, and local management and reduction statutes and regulations related to solid waste.

[38] https://www.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652, accessed on June 11, 2022.

4.20 Wildfire

Threshold 4.20 (e). Wildfire.	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Is the project located in or near state responsibility areas or lands classified as very high fire hazard severity zones?				✓

Impact Analysis

A wildfire is a nonstructural fire that occurs in vegetative fuels, excluding prescribed fire. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. As stated in the State of California's General Plan Guidelines: "*California's increasing population and expansion of development into previously undeveloped areas is creating more 'wildland-urban interface' issues with a corresponding increased risk of loss to human life, natural resources, and economic assets associated with wildland fires*." To address this issue, the state passed Senate Bill 1241 to require that General Plan Safety Elements address the fire severity risks in State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs).

According to the *California Fire Hazard Severity Zone Viewer* maintained by Cal Fire, the Project site is not located within a high wildfire hazard area[39]. Project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. As such, Thresholds 4.20 (a) through 4.20 (d) below require no response.

- □ Substantially impair an adopted emergency response plan or emergency evacuation plan.

- □ 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.

- □ 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.

- □ Expose people or structures to significant risks, including downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes.

[39]https://egis.fire.ca.gov/FHSZ/, accessed on June 10, 2022.

4.21 Mandatory Findings of Significance

Threshold 4.21(a) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		

Impact Analysis

As indicated in this Initial Study, Biological Resources, Cultural Resources, Soils and Geology, and Tribal Cultural Resources may be adversely impacted by Project development. The following mitigation measures are required to reduce impacts to less than significant levels:

- BIO-1: Western Joshua Tree Incidental Take Permit.
- BIO-2: Burrowing Owl Pre-Construction Survey.
- BIO-3: Burrowing Owl Avoidance/Relocation.
- BIO-4: Mojave Ground Squirrel Pre-Construction Survey.
- BIO-5: Desert Tortoise Pre-Construction Survey.
- BIO-6: Worker Environmental Awareness Training
- BIO-7: Deceased or Injured Tortoise Within the Project Site
- BIO-8: Species Avoidance
- BIO-9: Nesting Bird Pre-Construction Survey

- CR-1: Resource Discovery
- CR-2: Monitoring and Treatment Plan

- PALEO-1: Inadvertent Discovery of Paleontological Resources
- PALEO-2: Paleontological Treatment Plan

- TCR-1: Contact Yuhaaviatam of San Manuel Nation
- TCR-2: Tribal Cultural Documents

Threshold 4.21 (b) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?		✓		

The cumulative impacts analysis provided here is consistent with Section 15130(a) of the CEQA Guidelines in which the analysis of the cumulative effects of a project is based on two determinations: Is the combined impact of this project and other projects significant? If so, is the project's incremental effect cumulatively considerable, causing the combined impact of the projects evaluated to become significant? The cumulative impact must be analyzed only if the combined impact is significant, and the project's incremental effect is found to be cumulatively considerable (CEQA Guidelines 15130(a)(2) and (3)).

The analysis of potential environmental impacts in Section 4.0, *Environmental Analysis*, of this Initial Study concluded that the Project would have *no impact* or a *less than significant impact* for all environmental topics, apart from Biological Resources, Cultural Resources, Geology and Soils (Paleontological Resources), Tribal Cultural Resources, and Utilities and Service Systems (installation of facilities that involves disturbance of previously undisturbed land). For these resources, Mitigation Measures are required to reduce impacts to less than significant levels as discussed below.

Biological Resources

As discussed in Section 4.4, *Biological Resources,* of this Initial Study, future development of the site will impact the general biological resources present on the site, and most of the vegetation will likely be removed during future construction activities. Wildlife will also be impacted by development activities and those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. More mobile species (i.e., birds, and large mammals) will be displaced into adjacent areas and will likely experience minimal impacts.

As shown in Figure 4.4.1, *Location of Joshua Trees,* preservation or relocation on-site is not a viable option and would essentially prevent the development of the site as envisioned under the City's General Plan. Therefore, Mitigation Measure BIO-1 is recommended.

Although wildlife 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 were not detected, the project site is located within the range of the Burrowing Owl, Mojave Ground Squirrel, Desert Tortoise, and Nesting Birds. Therefore, the Mitigation Measures BIO-1 through BIO-9 are included to ensure any impacts are less than significant to these species.

Overall, the loss of about 14.51 -acres of disturbed desert vegetation is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitats throughout the surrounding desert region. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Cultural Resources

As discussed in Section 4.5, *Cultural Resources,* of this Initial Study, the records search and field survey did not identify any historical resources or unique archaeological resources within the Project site boundaries. Research results, combined with surface conditions have failed to indicate sensitivity for buried cultural resources. No additional cultural resources work, or monitoring is necessary during the proposed activities associated with the development of the earthmoving activities. If previously undocumented cultural resources are identified during earthmoving activities, a qualified archaeologist should be contacted to assess the nature and significance of the find, diverting construction excavation, if necessary, as required by Mitigation Measure CR-1 through CR-3. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Geology and Soils (Paleontological Resources)

As discussed in Section 4.7, *Geology and Soils,* of this Initial Study, the property is situated in the Mojave Desert geomorphic province. The Mojave Desert province is a wedge-shaped area that is enclosed on the southwest by the San Andreas fault zone, the Transverse Ranges province, and the Colorado Desert province, on the north and northeast by the Garlock fault zone, the Tehachapi Mountains and the Basin and Range province, and on the east by the Nevada and Arizona state lines, and the Colorado River. The area is dominated by broad alluvial basins that are mostly aggrading surfaces that are receiving non-marine continental deposits from the adjacent upland areas. More specific to the subject property, the site is in an area geologically mapped to be underlain by alluvium. Alluvium has the potential to contain paleontological resources. Therefore, Mitigation Measures PALEO-1 and PALEO-2 are required. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Tribal Cultural Resources

As discussed in Section 4.18, *Tribal Cultural Resources*, of this Initial Study, the construction and operation of the Project could potentially impact tribal cultural resources. Pending results of the AB52 tribal consultation process, Mitigation Measures TCR-1 is required. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Utilities and Service Systems

As discussed in Section 4.19 *Utilities and Service Systems*, of this Initial Study, the installation and construction of the sewer, water, and storm drainage facilities described below will result in earth moving that may impact Biological Resources, Cultural Resources, Geology and Soils (Paleontological Resources), and Tribal Cultural Resources. Potential impacts to these resources are mitigated by Mitigation Measures BIO-1 through BIO-6, CR-1 through CR-3, PALEO-1 and PALEO-2, and TCR-1. Based on the preceding analysis, the Project's impacts would not be cumulatively considerable.

Threshold 4.21 (c) Does the Project:	Potentially Significant or Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?			✓	

As indicated by this Initial Study, the Project will not result in potentially significant environmental impacts that directly affect human beings (i.e., Air Quality, Agriculture and Forestry Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Public Services, Recreation, Transportation, and Utilities and Service Systems.