



Initial Study

North Star 2 Solar and Battery Storage Project

Initial Study #22-0049

General Plan Amendment #25-0004

Zone Change #22-0007

Conditional Use Permit #22-0030

Conditional Use Permit #26-0004

Imperial County, CA

March 2026

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Introduction

A. Purpose

This document is a policy-level; project-level Initial Study for evaluation of potential environmental impacts resulting with the proposed North Star 2 Solar and Battery Storage Project.

B. CEQA Requirements and the Imperial County's Rules and Regulations for Implementing CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's Rules and Regulations for Implementing CEQA, an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

- According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:
 - The proposal has the potential to substantially degrade quality of the environment.
 - The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
 - The proposal has possible environmental effects that are individually limited but cumulatively considerable.
 - The proposal could cause direct or indirect adverse effects on human beings.
- According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.
- According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed North Star 2 Solar and Battery Storage Project will result in potentially significant environmental impacts; however, mitigation measures are available to reduce the potentially significant impacts and therefore, a Mitigated Negative Declaration is deemed as the appropriate document to provide necessary environmental evaluations and clearance for the proposed approvals under review in this Initial Study.

This Initial Study is prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); the State CEQA Guidelines & County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA; applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial's CEQA Regulations, Guidelines for the Implementation of CEQA, depending on the project scope, the County of Imperial Board of Supervisors, Planning

Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

C. Intended Uses of Initial Study

This Initial Study is an informational document which is intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study prepared for the project will be circulated for a period of no less than 35 days for public and agency review and comments.

D. Contents of Initial Study

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

SECTION 1

I. INTRODUCTION presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

SECTION 2

II. ENVIRONMENTAL CHECKLIST FORM contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed North Star 2 Solar and Battery Storage Project and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS describes the proposed project, necessary entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

ENVIRONMENTAL ANALYSIS evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

SECTION 3

III. MANDATORY FINDINGS presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

E. Scope of Environmental Analysis

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. No Impact: A “No Impact” response is adequately supported if the impact simply does not apply to the proposed project.
2. Less Than Significant Impact: The proposed project will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. Less Than Significant with Mitigation Incorporated: This applies where incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.”
4. Potentially Significant Impact: The proposed project could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

F. Policy-Level or Project-Level Environmental Analysis

This Initial Study will be conducted under a policy-level, project-level analysis.

Regarding mitigation measures, it is not the intent of this document to “overlap” or restate conditions of approval that are commonly established for future known projects or the proposed project and associated entitlement applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County’s jurisdiction, are also not considered mitigation measures, and therefore, will not be identified in this document.

G. Tiered Documents and Incorporation by Reference

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

1. Tiered Documents

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

“Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project.”

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

“Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development

projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration.”

Further, Section 15152(d) of the CEQA Guidelines states:

“Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

- (1) Were not examined as significant effects on the environment in the prior EIR; or
- (2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means.”

2. Incorporation by Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]).

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR is available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243, Ph. (442) 265-1736.
- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.

- These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the County of Imperial General Plan EIR is SCH #93011023.

The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]).

Environmental Checklist Form

1. **Project Title:** North Star 2 Solar and Battery Storage Project
2. **Lead Agency Name and Address:** Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243
3. **Contact Person and Phone Number:** Luis Bejarano, Planner II, 442-265-1736
4. **Project Location:** The project site is located on vacant desert land approximately 13 miles east of Brawley, immediately north of State Route (SR) 78 (Ben Hulse Highway) and between the East Highline Canal and the Coachella Canal in the unincorporated area of Imperial County, California. The project site is located on two privately-owned parcels (Assessor Parcel Number (APN) 039-140-013 and 039-140-014) encompassing approximately 614 acres. Federal lands managed by the Bureau of Land Management (BLM) generally surround the project site. The proposed 230 kV off-site gen-tie component of the project would traverse the BLM lands to the west of the project site.
5. **Project Sponsor's Name and Address:** Apex Energy Solutions, LLC, 750 W. Main Street, El Centro, CA 92243
6. **General Plan Designation:** Recreation/Open Space
7. **Zoning:** Open Space/Preservation (S-2)
8. **Description of Project:** The proposed project consists of six primary components: 1) 130-megawatt (MW) solar photovoltaic (PV) facility; 2) 175-MW battery energy storage system (BESS); 3) on-site substation; 4) off-site transmission line extension that would connect to the Imperial Irrigation District's (IID) existing 230-kilovolt (kV) KN Line; 5) groundwater well; and 6) site access. These project components are collectively referred to as the "proposed project" or "project." A detailed project description is provided in the Project Summary section below.
9. **Surrounding Land Uses and Setting: Briefly describe the project's surroundings:**

The project site is currently vacant, undeveloped land and primarily consists of desert scrub habitat. The project site is surrounded by open space to the north, west, and east, and SR 78 to the south. Federal lands managed by the BLM generally surround the project site. One single-family residence is located approximately 2.5 miles west of the project site.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):**
 - California Regional Water Quality Control Board, Colorado River Basin Region
 - Imperial County Air Pollution Control District
 - Imperial County Public Works Department
 - Imperial Irrigation District
 - California Department of Transportation (CEQA Responsible Agency Public Resources Code §21069 (Encroachment Permit for site access off of SR 78))

- California Department of Fish and Wildlife – Trustee Agency (Public Resources Code §21070)/Responsible Agency (Public Resources Code §21069)
- Bureau of Land Management (NEPA Lead Agency) (approval of right-of-way for off-site gen-tie line and access road)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Yes, an Assembly Bill (AB) 52 consultation request letter was sent to the Campo Band of Mission Indians, Quechan Indian Tribe, and Campo Band of Mission Indians on December 22, 2023, with the initial AB 52 consultation period extending from December 23, 2023 to January 23, 2023.

Additionally, Senate Bill (SB) 18 consultation requests were sent to the tribes listed below on December 23, 2023.

- Agua Caliente Tribe
- Barona Tribe
- Campo Band
- Ewiiapaayp Tribe
- Iipay Nation - Inaja-Cosmit Band
- Jamul Indian Village
- Kwaaymii Laguna - La Posta Mission Indians
- Manzanita Nation
- Mesa Grande Band
- Quechan Tribe
- Santa Rosa Band
- Soboba Band
- Sycuan Band
- Torres-Martinez
- Viejas Band

The Viejas Band of Kumeyaay Indians (“Viejas”) indicated that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the project area. Viejas requested that a Kumeyaay cultural monitor be on site for ground disturbing activities and to be informed of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

The Agua Caliente Band of Cahuilla Indians (ACBCI) responded on February 1, 2024 and indicated that the project area is not within the boundaries of the ACBCI Reservation; however,

the project site is within the Tribe's Traditional Use Area. The ACBCI Tribal Historic Preservation Office requested the following:

- Formal government to government consultation under California SB 18.
- A cultural resources inventory of the project area by a qualified archaeologist prior to any development activities in this area.
- Copies of any cultural resource documentation (report and site records) generated in connection with the project.
- A copy of the records search with associated survey reports and site records from the information center.
- The presence of an archaeologist that meets the Secretary of Interior's standards during any ground disturbing activities.
- The presence of an approved cultural resource monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the monitor may request that destructive construction halt and the monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the State Historic Preservation Officer.

On March 19, 2026, the ACBCI submitted a letter to the Imperial County Planning and Development Services Department stating that their concerns have been addressed and that proper mitigation measures have been proposed in the Initial Study to ensure the protection of tribal cultural resources. The letter also indicated the conclusion of consultation under SB 18.

The Historic Preservation Office of the Fort-Yuma Quechan Indian Tribe responded on February 25, 2026 requesting consultation for the project. The project is within the traditional lands of the Fort-Yuma Quechan Indian Tribe.

Environmental Factors Potentially Affected

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

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

Environmental Evaluation Committee Determination

After Review of the Initial Study, the Environmental Evaluation Committee (EEC) has:

- Found that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- Found that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- Found that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTAL HEALTH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OFFICE EMERGENCY SERVICES	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
APCD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SHERIFF DEPARTMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ICPDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Jim Minnick, Director of Planning/EEC Chairman

3-26-2026
Date:

Project Summary

Project Location

The project site is located on vacant desert land approximately 13 miles east of Brawley, immediately north of State Route (SR) 78 (Ben Hulse Highway) and between the East Highline Canal and the Coachella Canal in the unincorporated area of Imperial County, California (Figure 1).

The project site is located on two privately-owned parcels:

- Assessor Parcel Number (APN) 039-140-013 (460 acres)
- APN 039-140-014 (154 acres)

The project site encompasses approximately 614 acres (Figure 2). Federal lands managed by the Bureau of Land Management (BLM) generally surround the project site.

Renewable Energy Overlay Zone

In 2015, the County adopted the Imperial County Renewable Energy and Transmission Element, which includes an RE Zone (RE Overlay Map). This General Plan element was created as part of the California Energy Commission Renewable Energy Grant Program to amend and update the County's General Plan to facilitate future development of renewable energy projects.

The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved conditional use permit (CUP). The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

As shown in Figure 1, the entire project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment and Zone Change to include/classify the project site into the RE Overlay Zone. The underlying "Recreation/Open Space" General Plan designation would remain.

Environmental Setting

The project site is currently vacant, undeveloped land and primarily consists of desert scrub habitat. The project site is surrounded by open space to the north, west, and east, and SR 78 to the south. Federal lands managed by the BLM generally surround the project site. One single-family residence is located approximately 2.5 miles west of the project site.

Project Components

The proposed project consists of six primary components: 1) 130-megawatt (MW) solar photovoltaic (PV) energy generation facility; 2) 175-MW battery energy storage system (BESS); 3) on-site substation; 4) off-site 230 kV transmission line extension that would connect to the Imperial Irrigation District's (IID) existing 230-kilovolt (kV) KN Line; 5) groundwater well; and 6) site access. These six components together are collectively referred to as the "proposed project" or "project." These project components are described in detail below and depicted on Figure 3.

Solar Energy Facility

The proposed project involves the construction of a 130-MW alternating current (AC) PV solar energy facility. The solar photovoltaic energy facility is located on APNs 039-140-013 (460 acres) and 039-140-14 (154 acres). The solar energy facility would comprise the majority of the project site.

PV solar cells convert sunlight directly into direct current electricity. The process of converting light (photons) to electricity (voltage) in a solid-state process is called the photovoltaic effect. A number of individual PV cells are electrically arranged and connected into solar PV modules, sometimes referred to as solar panels.

The project proposes to utilize solar PV technology modules mounted on horizontal single-axis tracker (HSAT) systems with mounting racks supported by drive piles. The 130-MW solar energy field would consist of 289,800 modules on 9,660 strings and associated collector and inverter facilities. The project would include 52 Sungrow Model 25000-KW inverters. The PV modules would rotate around the north-south HSAT axis so that the PV modules would continue to face the sun as the sun moves across the sky throughout the day. The PV modules would reach their maximum height (up to 9 feet above the ground, depending on the final design) at both sunrise and sunset, when the HSAT is rotated to point the modules at the rising or setting sun. At noon, or when stowed during high winds, when the HSAT system is rotated so that the PV modules are horizontal, the nominal height would be about 6 feet above the ground, depending on the final design.

The individual PV systems would be arranged in large arrays by placing them in columns spaced approximately 10 feet apart to maximize operational performance and to allow access for panel cleaning and maintenance. Current project designs would have individual HSAT PV modules, each approximately two feet wide by four feet long (depending on the specific PV technology selected), mounted on a frame which is attached to an HSAT system. The HSAT arrays would be separated from each other and the perimeter security fence by up to 30-foot-wide roads, consistent with Imperial County Fire Department emergency access requirements.

Battery Energy Storage System

As shown in Figure 3, the proposed project would include a 175-MW BESS that would be located along the southwest side of the project site paralleling Highway 78 within APN 039-140-013. The BESS system itself would comprise approximately 40 acres of APN 039-140-013.

The proposed BESS would consist of either lithium ion or flow batteries. The batteries will either be housed in storage containers or buildings fitted with heating, ventilation, and air conditioning and fire suppression systems as necessary, depending on the final selection of battery technology. Inside the housing the batteries will be placed on racks, the orientation of which depends on the type of housing. Underground trenches with conduits will be used to connect the batteries to the control and monitoring systems, and inverters to convert the PV produced direct current (DC) power to AC power.

On-Site Substation

As shown in Figure 3, the proposed on-site substation would be located in the southwest corner of the project site, within APN 039-140-013. The substation would comprise approximately two acres. The proposed substation would be unstaffed and automated. The California Building Code and the IEEE 693, Recommended Practices for Seismic Design of Substations, will be followed for the substation's design, structures, and equipment. [A Lot Line Adjustment may be required to convey ownership of the substation to IID.](#)

Off-Site Gen-tie Line Extension

As shown in Figure 4, the project is proposed to connect to the electrical grid via an off-site transmission line (i.e., gen-tie line). The proposed gen-tie poles would be between 90 and 110 feet in height.

The proposed off-site gen-tie line would extend west from the proposed on-site project site substation, generally paralleling and north of SR-78, for approximately 1.25 miles, with its westerly connection occurring at the existing IID 230-kV KN transmission line located in proximity to the East Highline Canal. The off-site gen-tie will comprise approximately 19 steel pole structures, with a 12-foot-wide access/maintenance road, for a total disturbance footprint of approximately 2.13 acres. The off-site gen-tie/transmission line improvements and/or connections would traverse BLM lands. The project applicant is requesting a 60-foot-wide right-of-way (ROW) from BLM to construct the off-site transmission line extension and/or connections on BLM land. National Environmental Policy Act (NEPA) environmental clearance will be required for the off-site gen-tie. The proposed improvements are located within the BLM Desert Renewable Energy Conservation Plan (DRECP) Development Focus Area and traverse a portion of the Shoreline Area of Critical Environmental Concern (ACEC) boundary.

Water Well

The project site is located outside of IID's irrigated district boundary; therefore, water cannot be obtained from any of the IID delivery canals. In order to provide water for the construction and operation of the project, construction of a new groundwater well is proposed. As shown in Figure 3, the groundwater well would be located in the southwest corner of the project site. The proposed project's water demand during construction and operations is described below.

Construction Water Demand

The construction water demand is primarily for dust control. The water needs are proportional to the size of the disturbed area and the local climate. The monthly water demand during the 12-to-18-month construction period may range from 7.2 acre-feet to 10.8 acre-feet, on average. The total construction water demand is estimated at 310-acre feet.

Operational Water Demand

The operational water demand for panel washing and other maintenance needs is based primarily on the number of panels, which relates to the energy production or output, in megawatts. The operational water demand is anticipated to be approximately 10 acre-feet per year. Maintenance activities are anticipated to be conducted up to twice a year over a one-to-two-week period each event, so the maintenance water demand is intermittent and not spread throughout the year. The operational water demand will occur throughout the life of the project, which is anticipated to be 25 to 30 years. The project's water supply will be provided by a new onsite groundwater supply well to be drilled and installed as part of the project.

Security

Six-foot high security fencing would be installed around the perimeter of the project site at the commencement of construction and site access would be limited to authorized site workers. In addition, a motion detection system and closed-circuit camera system may also be installed. The site would be remotely monitored 24 hours per day, 7 days per week. In addition, routine unscheduled security rounds may be made by the security team monitoring the site security.

Site Access

Access will be provided via an improved access entry off SR 78, which would require an encroachment permit from the California Department of Transportation (Caltrans). To accommodate emergency access, PV panels would be spaced to maintain proper clearance. Internal access roads, up to 30-foot wide, would be constructed along the perimeter fence and solar panels to facilitate vehicle access and maneuverability for emergency unit vehicles.

Fire Protection/Fire Suppression

Fire protection systems for battery systems would be designed in accordance with California Fire Code and would take into consideration the recommendations of the National Fire Protection Association (NFPA) 855.

Fire suppression agents such as Novec 1230 or FM 2000, or water may be used as a suppressant. In addition, fire prevention methods would be implemented to reduce potential fire risk, including voltage, current, and temperature alarms. Energy storage equipment would comply with Underwriters Laboratory (UL)-95401 and test methods associated with UL-9540A. The project would include lithium-ion batteries. For lithium-ion batteries storage, a system would be used that would contain the fire event and encourage suppression through cooling, isolation, and containment. Suppressing a lithium-ion (secondary) battery is best accomplished by cooling the burning material. A gaseous fire suppressant agent (e.g., 3M™ Novec™ 1230 Fire Protection Fluid or similar) and an automatic fire extinguishing system with sound and light alarms would be used for lithium-ion batteries.

To mitigate potential hazards, redundant separate methods of failure detection would be implemented. These would include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off-gas detection would be implemented, as applicable. These are in addition to other potential protective measures such as ventilation, overcurrent protection, battery controls maintaining batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Remote alarms would be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan would be implemented. Additionally, the project applicant would contribute its proportionate share for purchase of any fire-suppression equipment, if determined warranted by the County Fire Department for the proposed project.

Construction

Construction is anticipated to be completed in approximately 12 to 18 months. The following provides the proposed project's construction phases:

- Site Preparation – 3 months

- Grading/Trenching – 9 months
- Building Construction – 5 months

Dust generated during construction would be controlled by watering and, as necessary, the use of other dust suppression methods and materials accepted by the Imperial County Air Pollution Control District (ICAPCD).

Operations & Maintenance

Once construction is completed, the project would be remotely operated, controlled and monitored and with no requirement for daily on-site employees. Security personnel may conduct unscheduled security rounds and would be dispatched to the project site in response to a fence breach or other alarm.

Up to two to three people would be contracted (part-time) to perform all routine and emergency operational and maintenance activities. Such activities include inspections, equipment servicing, site and landscape clearing, and periodic washing of the PV modules if needed (up to two times per year) to maintain power generation efficiency. Vegetation growing on the project site would periodically (approximately every 3 months) be removed manually and/or treated with herbicides.

Two 10,000-gallon water storage tanks will be provided on the project site, with the locations to be determined and approved by the fire department. In the event of a fire, the project BESS is proposed to be TESLA Megawall or equal type of system. This type of system will be compartmentalized and intended to burn to the ground should a fire event occur. Fire service response would be in the form of stand by services to prevent the fire from spreading to an adjacent property.

Restoration of the Project Site

Electricity generated by the project could be sold under the terms of a power purchase agreement (PPA) with a power purchaser (i.e., utility service provider). The projected life of the project is 25 to 30 years. At the end of the PPA term, the owner of the project may choose to enter into a subsequent PPA, update technology and re-commission, or decommission and remove the generating facility and its components. Upon decommissioning, the site could be converted to other uses in accordance with applicable land use regulations in effect at that time. A collection and recycling program will be executed to promote recycling of project components and minimize disposal in landfills. All permits related to decommissioning would be obtained, where required.

Project decommissioning may include the following activities:

- The facility would be disconnected from the utility power grid.
- Project components would be dismantled and removed using conventional construction equipment and recycled or disposed of safely.
- PV panel support steel and support posts would be removed and recycled off-site by an approved metals recycler.
- All compacted surfaces within the project site and temporary on-site haul roads would be de-compacted.

- Electrical and electronic devices, including inverters, transformers, panels, support structures, lighting fixtures, and their protective shelters would be recycled off-site by an approved recycler.
- All concrete used for the underground distribution system would be recycled off-site by a concrete recycler or crushed on-site and used as fill material.
- Fencing would be removed and recycled off-site by an approved metals recycler.
- Gravel roads would be removed; filter fabric would be bundled and disposed of in accordance with all applicable regulations. Road areas would be backfilled and restored to their natural contour.
- Soil erosion and sedimentation control measures would be re-implemented during the decommissioning period and until the site is stabilized.

Prior to issuance of the initial grading permit for the project, a Site Reclamation Plan in conformance with County of Imperial requirements would be prepared for review and approval by the Imperial County Planning and Development Services Department. This plan would be implemented at the end of power operations and would describe the proposed equipment dismantling, removal and site restoration program, in conformance with County requirements.

Project Approvals

Imperial County

The following are the primary discretionary approvals required for implementation of the project:

1. **Approval of Conditional Use Permit (CUP #22-0030).** Implementation of the project would require the approval of a CUP by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. The project parcels are currently zoned as Open Space/Preservation (S-2). Pursuant to Title 9, Division 5, Chapter 19, the following uses are permitted in the S-2 zone subject to approval of a CUP from Imperial County:
 - i) *Major facilities relating to the generation and transmission of electrical energy provide[d] such facilities are not under State or Federal law, to [be] approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters. Such uses shall include but be limited to the following:*
 - *Electrical generation plants*
 - *Facilities for the transmission of electrical energy (100-200 kV)*
 - *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)*
2. **Approval of CUP (CUP #26-0004) – Groundwater Well.** Pursuant to Title 9, Division 21: Water Well Regulations, §92102.00, the applicant will be required to obtain a CUP for the proposed on-site groundwater well. As required by §92102.00, no person shall (1) drill a new well, (2) activate a previously drilled but unused well, (unused shall mean a well or wells that have not been used for a 12 month) period by installing pumps, motors, pressure tanks, piping,

or other equipment necessary or intended to make the well operational, (3) increase the pumping capacity of a well, or (4) change the use of a well, without first obtaining a CUP through the County Planning & Development Services Department.

The project's total construction water demand is estimated at 310-acre feet. The operational water demand is anticipated to be approximately 10 acre-feet per year. The operational water demand will occur throughout the life of the project, which is anticipated to be 25 to 30 years.

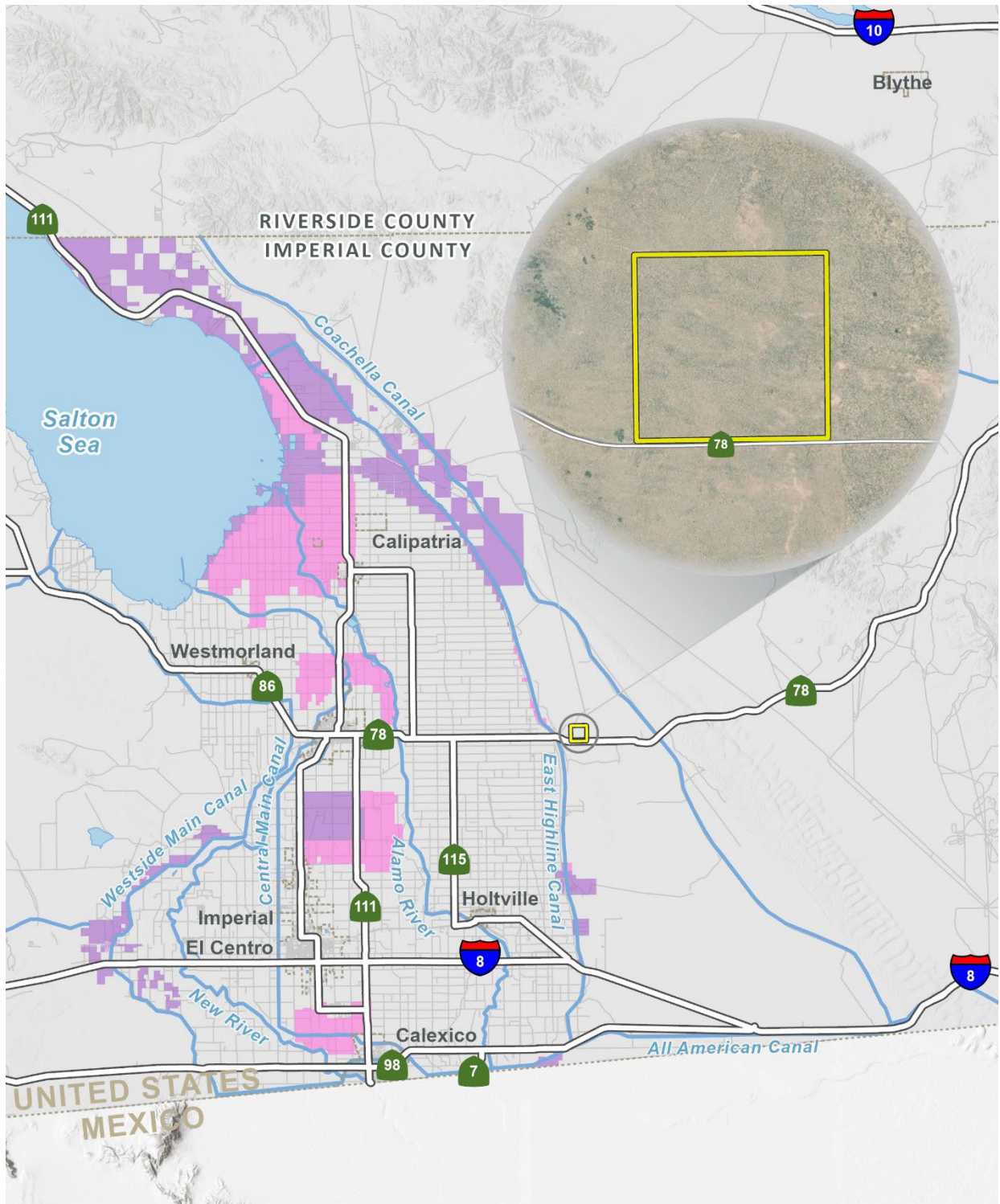
3. **General Plan Amendment (GPA #25-0004).** An amendment to the County's General Plan, Renewable Energy and Transmission Element is required to implement the proposed project. CUP applications proposed for specific renewable energy projects not located in the Renewable Energy (RE) Overlay Zone would not be allowed without an amendment to the RE Overlay Zone. The entire project site is located outside of the RE Overlay Zone. Therefore, the applicant is requesting a General Plan Amendment to include/classify the entire project site into the RE Overlay Zone. The underlying "Recreation/Open Space" General Plan designation would remain.
4. **Zone Change (ZC #22-0007).** The applicant is requesting a zone change to include/classify the two project parcels (APNs 039-140-013 and 039-140-014) into the RE Overlay Zone (i.e., zone change from S-2 to S-2-RE).

Discretionary Actions and Approvals by Other Agencies

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of the project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affected by a project. These agencies may include, but are not limited to the following:

- California Regional Water Quality Control Board – Notice of Intent for General Construction Permit, Clean Water Act 401 Water Quality Certification
- Imperial County Air Pollution Control District – Fugitive Dust Control Plan, Rule 801 Compliance
- Imperial County Public Works Department
- Imperial Irrigation District
- California Department of Transportation (CEQA Responsible Agency Public Resources Code §21069 (Encroachment Permit for site access off of SR 78)
- California Department of Fish and Wildlife – Trustee Agency (Public Resources Code §21070)/Responsible Agency (Public Resources Code §21069)
- Bureau of Land Management (NEPA Lead Agency) (approval of right-of-way for off-site gentie line and access road)

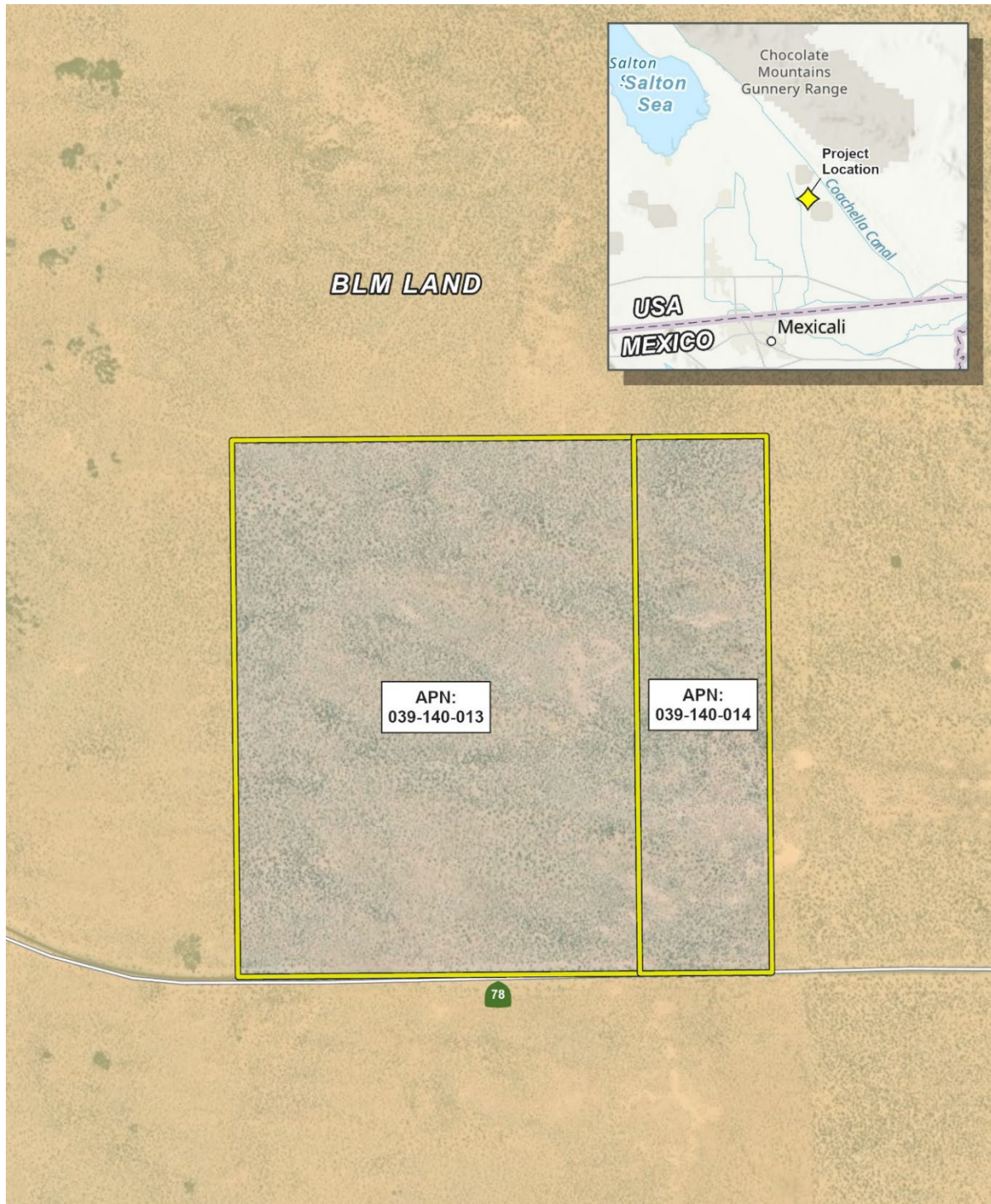
Figure 1. Regional Location



- Project Area
- Renewable Energy Overlay Zones**
 - Geothermal
 - Renewable Energy/Geothermal



Figure 2. Project Site

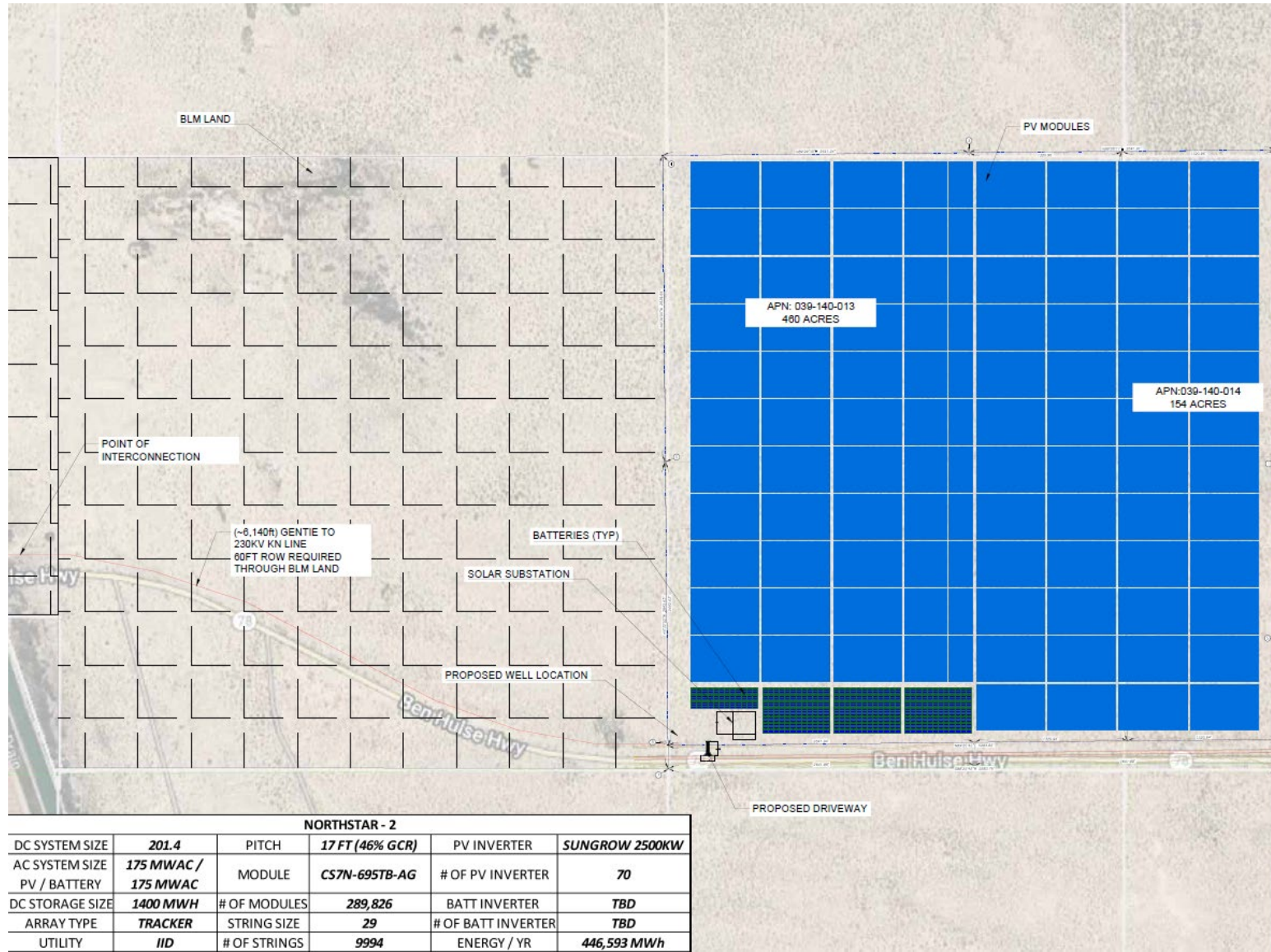


-  North Star 2 Project Parcels
-  BLM Land



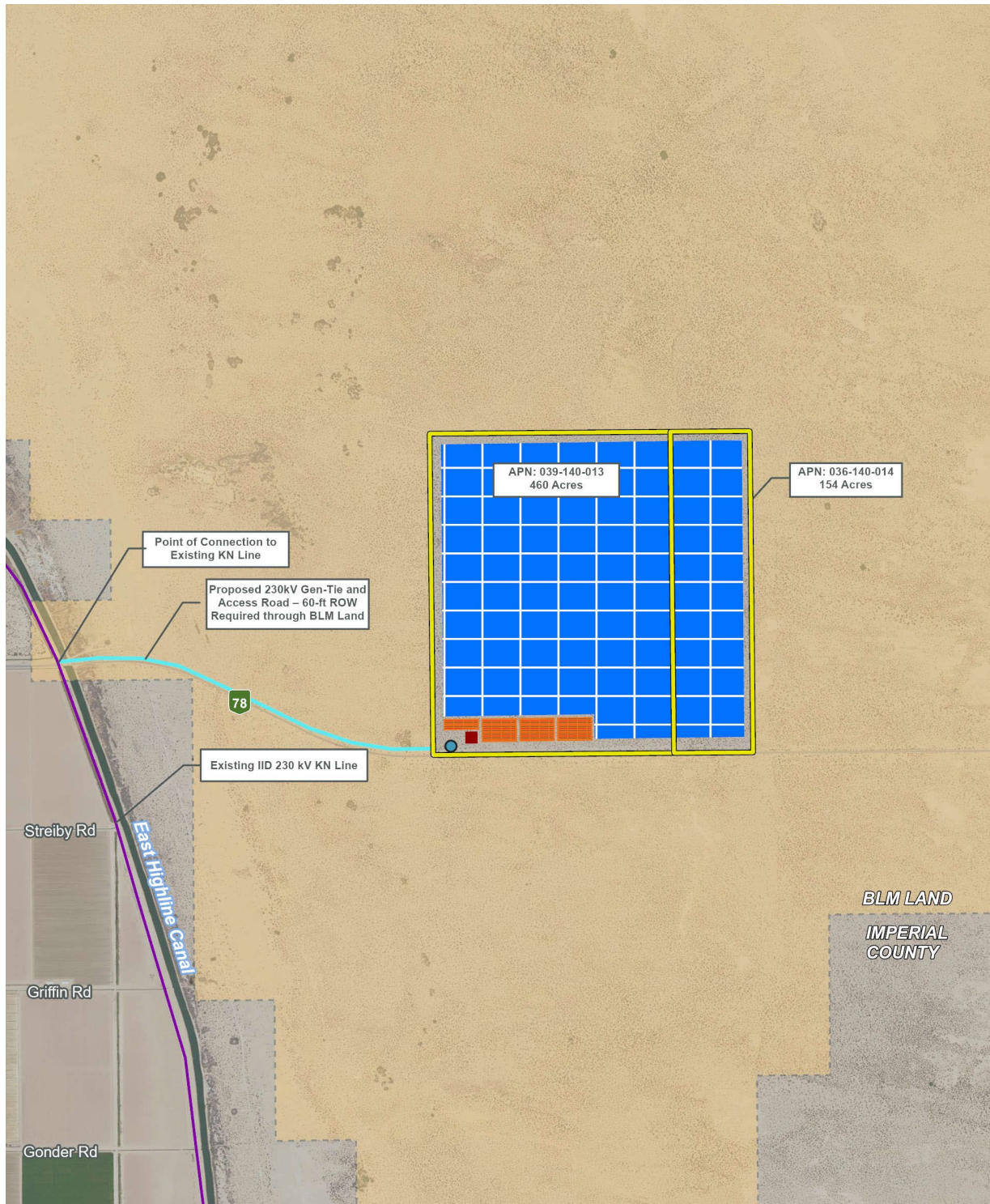
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Figure 3. Site Plan



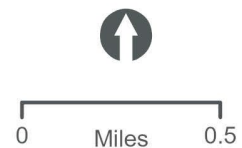
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Figure 4. Proposed Off-Site 230 kV Gen-Tie Line



- North Star 2 Project Site
- BLM Land
- Proposed 230kV Gen-Tie Line
- Existing IID 230 kV KN Line

- Site Components**
- Battery Energy Storage System (BESS)
 - Photovoltaic Solar Arrays/Panels
 - Proposed On-Site Substation
 - Proposed Well Location



Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance.

I. Aesthetics

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

The following information is summarized from the *Visual Resources Assessment for the North Star 2 Project* prepared by ECORP Consulting, Inc. This report is provided as Appendix A of this Initial Study.

- a) **No Impact.** The project site is not located within an area containing a scenic vista designated by the County's General Plan (County of Imperial 2016). Therefore, the proposed project would not have a substantial adverse effect on a scenic vista and no impact is identified.
- b) **No Impact.** According to the Conservation and Open Space Element, no State scenic highways have been designated in Imperial County (County of Imperial 2016). The segment of SR 78 (Ben Hulse Highway) located immediately south of the project site is not a designated scenic route per the California Department of Transportation (Caltrans) list of officially designated state scenic highways. The nearest road segment considered eligible for a State scenic highway designation is the approximately 20-mile portion of SR 78, from its intersection with SR 86 westward to its intersection with Quarry Road the Ocotillo Ranger Station (California Department of Transportation 2018). The project site is located over 30 miles southeast of the segment of SR 78 considered eligible for a State scenic highway designation; therefore, the project site would not be visible from this segment of SR 78. No impacts to scenic resources within any state scenic highways would occur.
- c) **Less than Significant Impact.** The overall character of the immediate landscape is agricultural to the west and natural open space to the north, east, and south. The proposed

project vicinity is characterized by open and vast views with flat to undulating topography. There is desert landscape to the north, east, and south; smooth dirt and soft sand dunes that lead to distant mountains forms to the north and east; and agricultural cropland dominates the landscape to the west (west of the East Highline Canal Canal). The dark gray, subdued formations of the Chocolate Mountains approximately 13 miles to the east of the project vicinity are approximately 2,000 feet above Mean Sea Level and are visible along the horizon for an approximately 25-mile stretch of SR 78 from just outside Brawley until they are blocked by the Mesquite Regional Landfill as the highway transitions into the mountain range; other portions of the mountain range are not prominent in the project area landscape given their distance from the project vicinity. The Algodones Dunes, including the Imperial Sand Dunes Recreation Area and North Algodones Dunes Wilderness Area, are approximately 11 miles east of the project site and are visible from the project site in the background at the base of the Chocolate Mountains. Agricultural development to the west of the project site (and west of the East Highline Canal) largely contributes to the human-made changes in the natural landscape in the general vicinity. Vegetation in the geometric agricultural fields is defined by distinct edges of exposed soils, with consistent groupings of bright yellow to dark green colors and a smooth, carpet-like texture.

The existing natural landscape is a valued resource because of its unspoiled nature and panoramic view, especially of the mountains and dunes in the background, which can be seen by motorists along much of SR 78 (Ben Hulse Highway). The foreground view, consisting of comparatively monotonous desert scrub habitat, is less valued because of the lack of distinguishing or interesting features, as evidenced by the lack of turnouts allowing motorists to stop and enjoy the view at the project site. This foreground view is consistent for approximately 7 miles from the East Highline Canal to the Imperial Sand Dunes Recreation area, approximately 5 miles east of the project site.

One key observation point (KOP) was identified to assess the level of visual change resulting from the proposed project on the existing environment. This KOP is the view traveling east in a vehicle traveling at 60 miles per hour (MPH) on SR 78 at the southwest corner of the project site. The view of the current environmental setting is generally characterized by broad, panoramic views of flat to undulating topography and horizontal terrain that is light khaki to light brown in color in the foreground and midground and dark-colored landforms in the background. The proposed project would be perceivable from this KOP based on viewer perspective (Figure 5). In the foreground area, a viewer would see the proposed project to the immediate left (northwest); vacant, undeveloped Sonoran Desert scrub to the right (southeast and east); and SR 78 directly ahead (to the east). In the mid-ground the viewer would see vacant, undeveloped Sonoran Desert Scrub. The viewer would see the Chocolate Mountains in the distant (greater than 10 miles) background. Additionally, the gen-tie would be perceivable, running adjacent to SR 78 between the southwest corner of the proposed project to the transmission line to the west of East Highline Canal Road. Neither the East Highline Canal or transmission lines are visible from KOP 1.

The proposed project would result in changes to the visual character (line, color, and texture) of the project site, which is currently characterized as desert landscape. The existing, natural landscape is a valued, important, beautiful, and scenic resource, including views of the Chocolate Mountains in the background. With the addition of structures (e.g., solar arrays, gen-tie line) to an area where there are currently none, the change in contrast in the foreground is strong. Contrast associated with the introduction of new lines with no similar comparisons (particularly the gen-tie line and the project fence) is strong; addition of new colors having similar color intensity results are a moderate contrast change; and addition of new textures results in a moderate contrast change. Sensitive viewers at KOP 1 are those traveling east on SR 78 who would therefore experience a moderate impact to visual resources because of the proposed project. However, impacts to the sensitive receptors from the proposed project would be temporary because viewers at KOP 1 would not be stationary. Eastbound travelers on SR 78 would pass the solar arrays for the proposed project within 1 minute and then be back to the existing desert and panoramic view.

Therefore, the proposed project would result in a less than significant impact to the existing visual character or quality of the site and its surroundings.

- d) **Less than Significant Impact.** The project would not include any substantial source of nighttime light in the vicinity of the project site. Any lighting required for safety and security within the project site would be hooded and oriented downward so as not to spill over into adjacent parcels consistent with Title 9, Division 17, Chapter 2: Specific Standards for all Renewable Energy Projects, of the County's Zoning Ordinance.

A glare analysis was conducted to determine the potential for significant glint or glare from solar panels and other built-project components that may affect residents, motorists, or airborne travelers.

The glare analysis shows two receptors with the potential to receive low and medium glare from the proposed project:

- Eastbound travelers on SR 78 (Ben Hulse Highway), in the vicinity of the project site may experience medium glare from mid-March to early October between approximately 5:30 and 6:00 am and mid-April to late August between approximately 6:00 and 7:00 pm, when the modules are fully rotated to the east and west, respectively.
- Airborne travelers traveling from the nearest airport (Brawley Municipal Airport, approximately 14 miles west of the project) may experience medium momentary glint. During takeoff and landing procedures, airborne viewers (e.g., pilots) would be elevated in relation to the project area. The results for one flight path show the potential for medium glare experienced as a momentary glint for air travelers. This momentary glint on this flight path has potential to occur during a period of up to 233 minutes (3.9 hours) from early to late March, and for 1-8 minutes between mid-September and mid-October.

The glare analysis for the proposed project concluded that glint that may be experienced by eastbound travelers at KOP 1. Travelers on SR 78, traveling at a typical speed of 60 MPH, would experience glint for no more than one minute along the 1-mile-long southern project boundary during short periods at the beginning and the end of the day. Because aircraft typically travel at a higher rate of speed than vehicles, the effect is momentary, lasting only if the angle between the sun, water body, and aircraft is maintained. Unless an aircraft were descending at an angle sloped directly at the solar array with the sun directly behind the aircraft, any glare that might occur from solar panels would be below the pilot's horizon and would at no time be as severe as the sun itself. Given the brief period glare would be produced, these effects are considered less than significant.

Figure 5. View from KOP 1



Source: Appendix A of this Initial Study

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II. Agriculture and Forestry Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</i></p> <p>Would the project:</p>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- a) **No Impact.** According to the California Department of Conservation's (DOC) California Important Farmland Finder, the project site is not located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California DOC 2022). The project site is designated as Other Land by the DOC. Therefore, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and no impact is identified.

- b) **No Impact.** The project site is currently zoned S-2 (Open Space/Preservation) and is not zoned for agricultural use. Therefore, the proposed project would not conflict with existing zoning for agricultural use and no impact is identified.

As of December 31, 2018, all Williamson Act contracts in Imperial County have been terminated. The project site is not located on Williamson Act contracted land. Therefore, the proposed project would not conflict with a Williamson Act contract and no impact is identified.

- c) **No Impact.** The project site is not located on forest land as defined in PRC Section 1220 (g). There are no existing forest lands, timberlands, or timberland zoned Timberland Production either on-site or in the immediate vicinity; therefore, the project would not conflict with existing zoning of forest land or cause rezoning of any forest land. Additionally, the site is not zoned as forest, timberland or for Timberland Production. Therefore, no impact is identified for this issue area.
- d) **No Impact.** There are no existing forest lands either on site or in the immediate vicinity of the project site. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impact is identified for this issue area.
- e) **No Impact.** As discussed in Response II. a) above, the project site is not located on land designated as Important Farmland and would not convert farmland to non-agriculture use. As discussed in Response II. d) above, there are no existing forest lands either on site or in the immediate vicinity of the project site. Therefore, the proposed project would not result in the conversion of forest land to non-forest use. Thus, no impact is identified for this issue area.

III. Air Quality

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.</i>				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

The following information is summarized from the *Air Quality and Greenhouse Gas Emissions Assessment for the North Star 2 Project* prepared by ECORP Consulting, Inc. This report is provided as Appendix B of this Initial Study.

- a) **Less than Significant Impact.** The proposed project is located within the jurisdiction of the Imperial County Air Pollution Control District (ICAPCD) in the Salton Sea Air Basin. The project region is designated as a nonattainment area for the federal ozone (O₃), particulate matter less than 2.5 microns in diameter (PM_{2.5}) and particulate matter less than 10 microns in diameter (PM₁₀) standards and is also a nonattainment area for the state standards for O₃ and PM₁₀.

The U.S. Environmental Protection Agency, under the provisions of the Clean Air Act, requires each state with regions that have not attained the federal air quality standards to prepare a State Implementation Plan (SIP), detailing how these standards are to be met in each local area.

The region’s SIP is constituted of the following ICAPCD air quality plans: 2018 PM₁₀ SIP, the 2018 Annual PM_{2.5} SIP, the 2017 8-Hour Ozone SIP, 2013 24-Hour PM_{2.5} SIP, the 2009 1997 8-hour Ozone RACT SIP, the 2009 PM₁₀ SIP and the 2008 Ozone Early Progress Plans. Conformance with the Air Quality Management Plan (AQMP) for development projects is determined by demonstrating compliance with local land use plans and/or population projections, meeting the land use designation set forth in the local General Plan, and comparing assumed emissions in the AQMP to proposed emissions. The project must demonstrate compliance with all ICAPCD applicable rules and regulations, as well as local land use plans and population projections. As the project does not contain a residential component, the project would not result in an increase in the regional population. While the project would contribute to energy supply, which is one factor of population growth, the

proposed project would not significantly increase employment or growth within the region. The proposed project would be required to comply with all applicable ICAPCD rules and requirements during construction and operation to reduce air emissions. Overall, the proposed project would improve air quality by reducing the amount of emissions that would be generated in association with electricity production from a fossil fuel burning facility. Furthermore, the thresholds of significance, adopted by the air district (ICAPCD), determine compliance with the goals of the attainment plans in the region. As such, emissions below the ICAPCD regional mass daily emissions thresholds presented would not conflict with or obstruct implementation of the applicable air quality plans.

The following provides an analysis of potential impacts during construction of the project followed by an analysis of potential impacts during operation of the project.

Construction

Air quality impacts related to construction were calculated using the CalEEMod version 2020.4.0 air quality model. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the project. The project's construction assumptions used in the CalEEMod, including the construction schedule and equipment mix, are described in the project's air quality and greenhouse gas assessment (Appendix B of this Initial Study).

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM₁₀ must be implemented at construction sites. Additionally, all feasible discretionary measures for PM₁₀ apply to those construction sites that are 5 acres or more for non-residential developments or 10 acres or more in size for residential developments. Other portions of the project site may be used for staging areas. Standard and discretionary measures from the ICAPCD handbook include:

Standard Measures for Fugitive PM₁₀ Control:

- a. All disturbed areas, including bulk material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.
- b. All on-site and off-site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- c. All unpaved traffic areas one acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- d. The transport of bulk materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of bulk material. In addition, the cargo compartment of all haul trucks is to be cleaned and/or washed at delivery site after removal of bulk material.
- e. All track-out or carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.

- f. Movement of bulk material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
- g. The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

Discretionary Measures for Fugitive PM₁₀ Control

- a. Water exposed soil with adequate frequency for continued moist soil.
- b. Replace ground cover in disturbed areas as quickly as possible.
- c. Automatic sprinkler system installed on all soil piles.
- d. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
- e. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership for construction employees.
- f. Implement a shuttle service to and from retail services and food establishments during lunch hours.

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for construction equipment must be implemented at construction sites. Standard measures from the ICAPCD handbook include:

Standard Measures for Construction Combustion Equipment

- a. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel-powered equipment.
- b. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes as a maximum.
- c. Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the amount of equipment in use.
- d. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Construction-related Emissions. Construction-related activities are temporary, short-term sources of air pollutant emissions. Two basic sources of short-term emissions would be generated through project implementation: operation of heavy-duty equipment and the creation of fugitive dust during clearing and grading.

Predicted maximum daily emissions attributable to project construction are summarized in Table 1. As shown in Table 1, emissions generated during project construction would not exceed the ICAPCD's significance thresholds. Therefore, criteria pollutant emissions generated during project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard and is thus considered a less than significant impact.

Table 1. Project Construction-Generated Emissions

Construction Year	Pollutant (Pounds per day)					
	ROG	NOx	CO	SO _x	PM ₁₀	PM _{2.5}
Year One	6.26	65.75	48.76	0.11	19.97	9.78
Year Two	5.67	57.67	47.06	0.11	19.58	9.41
Year Three	4.01	37.71	37.71	0.07	3.68	1.79
<i>ICAPCD Significance Threshold</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>-</i>	<i>150</i>	<i>-</i>
Exceeds Threshold?	No	No	No	No	No	No

Source: Appendix B of this Initial Study

Notes: Pounds per day taken from the season with the highest output.

CUP Conditions of Approval for ICAPCD Review/Compliance (Construction):

As a Condition(s) of Approval of the CUP, the applicant will be required to submit information to ICAPCD to verify that proper emissions controls have been implemented to maintain air emissions below ICAPCD Significance Thresholds. These CUP Conditions of Approval include the following for the construction phase:

- A minimum of 30 days prior to the commencement of any earthmoving or ground-disturbing activities, the applicant shall coordinate with ICAPCD to allow ICAPCD to conduct a pre-construction inspection(s) of the project site. The purpose of the inspection shall be to evaluate site conditions, identify appropriate and effective dust control measures, and inform the development of an Enhanced Construction Dust Control Plan.

Prior to any earthmoving activity, the applicant shall submit an Enhanced Construction Dust Control Plan and obtain approval from ICAPCD and Imperial County Planning and Development Services Department (ICPDS). The Construction Dust Control Plan shall include the requirement that the ICAPCD be notified of earthmoving activities a minimum of 10 days before initiating the earth moving activities.

- ~~As a CUP Condition of Approval, the applicant shall submit an Enhanced Construction Dust Control Plan to the ICAPCD for review and approval.~~
- As a CUP Condition of Approval, the applicant shall submit an Equipment List to ICAPCD. The Equipment List shall be submitted periodically (on a monthly basis) during construction and include the following:
 - The list must be in Excel Format and include make, model, year, ID/serial number(s), type, tier, horsepower, and actual dates and hours used.
 - The Equipment List shall be submitted to ICAPCD electronically on a monthly basis
 - The ICAPCD will calculate NOx emissions using the Equipment Lists once construction is completed to verify that NOx thresholds were not exceeded. In the event an exceedance is determined the project may become subject to Policy 5 requirements.

Operation

Operation-related sources of air pollutant emissions include the direct emission of criteria pollutants. Project-generated increases in emissions would be predominately associated with motor vehicle use for routine maintenance work, and site security. The maximum daily pollutants calculated for operations are shown in Table 2. As shown in Table 2, the project’s emissions would not exceed any ICAPCD’s thresholds for any criteria air pollutants during operation, and operations-related emissions would be less than significant for the proposed project.

Table 2. Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NOx	CO	SOx	PM ₁₀	PM _{2.5}
Summer Emissions						
Area	12.54	0.00	0.06	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.01	0.51	0.17	0.00	0.09	0.03
Total:	13.92	0.51	0.23	0.00	0.09	0.03
ICAPCD Significance Thresholds	137	137	150	550	550	150
Exceed ICAPCD Significance Threshold?	No	No	No	No	No	No
Winter Emissions						
Area	12.54	0.00	0.06	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.01	0.56	0.17	0.00	0.09	0.03
Total:	13.92	0.51	0.23	0.00	0.09	0.03
ICAPCD Significance Thresholds	137	137	150	550	550	150
Exceed ICAPCD Significance Threshold?	No	No	No	No	No	No

Source: Appendix B of this Initial Study

Notes: Operational emissions account for six heavy-duty truck vehicle trip per day. It is noted that this is a conservative estimate, and many days will have no operational related vehicle trips.

CUP Conditions of Approval for ICAPCD Review/Compliance (Operation):

As a Condition(s) of Approval of the CUP, the applicant will be required to submit information to ICAPCD to verify that proper emissions controls have been implemented to

maintain air emissions below ICAPCD Significance Thresholds. These CUP Conditions of Approval include for the operation phase:

- As a CUP Condition of Approval, the applicant shall submit an Operational Dust Control Plan to the ICAPCD for review and approval.

Conclusion

As described above, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections and comparing assumed emissions in the AQMP to proposed emissions. Because the proposed project complies with local land use plans and population projections and would not exceed ICAPCD's thresholds during construction and operations, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. This is considered a less than significant impact. Compliance with the air quality related conditions of approval as part of the Conditional Use Permit conditions, will ensure that the potential impact remains less than significant.

- b) **Less than Significant Impact.** By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

The ICAPCD's application of thresholds of significance for criteria air pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. As discussed above in Response III. a), emissions generated during project construction and operations would not exceed the ICAPCD's thresholds of significance (Table 1 and Table 2). Therefore, the project's potential to result in a cumulatively considerable net increase of any criteria pollutant is considered less than significant.

- c) **Less than Significant Impact.** Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest existing sensitive land use to the project Site is a single-family residence located approximately 2.5 miles from the western boundary of the project boundary.

Construction-Generated Air Contaminants. Construction of the project would result in temporary, short-term proposed project-generated emissions of diesel particulate matter (DPM), ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road, heavy-duty diesel equipment for project construction; soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SSAB which encompasses the project area is designated as a nonattainment area for federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃ and PM₁₀ (CARB 2019). Thus, existing O₃ and PM₁₀ levels in the SSAB are at unhealthy levels during certain periods. However, as shown in Table 1, the project would not exceed the ICAPCD significance thresholds for construction emissions.

The health effects associated with O₃ are generally associated with reduced lung function. Because the project would not involve construction activities that would result in O₃ precursor emissions (ROG or NO_x) in excess of the ICAPCD thresholds, the project is not anticipated to substantially contribute to regional O₃ concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The project would not involve activities that would result in CO emissions in excess of the ICAPCD thresholds. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction-type activity, DPM is the primary TAC of concern. PM₁₀ exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. Most PM₁₀ exhaust derives from combustion, such as use of gasoline and diesel fuels by motor vehicles. As with O₃ and NO_x, the project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the ICAPCD's thresholds. Accordingly, the project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants. Operation of the proposed project would not result in the development of any substantial sources of air toxics. There would be no stationary sources associated project operations; nor would the project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite project emissions would not result in significant concentrations of pollutants at the nearby sensitive receptor as the predominant operational emissions associated with the proposed project would be routine maintenance work, and site security. Therefore, the project would not be a substantial source of TACs. The project will not result in a high carcinogenic or non-carcinogenic risk during operation.

Carbon Monoxide Hot Spots. CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. CO concentration in the SSAB is designated as an attainment area. Detailed modeling of project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

The proposed project is anticipated to result in no more than six daily traffic trips. It is noted that this is a conservative estimate, and many days will have no operational related vehicle trips. Thus, the proposed project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the project traffic exceeding CO values. Therefore, this is considered a less than significant impact.

- d) **Less than Significant Impact.** During construction, the proposed project would have the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the project area, which is generally

devoid of surrounding receptors. Therefore, odors generated during project construction would not adversely affect a substantial number of people to odor emissions.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified as being associated with odors. Therefore, operational impacts related to odor would be less than significant.



IV. Biological Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

The following information is summarized from the *Biological Technical Report for the North Star 2 Project* prepared by ECORP Consulting, Inc and the *Jurisdictional Delineation for the North Star 2 Project* prepared by Hernandez Environmental Services. These reports are provided as Appendix C and D of this Initial Study, respectively.

- a) **Less than Significant with Mitigation Incorporated.** ECORP Consulting, Inc. conducted a literature review, vegetation mapping, and a biological resource assessment of the Survey Area, which includes the project site plus a 500-foot buffer, to document the existing biological conditions and resources, to assess the habitat for its potential to support sensitive plant and wildlife species, as required under CEQA, and to determine whether project-related impacts may occur to sensitive biological resources.

EXISTING CONDITIONS

Literature Review

A literature review using the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDDB), the California Native Plant Society's (CNPS') Electronic Inventory (CNPSEI), and the USFWS Species Occurrence Data (USFWS 2022a) to determine the special-status plant and wildlife species that have been documented in the vicinity of the project site.

The literature review resulted in 10 special-status plant and 23 special-status wildlife species that have recently and historically been recorded in the vicinity of the project site or that are highly associated with habitat that occurs within the Survey Area.

Biological Reconnaissance Survey

A biological reconnaissance survey for the Survey Area was conducted on October 25 and 26, 2022. The results of the biological reconnaissance survey, including plants and plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) are summarized below.

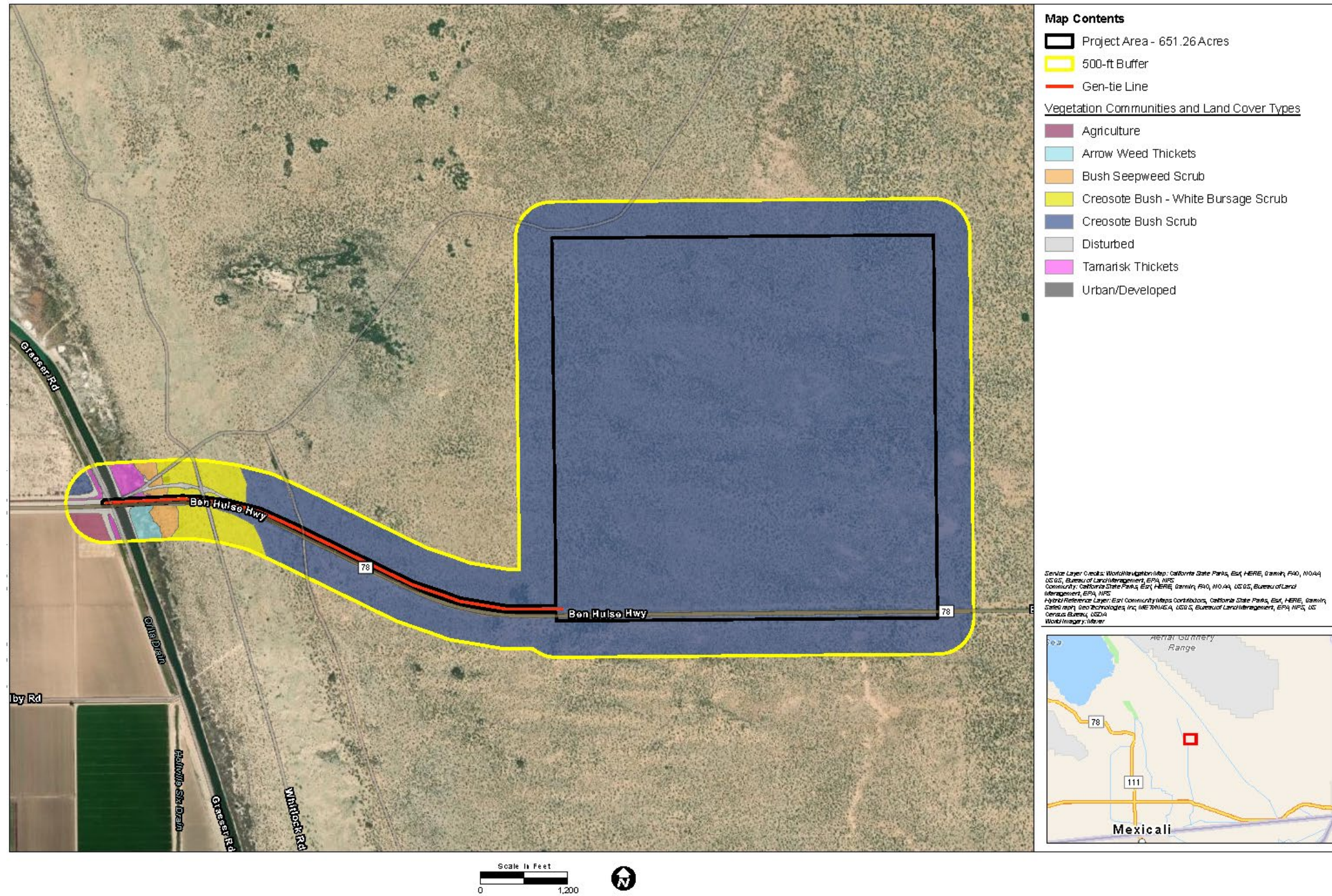
Vegetation Communities/Land Cover. The majority of the Survey Area consists of creosote bush scrub. The location of each vegetation community/land cover in the project site and Survey Area are shown in Figure 6. Acreages of each habitat and vegetation community in the project site are shown in Table 3. A detailed description of each vegetation community/land cover is provided in the *Biological Technical Report for the North Star 2 Project* (Appendix C of this Initial Study).

Table 3. Vegetation Communities and Land Covers in Project Site

Vegetation Communities and Land Covers	Acres in Project Site
Creosote Bush Scrub	639.30
Creosote Bush - White Bursage Scrub	1.47
Bush Seepweed Scrub	0.22
Tamarisk Thickets	0.36
Arrow Weed Thickets	0.00
Agriculture	0.00
Disturbed	0.82
Urban/Developed	9.09
Project Site Total	651.26

Source: Appendix C of this Initial Study

Figure 6. Vegetation Communities and Land Cover Types



Source: Appendix C of this Initial Study

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Wildlife Observed. Wildlife species observed included, monarch butterfly (*Danaus plexippus*), great basin whiptail (*Aspidoscelis tigris tigris*), side-blotched lizard (*Uta stansburiana*), loggerhead shrike (*Lanius ludovicianus*), northern flicker (*Colaptes auratus*), turkey vulture (*Cathartes aura*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), house finch (*Haemorhous mexicanus*), black-tailed jackrabbit (*Lepus californicus*), and signs of western burrowing owl (*Athene cunicularia hypugaea*), desert kit fox (*Vulpes macrotis arsipus*), and kangaroo rat (*Dipodomys* sp.). A full list of wildlife species observed on or immediately adjacent to the Survey Area is included in Appendix C of this Initial Study.

Special-Status Species Assessment. As previously mentioned above, the literature review resulted in 10 special-status plant and 23 special-status wildlife species that have recently and historically been recorded in the vicinity of the project site or that are highly associated with habitat that occurs within the Survey Area.

PLANTS

Numerous special-status plant species have been recorded within five miles of the project site, according to the CNDDDB and CNPSEI. Of all available records, a total of 10 species were identified as those with the potential for occurrence within the vicinity of the project site. None of these species have a high potential to occur within the project site. Additionally, CRPR 3 or 4 species were eliminated from the analysis because these rankings are considered a review list and a watch list, respectively. Descriptions of the CNPS designations are shown in Table 4.

Table 4. CNPS Status Designations

List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which we need more information; a review list
4	Plants of limited distribution; a watch list
List 1B, 2, and 4 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Source: Appendix C of this Initial Study

Due to the presence of suitable habitat and several known occurrences within five miles of the project site, the following species was determined to have a **moderate** potential to occur:

- Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*) is a federally listed threatened and state-listed endangered plant species with a CRPR of 1B.2. Peirson's milk-vetch is known to occur in desert dunes in creosote bush scrub habitat. There were multiple CNDDDB occurrences returned during the database search, with one record from 2018 documenting approximately 8,000 plants on Algodones Dunes, approximately four miles northeast of the project site. Marginally

suitable habitat for this species exists in the creosote bush scrub (sand dunes) within the project site.

- Wiggins' croton (*Croton wigginsii*) is a CRPR 2B.2 plant species. Wiggins' croton is known to occur in sandy Sonoran desert scrub habitat. There were multiple CNDDDB occurrences returned during the database search, with one record from 2019 documenting thousands of individuals on Algodones Dunes, approximately three miles northeast of the project site. Marginally suitable habitat for this species exists in the creosote bush scrub (sand dunes) within the project site.
- Munz's cholla (*Cylindropuntia munzii*) is a CRPR 1B.3 plant species. Munz's cholla is known to occur in sandy or gravelly soils in Sonoran Desert scrub habitat. There are no CNDDDB records of this species within five miles of the project site; however, one record from 2018 documented one individual on Algodones Dunes, approximately eight miles northeast of the project site. Suitable habitat for this species exists in the desert scrub in the project site.
- Abrams' spurge (*Euphorbia abramsiana*) is a CRPR 2B.2 plant species. Abrams' spurge is known to occur in creosote scrub habitat within sandy flats including playas, fields, disturbed areas, and washes. There are no CNDDDB records of this species within five miles of the project site; however, two records from 2012 documented hundreds to thousands of individuals on Algodones Dunes, approximately ten miles north of the project site. Suitable habitat for this species occurs within the project site in the creosote bush scrub.
- Algodones Dunes sunflower (*Helianthus niveus* ssp. *tephrodes*) is a state-listed endangered plant species with a, CRPR of 1B.2. Algodones Dunes sunflower is known to occur on desert dunes in creosote bush scrub habitat. There were multiple CNDDDB occurrences returned during the database search, with one record from 2018 documenting hundreds of individuals on Algodones Dunes approximately four miles from the project site. Marginally suitable habitat for this species exists in the creosote bush scrub (sand dunes) in the project site.
- Darlington's blazing star (*Mentzelia puberula*) is a CRPR 2B.2 plant species. Darlington's blazing star is known to occur in Mojavean and Sonoran Desert scrub and creosote bush scrub in rocky or sandy soils. There are no CNDDDB records of this species within five miles of the project site; however, one historic record from 1960 documented the plant at SR 78 crossing of Coachella Canal less than five miles east of the project site. Suitable habitat for this species exists in the creosote bush scrub in the project site.
- Giant Spanish-needle (*Palafoxia arida* var. *gigantea*) is a CRPR 1B.3 plant species. Giant Spanish-needle is known to occur on desert dunes in creosote bush scrub habitat. There were multiple CNDDDB occurrences returned during the database search, with one record from 2013 documenting multiple plants on Algodones Dunes approximately four miles from the project site. Marginally suitable habitat for this species exists in the creosote bush scrub (sand dunes) in the project site.
- Roughstalk witch grass (*Panicum hirticaule* ssp. *hirticaule*) is a CRPR 2B.1 plant species. Roughstalk witch grass is known to occur in creosote bush scrub, Joshua tree woodland, Mojavean desert scrub, and Sonoran Desert scrub in silty or sandy soils, often on desert dunes. There are no CNDDDB records of this species within five miles of the project site, however one record from 2012 documented the plant on Algodones Dunes, approximately 8 miles north of the project site. Suitable habitat for this species exists in the creosote bush scrub in the project site.
- Sand food (*Pholisma sonorae*) is a CRPR 1B.2 plant species. It is known to occur in sandy Sonoran Desert scrub habitat. There were multiple CNDDDB occurrences returned during the database search including two recent occurrences within 5 miles

of the project site. Marginally suitable habitat occurs for this species in the creosote bush scrub in the project site.

The following species was found to have a **low** potential to occur within the project site because of limited habitat for the species on the site and a known occurrence has been reported in the database, but not within 5 miles of the project site, or suitable habitat strongly associated with the species occurs within the project site, but no records were found in the database search:

- slender cottonheads (*Nemacaulis denudata* var. *gracilis*), CRPR 2B.2

WILDLIFE

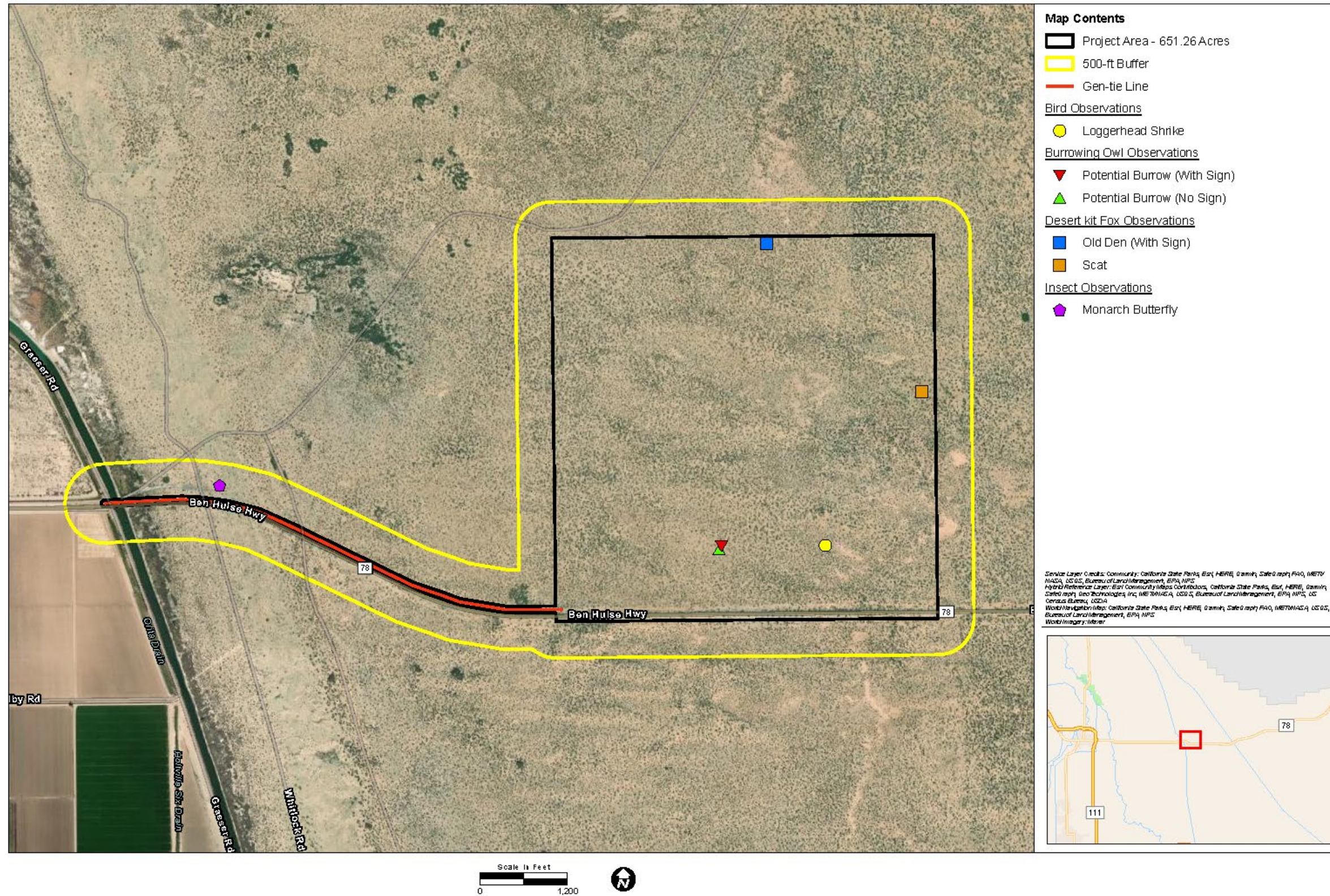
The literature search documented 23 special-status wildlife species in the vicinity of the Survey Area. Of the 23 special-status wildlife species identified in the literature review, four were present within the Survey Area, three were found to have a high potential to occur, four were found to have a moderate potential to occur and six were found to have a low potential to occur; the remaining six species are presumed absent from the project site. A discussion of the special-status wildlife species found onsite and species that have a high or moderate potential to occur within the Survey Area are provided below.

The following species were observed on the site during the reconnaissance survey. Special-status species wildlife species **observed** during the reconnaissance survey are shown in Figure 7.

- Burrowing owl (*Athene cunicularia*) is a U.S. Fish and Wildlife Service (USFWS) Bird of Conservation Concern (BCC), a CDFW species of special concern (SSC), candidate for potential listing as a protected species under CESA, and a BLM sensitive species. This species is typically found in dry open areas with few trees and short grasses; it is also found in vacant lots near human habitation. It uses uninhabited mammal burrows for roosts and nests, often in close proximity to California ground squirrel colonies. It primarily feeds on large insects and small mammals but will also eat birds and amphibians. One burrow, with recent burrowing owl sign (i.e., pellets and feathers) was observed within the southern portion of the project site during the October 2022 biological reconnaissance survey.
- Monarch butterfly (*Danaus plexippus*) is a USFWS candidate federally listed butterfly species. Monarchs occur throughout a variety of habitats in North America and can be found along roadsides, open areas, and urban gardens. Key habitat requirements of monarchs include their host plant for reproduction, nectar sources for adults, and forested groves providing suitable microclimate protected from the elements during the winter. Milkweed (*Asclepias* sp.) is the host plant for this species and used for sheltering eggs and feeding larvae. One individual was observed on a rush milkweed (*Asclepias subulata*) in the buffer surrounding the gen-tie line extension during the October 2022 biological reconnaissance survey.
- Loggerhead shrike (*Lanius ludovicianus*) is a CDFW SSC. This species prefers open country with scattered shrubs and trees. They frequent agricultural fields, deserts, grasslands, savanna, and chaparral habitats. One individual was observed in the southern portion of the project site during the October 2022 biological reconnaissance survey.
- Desert kit fox (*Vulpes macrotis arsipus*) is a fur-bearing mammal that is protected under the CCR Title 14, Chapter 5, Section 460, which prohibits take of the species at any time. The desert kit fox is found in desert habitats that include creosote bush, shadscale, greasewood, and sagebrush. It feeds primarily on nocturnal rodents and rabbits, but will opportunistically take birds, reptiles, and insects. Sign of desert kit fox, including scat and dens, were observed throughout the project site during the October 2022 biological reconnaissance survey.

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Figure 7. Special-Status Wildlife Species Observed within Survey Area



Source: Appendix C of this Initial Study

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Three species were found to have **high** potential to occur within the Survey Area due to the presence of suitable habitat for the species on site and because a known occurrence has been recorded within 5 miles of the site.

- Flat-tailed horned lizard (*Phrynosoma mcallii*) is a CDFW SSC and BLM Sensitive species. This species is most commonly found on sandy flats and valleys within desert scrub habitat with little or no windblown sand. They can also be found on salt flats and gravelly soils. The creosote bush scrub provides suitable habitat for the flat-tailed horned lizard. Two recent CNDDDB records occur within 5 miles of the Survey Area. The most recent record, recorded in 2017, was approximately 5 miles east of the project site. The closest record, recorded in 2007, was located within the project site. According to the CNDDDB, many collections of this species have been made along SR 78.
- Western yellow bat (*Lasiurus xanthinus*) is a CDFW SSC. This species roosts in trees, especially in fan palms with dead fronds. They can also be found in riparian woodlands in arid regions, oak or pinyon-juniper woodlands, and developed areas. Although the CNDDDB only revealed one historic record of this species approximately 11 miles southwest of the project site, nearby and recent records of this species were found using iNaturalist, a citizen science resource. In addition, the gen-tie line contains suitable roosting habitat for this species in the form of palm trees.
- Yuma myotis (*Myotis yumanensis*) is a BLM sensitive species. This species roosts near water in cliff crevices, caves, trees, buildings, and bridges. Occurs near water in riparian areas, moist woodlands and forests, and desert scrub. Although this species is not tracked in the CNDDDB, the project site contains suitable foraging and roosting habitat for this species. This species commonly roosts in bridges and may use the bridge along the gen-tie line if habitat is present.

Four species were found to have **moderate** potential to occur within the Survey Area because habitat (including soils and elevation factors) for the species occurs on the site and a known occurrence exists within the database search, but not within 5 miles of the site or a known occurrence exists within 5 miles of the site and marginal or limited amounts of habitat occurs within the project site:

- Colorado Desert fringe-toed lizard (*Uma notata*) is a CDFW SSC and BLM Sensitive species. This species is commonly found in sparsely vegetated areas with fine sand including flats, riverbanks, dunes, and washes. This species burrows in fine loose sand. Small areas of suitable habitat are present within the Survey Area.
- Pallid bat (*Antrozous pallidus*) is a CDFW SSC and BLM Sensitive species. This species is commonly found in desert habitat and is known to roost in bridges. Potential roosting habitat for this species may be present within the SR-78 bridge that crosses over the East Highline Canal if habitat is present.
- Townsend's big-eared bat (*Corynorhinus townsendii*) is a CDFW SSC and BLM Sensitive species. The Survey Area is within the known range of this species and this species is known to roost in bridges. Potential roosting habitat for this species may be present within the SR-78 bridge that crosses over the East Highline Canal if habitat is present.
- American badger (*Taxidea taxus*) is a CDFW SSC. Although the CNDDDB did not contain any nearby records of this species, suitable habitat for this species was present within the project site.

Six species were found to have a **low** potential to occur within the Survey Area because limited habitat for the species occurs on the site and a known occurrence has been reported in the database, but not within 5 miles of the site, or suitable habitat strongly associated with the species occurs on the site, but no records were found in the database search:

- Desert pupfish (*Cyprinodon macularius*), USFWS Endangered (END) and CDFW END,
- Razorback sucker (*Xyrauchen texanus*), USFWS END and CDFW END,
- Lucy's warbler (*Oreothlypis luciae*), CDFW SSC and BLM Sensitive species;
- Small-footed myotis (*Myotis ciliolabrum*), BLM Sensitive species;
- Long-eared myotis (*Myotis evotis*), BLM Sensitive species; and
- Fringed myotis (*Myotis thysanodes*), BLM Sensitive species.

USFWS Designated Critical Habitat

The project site is not located within any USFWS-designated critical habitat. The closest USFWS-designated critical habitat is for Peirson's milk-vetch located approximately 5.5 miles northeast of the project site, near the Glamis Dunes.

PROJECT IMPACTS

Special-Status Plants

The literature review identified 10 special-status plant species that have the potential to occur within the project site. One of these plant species, slender cottonheads, has a low potential to occur due to the limited suitable habitat within the project site. There is moderate potential for the following nine rare plant species to occur within the project site:

- Peirson's milk-vetch
- Wiggins' croton
- Munz's cholla
- Abram's spurge
- Algodones Dunes sunflower
- Darlington's blazing star
- giant Spanish-needle
- roughstalk witch grass
- sand food

Suitable habitat for these species is present within the creosote bush scrub and desert scrub habitats. Impacts that may occur to the species includes loss of individuals, habitat, and seedbank. Depending on the size of the population, this impact may be significant. Implementation of Mitigation Measures BIO-1, BIO-3, BIO-4, BIO-11, BIO-12, BIO-14, BIO-16, BIO-18, BIO-19, BIO-21 and BIO-25 would reduce potential impacts on special-status plant species to a level less than significant.

Special-Status Wildlife

The literature review identified 23 special-status wildlife species that have the potential to occur within the Survey Area. However, 12 of these species have a low or no potential to occur due to the lack of suitable habitat, limited habitat within the Survey Area, and/or the project site occurs outside the known range of these species.

Four special-status wildlife species were observed onsite during the habitat assessment (Figure 7). Burrowing owl, loggerhead shrike, and desert kit fox were all observed in the creosote bush scrub habitat in the solar field portion of the Survey Area. A monarch butterfly was observed within the creosote bush-white bursage scrub in the buffer of the gen-tie line extension. Direct impacts to these species that could occur include injury, mortality, nest failures, and loss of young. Indirect impacts include loss of nesting and foraging habitat,

increase in anthropogenic effects (i.e., noise levels, introduction of invasive/nonnative species, increase in human activity, increase in dust). Impacts to these species could be considered significant. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6 through BIO-15, BIO-18 and BIO-19 would reduce potential impacts on special-status wildlife species to a level less than significant.

Three special-status wildlife species were found to have a high potential to occur within the Survey Area: flat-tailed horned lizard, western yellow bat, and Yuma myotis. Four special-status wildlife species were found to have a moderate potential to occur within the Survey Area: Colorado Desert fringe-toed lizard, pallid bat, Townsend's big-eared bat, and American badger. Direct impacts to these species that could occur include injury, mortality, loss of nests or young, and destruction of habitat. Indirect impacts could occur in the form of habitat loss, increased human and vehicular activity, ground vibrations, noise, and increased dust. Impacts to these species could be considered significant. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6 through BIO-15, BIO-18 and BIO-19, BIO-23 and BIO-24 would reduce potential impacts on special-status wildlife species to a level less than significant.

Foraging habitat for a number of raptor species and breeding habitat for numerous passerine species protected by the MBTA occurs throughout the project site. The project site provides nesting habitat for ground-nesting species as well as species that nest in desert scrub habitat. Direct impacts to nesting avian species include injury, mortality, loss of young, and nest failure. Indirect impacts include loss of foraging and nesting habitat for passerine and raptors species, increase in noise and human activities, and potential introduction of invasive/nonnative species. Impacts to nesting avian species could be considered significant. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6 through BIO-15, BIO-18 and BIO-19 would reduce potential impacts on nesting avian species to a level less than significant.

The palm trees located within the Survey Area may provide roosting habitats for bat species, particularly western yellow bat, an SSC species. These trees could function as maternity roost sites for this species. The bridge located over the East Highline Canal within the Survey Area may provide roosting habitats for bat species if suitable roosting habitat is present. This bridge could function as maternity roost sites for multiple bat species. The bridge was not assessed for suitable bat roosting habitat due to the amount of water present in the East Highline Canal. Bat species in California are protected by Section 4150 (protection of non-game mammals from take) of the California Fish and Game Code. Section 4150 of the California Fish and Game Code prohibits the take of any naturally occurring mammals in California that are nongame mammals, which includes all species of the Order Chiroptera (bats). Furthermore, bat maternity roosting habitats are protected as native wildlife nursery sites under CEQA. The reconnaissance survey was conducted outside of the maternity season, but based on the observation records and habitat suitability, there is high likelihood that the palm trees may serve as a maternity roost location. Direct impacts to special-status bat species and/or bat maternity colonies that could occur include injury, mortality, maternity colony failures, and loss of young. Indirect impacts include loss of roosting habitat, and increase in anthropogenic effects (i.e., noise levels, increase in human activity, increase in dust). Impacts to these species and maternity roosting sites could be considered significant. Implementation of Mitigation Measures BIO-2, BIO-3, BIO-4, BIO-6 through BIO-15, BIO-18 and BIO-19, BIO-23 and BIO-24 would reduce potential impacts on bat species to a level less than significant.

Mitigation Measures:

BIO-1 Rare Plant Surveys. Prior to initiating ground disturbance, three rare plant botanical field surveys shall be conducted that are floristic in nature (i.e., identifying all plant species to the taxonomic level necessary to determine rarity), and inclusive of areas proposed for disturbance and indirect impacts by the Project. The surveys shall be conducted by a qualified botanist or qualified

biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If any special-status species are observed during the botanical field surveys, The project shall be designed to reduce impacts to these species through the establishment of buffers, to the extent feasible. Buffer distances will be determined by the qualified botanist or biologist, typically 50 feet or greater from an identified special-status plant species, unless the qualified botanist or biologist determines a reduced buffer would suffice to avoid impacts to the species. All special status plant species identified on site shall be mapped with a submeter GPS device and depicted on a site-specific aerial photograph and topographic map and included on any construction, grading, fuel modification, or other pertinent plans. If avoidance of special-status plant species is not feasible, a Special-Status Plant Relocation Plan shall be developed and implemented. The Special-Status Plant Relocation Plan shall address mitigation for special-status plants, including topsoil salvage to preserve seed bank and management of salvaged topsoil; seed collection, storage, possible nursery propagation, and planting; salvage and planting of bulbs as feasible; location of on-site receptor sites; land protection instruments for receptor areas; and funding mechanisms. The Special-Status Plant Relocation Plan shall include methods, monitoring, reporting, success criteria, adaptive management, and contingencies for achieving success.

The Project proponent shall mitigate the loss of the plant(s) through the purchase of mitigation credits from a CDFW-approved bank or land acquisition and conservation at a minimum 2:1 (replacement to impact) ratio for occupied habitat should success criteria not be met, or presence of the specific is assumed based on suitable habitat acreage within the Project area. Note that a higher ratio may be warranted if the proposed mitigation lands are located far away from the Project site.

BIO-2 **General Impact Avoidance and Minimization Measures.** Minimization of Impacts to Migratory Birds, Bats, and Raptors. The following measures will be applicable throughout the life of the project:

- To reduce the potential indirect impact on migratory birds, bats and raptors, the project shall comply with the APLIC 2012 Guidelines for overhead utilities, as appropriate, to minimize avian collisions with transmission facilities (APLIC 2012)
- All electrical components on the project site shall be either undergrounded or the transmission lines and poles will follow design plans recommended by APLIC (i.e., installing covers over the insulator and conductor on the center phase, installing phase covers over all three insulators and conductors for three phase transmission lines, lowering and/or replacing the crossarm with a longer cross arm on pole-top pin constructions), or utilizing link marking devices (e.g., aerial marker spheres, spirals, or suspended devices).

BIO- 3 **Project Biologist.** The Project proponent shall designate a Project Biologist who shall be responsible for overseeing compliance with protective measures for biological resources during vegetation clearing and work activities within and adjacent to areas of native habitat. The Project Biologist shall be familiar with the local habitats, plants, and wildlife, and have experience performing all necessary surveys and monitoring for biological resources present on site. The Project Biologist shall also maintain communications with the Contractor to



ensure that issues relating to biological resources are appropriately and lawfully managed and shall monitor construction. The Project Biologist shall monitor all ground disturbing activities within construction areas, including activities during nesting bird season (generally February 1 to September 15), such as vegetation removal, the implementation of Best Management Practices (BMPs), and installation of security fencing to protect native species. The Project Biologist shall ensure that all wildlife and regulatory agency permit requirements, conservation measures, and general avoidance and minimization measures are properly implemented and followed.

- BIO-4** **Project Site Delineation.** The boundaries of all areas to be newly disturbed (including solar facility areas, staging areas, access roads, and sites for temporary placement of construction materials and spoils) shall be delineated with stakes and flagging prior to disturbance. All disturbances, vehicles, and equipment shall be confined to the flagged areas. Stockpiling of material shall only be allowed within established work areas.
- BIO-5** **Wildlife Entrapment Avoidance.** No potential wildlife entrapments (e.g., trenches, bores) shall be left uncovered overnight. Any uncovered pitfalls will be excavated to 3:1 slopes at the ends to provide wildlife escape ramps. Alternatively, man-made ramps may be installed. Covered pitfalls will be covered completely to prevent access by small mammals or reptiles.
- To avoid wildlife entrapment (including birds), all pipes or other construction materials or supplies shall be covered or capped in storage or laydown areas, and at the end of each construction work day in construction, quarrying and processing/handling areas. No pipes or tubing of sizes or inside diameters ranging from 1 to 10 inches shall be left open either temporarily or permanently.
- BIO-6** **Rodenticide.** No anticoagulant rodenticides, such as Warfarin and related compounds (indandiones and hydroxycoumarins), shall be used within the project site, on off-site project facilities and activities, or in support of any other project activities.
- BIO-7** **Trash Abatement.** All trash and food-related waste shall be placed in self-closing containers and removed regularly from the site to prevent overflow. Workers shall not feed wildlife.
- BIO-8** **Project Site Speed Limit.** To minimize the likelihood for vehicle strikes on wildlife, speed limits shall not exceed 15 miles per hour when driving on access roads. All vehicles required for O&M must remain on designated access/maintenance roads.
- BIO-9** **Artificial Lighting.** Avoid nighttime construction lighting or if nighttime construction cannot be avoided, use shielded directional lighting pointed downward and towards the interior of the project site, thereby avoiding illumination of adjacent natural areas and the night sky.
- BIO-10** **Equipment Mufflers.** All construction equipment used for the projects shall be equipped with properly operating and maintained mufflers.
- BIO-11** **Hazardous Substances.** Hazardous materials and equipment stored overnight, including small amounts of fuel to refuel hand-held equipment, shall be stored within secondary containment when within 50 feet of open water or resources subject to Fish and Game Code section 1602 to the fullest extent practicable. Secondary containment shall consist of a ring of sand bags around each piece of stored equipment/structure. A plastic tarp/visqueen lining with no seams shall be placed under the equipment and over the edges of the sandbags, or a plastic hazardous materials secondary containment unit shall be utilized by the Contractor.

- The Contractor will be required to conduct vehicle refueling in upland areas where fuel cannot enter waters of the U.S. or areas subject to Fish and Game Code section 1602, and in areas that do not have potential to support federally threatened or endangered species. Any fuel containers, repair materials, including creosote-treated wood, and/or stockpiled material that is left on site overnight, shall be secured in secondary containment within the work area and staging/assembly area and covered with plastic at the end of each work day.
- In the event that no activity is to occur in the work area for the weekend and/or a period of time greater than 48 hours, the Contractor shall ensure that all portable fuel containers are removed from the project site.
- All equipment shall be maintained in accordance with manufacturer's recommendations and requirements.
- Equipment and containers shall be inspected daily for leaks. Should a leak occur, contaminated soils and surfaces will be cleaned up and disposed of following the guidelines identified in the Stormwater Pollution Prevention Plan or equivalent, Materials Safety Data Sheets, and any specifications required by other permits issued for the project.
- The Contractor shall utilize off-site maintenance and repair shops as much as possible for maintenance and repair of equipment.
- If maintenance of equipment must occur onsite, fuel/oil pans, absorbent pads, or appropriate containment will be used to capture spills/leaks within all areas. Maintenance of equipment shall occur in upland areas where fuel cannot enter waters of the U.S. or areas subject to Fish and Game Code section 1602, and in areas that do not have potential to support federally threatened or endangered species.

BIO12 **Best Management Practices.** Appropriate BMPs shall be used by the Contractor to control erosion and sedimentation and to capture debris and contaminants from construction to prevent their deposition in waterways.

Erosion and sediment control devices used for the proposed project, including fiber rolls and bonded fiber matrix, shall be made from biodegradable materials such as jute, with no plastic mesh, to avoid creating a wildlife entanglement hazard.

BIO-13 **Firearms and Pets.** Project personnel and any other individuals associated with the Project are prohibited from bringing any firearms or dogs on the Project Area during, except those in the possession of authorized security personnel or local, state, or federal law enforcement officials, dogs that may be used to aid in official and approved monitoring procedures/protocols, or service dogs under Title II and Title III of the American with Disabilities Act. Firearms, open fires, and pets shall be prohibited at all work locations and access roads. Smoking shall be prohibited along the project alignment.

BIO-14 **Cross-country Vehicle Use.** Cross-country vehicle and equipment use outside of approved designated work areas and access roads shall be prohibited to prevent unnecessary ground and vegetation disturbance.

BIO-15 **Injured or Dead Wildlife.** Any injured or dead wildlife encountered during project-related activities shall be reported to the project biologist, biological monitor, CDFW, or a CDFW-approved veterinary facility as soon as possible to report the observation and determine the best course of action. For special-status species, the Project Biologist shall notify by phone or email the

County, USFWS, and/or CDFW, as appropriate, within 24 hours of the discovery.

- BIO-16** **Invasive Plants.** The Contractor shall actively manage the spread of invasive and nonnative plants, and noxious weeds by implementing weed control activities, including, but not limited to, cleaning equipment and inspecting equipment prior to transport to the sites and cleaning of tires and underside of equipment prior to leaving the site, vacuuming and cleaning the interior of vehicles and heavy equipment that have been used off-site before bringing them to the Project site, clean by pressure washing, washing in hot water, freezing, or bleaching personal gear and clothing, including footwear, that have been worn offsite before bringing them to the Project site, and not transporting soil or other fill material from off-site locations to the Project area unless they are certified weed free. The introduction of exotic, nonnative, weed, and/or invasive plant species will be avoided and controlled wherever possible, and may be achieved through physical or chemical removal and prevention, limiting the size of any vegetation and/or ground disturbance to the absolute minimum, and limiting ingress and egress to defined routes. Preventing exotic plants from entering the site via vehicular sources will include measures such as cleaning vehicles coming into and going from the site. Any use of herbicide for chemical removal of invasive and nonnative plants shall only use herbicides containing a harmless dye and registered with the California Department of Pesticide Regulation (DPR). All herbicides shall be applied in accordance with regulations set by the DPR. All herbicides shall be used according to label instructions. Labeled instructions of the herbicide used shall be made available to CDFW upon request. No herbicide application when winds are greater than five (5) miles per hour.
- BIO-17** **Checking Beneath Vehicles.** The ground beneath all parked equipment and vehicles shall be inspected for wildlife before moving.
- BIO-18** **Fugitive Dust Abatement.** Water applied to dirt roads and construction areas for dust abatement shall use the minimal amount needed to meet safety and air quality standards to prevent the formation of puddles, which could attract wildlife. Pooled rainwater or floodwater within retention basins shall be removed to avoid attracting wildlife to the active work areas.
- BIO-19** **Worker Environmental Awareness Program.** Prior to project construction, a Worker Environmental Awareness Program shall be developed and implemented by a qualified biologist and shall be available in both English and Spanish. Handouts summarizing potential impacts on special-status biological resources and the potential penalties for impacts on these resources shall be provided to all construction personnel. At a minimum, the education program shall include the following:
- the purpose for resource protection;
 - a description of special-status species including representative photographs and general ecology;
 - occurrences of USACE, RWQCB, and CDFW regulated features in the project study area;
 - regulatory framework for biological resource protection and consequences if violated;
 - sensitivity of the species to human activities;
 - avoidance and minimization measures designed to reduce the impacts on special-status biological resources;

- environmentally responsible construction practices;
- reporting requirements;
- the protocol to resolve conflicts that may arise at any time during the construction process; and
- workers sign acknowledgement form indicating that the Environmental Awareness Training and Education Program that has been completed, which shall be kept on record.

BIO-20 Burrowing Owl Avoidance and Minimization, and Mitigation. Take avoidance (pre-construction), four breeding season surveys for burrowing owl shall be completed prior to project construction by a qualified avian biologist. Surveys shall be conducted as detailed within Appendix D of the Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game [CDFG] 2012). This survey shall include 100 percent coverage of the Project site. A report summarizing the breeding season surveys including all requirement for survey reports shall be submitted to CDFW for review and approval. If burrowing owl or sign thereof is not detected, no further action is necessary.

If burrowing owl, active burrowing owl burrows, or sign thereof are found, the qualified avian biologist shall prepare and implement a plan for avoidance, minimization, and mitigation measures to be reviewed and approved by CDFW prior to commencing Project activities. The plan shall propose mitigation for permanent impacts to nesting, loss of foraging habitat, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced with permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering, and dispersal comparable to or better than that of the impact area. The mitigation land shall be sufficiently large acreage with presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter, and dispersal opportunity, and remove or control of population stressors. Permanent protection of mitigation land shall be through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission. The project proponent shall develop and implement a mitigation land management plan to address long-term ecological sustainability and maintenance of the site for burrowing owls, and funding for the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment. If deemed appropriate by CDFW, conservation species credits may also be purchased at a CDFW-approved conservation bank.

To ensure that the Project avoids impacts to burrowing owl, a qualified avian biologist shall complete a take avoidance survey no less than 14 days prior to initiating ground disturbing activities using the recommended methods described in the Staff Report on Burrowing Owl Mitigation (CDFG, 2012). Burrowing owls may recolonize a site after only a few days. Time lapses between Project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance. is identified during the non-breeding season (September 1 through January 31), then a 50-meter buffer will be established by the biological monitor. Construction within the buffer will be avoided until a qualified biologist determines that burrowing owl is no longer present or until a CDFW-approved exclusion plan has been implemented. The buffer distance may be reduced if noise attenuation buffers such as hay bales are placed between the occupied burrow and construction activities.

If burrowing owl is identified during the breeding season (February 1 through August 31), then an appropriate buffer will be established by the biological monitor in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Construction within the buffer will be avoided until a qualified biologist determines that burrowing owl is no longer present or until young have fledged. The buffer distance may be reduced in consultation with CDFW if noise attenuation buffers such as hay bales are placed between the occupied burrow and construction activities.

- BIO-21 Pre-Construction Nesting Bird Survey.** If construction or other project activities are scheduled to occur during the bird breeding season (typically February 1 through August 31 for raptors and February 15 through August 31 for the majority of migratory bird species), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests, including those for loggerhead shrike and burrowing owl, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting-bird survey should include the project site and adjacent areas where project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise. If an active nest is identified, the biologist shall establish an appropriately sized disturbance-limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance-limit buffer zones until the nest is deemed inactive by the qualified biologist. If construction activities cease for a period of greater than three days during the bird breeding season, a pre-construction nesting bird survey shall be conducted prior to the commencement of activities. Final construction buffers or setback distances shall be determined by the qualified biologist in coordination with USFWS and CDFW on a case-by-case basis, depending on the species, season in which disturbance shall occur, the type of disturbance, and other factors that could influence susceptibility to disturbance (e.g., topography, vegetation, existing disturbance levels, etc.).
- BIO-22 Pre-Construction Survey for Special-Status Wildlife Species.** A pre-construction survey shall be conducted for special-status wildlife species within all areas of potential permanent and temporary disturbance. The pre-construction survey shall take place no more than 14 days prior to the start of ground-disturbing activities. The pre-construction surveys shall take place regardless of breeding season timing and shall focus on identifying the presence of special-status wildlife species present within the Survey Area or that were identified as having a high/moderate potential to occur on the site. These species include, but are not limited to, flat-tailed horned lizard, burrowing owl, monarch butterfly, desert kit fox, loggerhead shrike, western yellow bat, Yuma myotis, American badger. Should any special status species be identified during the pre-construction survey, consultation to develop suitable avoidance and minimization measures with the appropriate agency (USFWS, CDFW) may need to be undertaken.
- BIO-23 Compliance with Section 4150 of California Fish and Game Code.** A qualified bat biologist shall conduct an appropriate combination of sampling, exit counts, and acoustic surveys to determine if bats are using the palm tree resources in the Survey Area. If project-related impacts to bat species are unavoidable, additional measures may need to be implemented to reduce or eliminate impacts to bat species, including maternity roosts, such as tree removal occurring outside of bat breeding season (October through February) or two-step, two-day removal of palm trees under supervision of a qualified bat biologist.

BIO-24 Focused Bat Surveys and Preparation of a Bat Management Plan. All suitable roosting and foraging habitat for local or migratory bat species known to the Project area, including special status species, found within the Project site and adjacent land shall be surveyed throughout no more than one year prior to initial site clearing activities. The focused surveys for special-status bat species shall be completed by a qualified bat biologist whose resume shall be reviewed and approved by CDFW. Surveys shall include determination of the approximate size of the colony(s) and species present. At the discretion of the qualified bat biologist, and the features being used within the palm trees and bridge over the East Highline Canal may be examined using appropriate methods to avoid roost and/or young abandonment due to disturbance. The focused surveys shall include a combination of nighttime emergence counts and acoustic techniques (full spectrum bat acoustic detectors) appropriate for the roosting habitat and time of year. At a minimum, focused surveys shall be conducted during the spring, summer, fall, and winter to determine how the habitat is being used by bats throughout the year with at least two surveys conducted during the maternity season to determine a pre- and post-volant count of colonies present. If roosting bats, of any status, are found during the surveys, the bats and roosts shall be avoided to the maximum extent practicable with consideration of the most disturbing Project activities and their effect (e.g., pile driving). A Bat Management Plan prepared by the qualified bat biologist identifying situation-specific and species-specific avoidance and minimization measures to reduce impacts to roosting and foraging bats shall be prepared for CDFW's review, approval, and implementation prior to the commencement of initial site clearing activities. The Bat Management Plan shall include, as appropriate to the findings of the focused surveys and roosting habitat affected, a construction schedule to avoid roosting season, spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary), and identification of species-specific replacement or alternative habitat to mitigate for permanent maternity roosting habitat loss. If roosts cannot be avoided or it is determined that construction activities will cause roost abandonment, a mitigation plan addressing exclusion and passive relocation procedures and impact compensation will be developed. The mitigation plan will be developed in consultation with CDFW and the qualified bat biologist. Roost and foraging habitat shall be replaced in-kind prior to any exclusion. Any exclusion and passive relocation efforts shall avoid periods of sensitive activity (e.g. hibernation or maternity season) and may require several seasons for bats to discover alternative roosting sites.

BIO-25 Desert Kit Fox and American Badger. Prior to the beginning of surface disturbance, the Project Biologist shall conduct a pre-Project 10-meter transect survey (or reduced based on topography and vegetation), to attain 100% visual coverage within the Project area and a minimum 200-meter buffer to determine the presence or absence of desert kit fox and/or American badger individuals, dens, and sign. If potential dens are located, they shall be monitored by the Project Biologist. Trail cameras may be used to assist with observation but shall not be the sole basis upon which the status is determined. The Project proponent shall provide the results of the survey to CDFW prior to start of Project activities. Project proponent shall provide a determination if active dens can be avoided and buffered from Project activities to prevent take and disturbance with the survey results. Should active dens be present within the Project area that cannot be avoided with an adequate buffer, the Project proponent shall reschedule Project activities or submit a monitoring and passive relocation plan for CDFW's review and approval. No disturbance or passive relocation of active dens may take place during the breeding season.

- b) **Less than Significant Impact with Mitigation Incorporated.** One sensitive vegetation community, bush seepweed scrub, occurs along a small portion of the gen-tie line extension (Figure 6). Approximately 0.22 acres of bush seepweed scrub was mapped within the project site. Implementation of the proposed project has the potential to impact 0.22 acres of bush seepweed scrub and this is considered a significant impact. Implementation of Mitigation Measure BIO-26 would reduce the potential impact to a level less than significant.

Mitigation Measure:

BIO-26 Compensatory Mitigation. To the greatest extent possible, plans shall avoid impacts to bush seepweed scrub. If bush seepweed scrub cannot be avoided, the project applicant shall provide compensatory mitigation for direct impacts consisting of habitat acquisition, establishment or enhancement through a resource agency-approved in-lieu fee program, and/or resource agency approved mitigation or conservation bank at a minimum of a 3:1 ratio. Habitat acquisition sites shall be biologically equal or superior to existing conditions and must be conserved and managed in perpetuity.

- c) **No Impact.** According to the *Jurisdictional Delineation for the North Star 2 Project* prepared by Hernandez Environmental Services (Appendix D of this Initial Study), the study area does not contain federally defined wetlands (a federal wetland needs to have the presence of the three wetland indicators which are hydric soils, hydrophytic vegetation, and hydrology). Due to the isolated nature of the temporary ephemeral depressions within the study area, these features are not considered waters of the United States. These depressions did not contain riparian habitat or were associated with a stream regulated by the CDFW, USACE, or RWQCB. No stream features, lake or pond areas, wetlands, or riparian habitat subject to jurisdiction under the USACE, CDFW, or RWQCB were found on the project site. The gen-tie extension route along SR 78 will be near the East Highline Canal. If the project alters or removes vegetation in the East Highline Canal, impacts would be considered significant. However, the project would avoid any impacts, such as alteration or removal vegetation of vegetation, to the East Highline Canal. Therefore, based on these considerations, the proposed project would have no impact on jurisdictional features.
- d) **Less than Significant Impact with Mitigation Incorporated.** The project site is located in generally undeveloped open space but is adjacent to areas containing existing disturbances (i.e., roads and active agricultural land). The project site is not in a recognized species corridor or habitat linkage, but the majority of the site contains suitable vegetation and/or cover to support some wildlife movement. The desert scrub habitat could function as a potential nursery site for wildlife species. The palm trees and bridge over the East Highline Canal present in the gen-tie line extension portion of the project site may serve as a native wildlife nursery site for roosting bats. Based on these considerations, the proposed project has the potential to interfere with the movement of wildlife species or impede the use of wildlife nursery sites. However, implementation of Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts to a level less than significant.
- e) **Less than Significant Impact with Mitigation Incorporated.** The proposed project would not conflict with any local policies or ordinances protecting biological resources. As discussed above, Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts to biological resources on the project site to a level less than significant.
- f) **Less than Significant Impact with Mitigation Incorporated.** The proposed gen-tie line extension is located within the Desert Renewable Energy Conservation Plan Area with a conservation designation of California Desert National Conserved Lands and falls within the Lake Cahuilla Shoreline ACEC. A small portion of the gen-tie line extension is located on BLM Renewable Energy Development Focus Areas. If habitat within the California Desert National Conserved Lands area of the project is to be impacted, this would be considered a significant impact. Implementation of Mitigation Measures identified above and BIO-27 would reduce potential impacts to a level less than significant.

Mitigation Measure:

BIO-27 **Minimization of Impacts to Sensitive Species on BLM Land.** All vehicles shall stay on designated roads within BLM land to minimize impacts to habitat. Coordination with a qualified biologist shall occur prior to the staging of equipment and placement of temporary or permanent structures within BLM land. Additionally, a biologist shall demarcate temporary and permanent workspaces in the field prior to the commencement of construction-related activities. Construction plans shall incorporate measures to minimize and avoid impacts to habitats within this area. Tires shall be cleaned prior to entering BLM lands to control introduction of invasive plant species.

V. Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

The following information is summarized from the *Cultural Resources Inventory Report for the North Star 2 Project* prepared by ECORP Consulting, Inc. This study is provided as Appendix E of this Initial Study.

- a) **Less than Significant Impact with Mitigation Incorporated.** ECORP Consulting, Inc. prepared a Cultural Resources Inventory Report for the proposed project, which included a records search, Sacred Files search, and a pedestrian survey. The results are summarized below.

Sacred Lands File Search

The results of the Sacred Lands File search by the Native American Heritage Commission were received on July 7, 2022. The results were negative, indicating that no Native American Sacred Lands are located within the project area.

Records Search

The records search consisted of a review of previous research and literature, records on file with the South Coastal Information Center for previously recorded resources, and historical aerial photographs and maps of the vicinity. Seventeen previous cultural resource investigations have been conducted in or within 1 mile of the property, covering approximately 20 percent of the total area surrounding the property within the records search radius. Six of the 17 studies were conducted within the project area (Table 5 of the *Cultural Resources Inventory Report for the North Star 2 Project*). These studies revealed the presence of pre-contact habitation sites. The previous studies were conducted between 1974 and 2011.

Pedestrian Survey

An intensive pedestrian survey of the project site was conducted between November 28 and December 5, 2022. As a result of the field survey, 19 newly identified cultural resources were recorded within the project area (Table 5). Six of these are pre-contact resources and 13 are historic-period resources. In addition, the one previously recorded resource, P-13-003891, was not located during the survey.

Table 5. Archaeological and Built Environment Resources within the Project Area

Field Number 2020-	Primary Number P-13-	Age/Period	Site Description	NRHP/CRHR Eligibility
-	003891	Precontact	Lithic tool	Not eligible
01-I	-	Historic	Knife opened can	Not eligible
02-I	-	Historic	Tobacco can	Not eligible
03	-	Historic	Can scatter	To be determined
00-I	-	Historic	Sanitary cans	Not eligible
05-I	-	Historic	BGS casing	Not eligible
06-I	-	Historic	Sanitary casing	Not eligible
07	-	Historic	Roadside debris	To be determined
08	-	Precontact	Ceramic scatter	To be determined
09-I	-	Historic	Oil and condensed milk cans	Not eligible
10-I	-	Historic	Coffee can	Not eligible
11-I	-	Historic	Can	Not eligible
16-I	-	Historic	Beverage can	Not eligible
20-I	-	Historic	Oil can	Not eligible
21	-	Precontact	Lithic scatter	To be determined
22	-	Precontact	Ceramic scatter	To be determined
23-I	-	Precontact	Two lithics flakes	Not eligible
24-I	-	Precontact	Chert flake	Not eligible
27-I	-	Historic	50 cal. casing	Not eligible
28-I	-	Precontact	One lithic flake	Not eligible

Source: Appendix E of this Initial Study

The records search and the 2022 field survey yielded a total of 19 resources. These include 11 historic-period isolated archaeological resources (NS2-01-I, NS2-02-I, NS2-04-I, NS2-05-I, NS2-06-I, NS2-09-I, NS2-10-I, NS2-11-I, NS2-16-I, NS2-20-I, NS2-23-I, and NS2-27-I), three pre-contact isolated archaeological resources (NS2-23-I, NS2-24-I, and NS2-28-I), three pre-contact archaeological sites (NS2-08, NS2-21, and NS2-22), one historic-period archaeological site (NS2-03), and one historic-period built environment site (NS2-07).

Isolates are unassociated artifacts or minor features that represent either accidental inclusion or are otherwise disconnected from the human activity that produced them. Isolates typically do not individually contribute to the broad patterns of history because they cannot be connected to a particular event (NRHP Criterion A/CRHR Criterion 1). Isolates are similarly difficult to associate with specific individuals due to their lack of association with archaeological or historical sites, and generally no information exists in the archival record to associate isolates with important individuals in history (NRHP Criterion B/CRHR Criterion 2). Isolates do not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values (NRHP Criterion C/CRHR Criterion 3). Finally, isolates in general do not provide important information in history or prehistory (NRHP Criterion D/CRHR Criterion 4). Therefore, the isolates identified during the technical study do not meet the eligibility criteria for inclusion in the NRHP or CRHR as an individual resource. These isolated finds do not contribute to any known or suspected historic districts; and are neither considered to be

Historic Properties for the purpose of Section 106 NHPA, nor Historical Resources under CEQA.

The five sites (NS2-03, NS2-07, NS2-08, NS2-21, and NS2-22) are more complex archaeological assemblages or built-environment resources and require evaluation through either archaeological excavation or archival research, or both, to determine if they are eligible for listing on the NRHP or on the CRHR. Until this occurs, and unless they are presumed eligible without formal evaluation, it is unknown whether these represent Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA.

Impacts:

Table 5 identifies the archaeology and built environment resources located within the North Star 2 project site. While the majority of resources are identified as not significant/eligible for NRHP/CRHR, it assumed that sites NS2-03 and NS2-07 (identified as historic can scatter and historic roadside debris), are significant, and Mitigation Measures CR-1 through CR-4 are required in order to reduce potential impacts to a level less than significant.

Mitigation Measures:

- CR-1** **Cultural Resources Management Plan.** Project proponent shall develop a Cultural Resources Management Plan (CRMP) to outline the process for compliance with applicable cultural resources laws, management of resources during operation, and consideration of the effect of decommissioning. The CRMP shall include the following: identification of California Native American tribes, identification of long and short term management goals for cultural resources within the project area, evaluation of eligibility for the CRHR and NRHP for all resources within the project area as identified in Table 5 of this CEQA Initial Study (NS2-03, NS2-07, NS2-08, NS2-21, and NS2-22), recommendations for eligibility for the CRHR and NRHP, description of measures to avoid, minimize, and reduce significant impacts to cultural resources (including both historical and archaeological resources), unanticipated discovery procedures, monitoring needs, data recovery of significant cultural resources where avoidance is not possible, curation procedures for recovered artifacts, anticipated personnel requirements and qualifications. The CRMP shall address all resources identified in Table 5 of this CEQA Initial Study (NS2-03, NS2-07, NS2-08, NS2-21, and NS2-22). The draft CRMP shall be prepared by a registered professional archaeologist and reviewed and approved by the County of Imperial Planning and Development Services Department.
- CR-2** **Cultural Resources Training.** Project proponent shall provide cultural resources training for all project personnel regarding the laws protecting cultural resources, appropriate conduct in the field, and other project-specific issues identified in the CRMP prepared for the project site as required by Mitigation Measure CR-1.
- CR-3** **Construction Monitoring.** A Qualified Archaeologist that meets the Secretary of Interior’s standards shall be present on site for ground disturbing activities within 100-feet of all unevaluated and/or sites eligible for inclusion to the NRHP or CRHR. Ground disturbing activities include grubbing, trenching, and grading. Monitoring will be limited to natural surfaces and undisturbed sediments. Monitoring is not required for previously disturbed areas or fill. Monitors will complete daily monitoring reports documenting activities and results of the day. After construction activities have finished a comprehensive monitoring report shall be prepared. A Native American monitor shall be on-site during ground disturbing activities and to inform appropriate tribe contacts of discovery of cultural artifacts, cremation sites, or human remains.

CR-4 Unanticipated Discovery Procedures. In the event of the discovery of previously unidentified archaeological materials, the contractor shall immediately cease all work activities within approximately 100 feet of the discovery. After cessation of excavation, the contractor shall immediately contact the Imperial County Department of Planning and Development Services. Except in the case of cultural items that fall within the scope of the Native American Grave Protection and Repatriation Act, the discovery of any cultural resource within the project area shall not be grounds for a “stop work” notice or otherwise interfere with the project’s continuation except as set forth in this paragraph.

In the event of an unanticipated discovery of archaeological materials during construction, the applicant shall retain the services of a qualified professional archaeologist, meeting the Secretary of the Interior’s Standards for a Qualified Archaeologist, to evaluate the significance of the materials prior to resuming any construction related activities in the vicinity of the find. If the qualified archaeologist determines that the discovery constitutes a significant resource under CEQA and it cannot be avoided, the applicant shall implement an archaeological data recovery program.

- b) **Less than Significant Impact with Mitigation Incorporated.** Table 5 identifies the archaeology and built environment resources located within the North Star 2 project site. While the majority of resources are identified as not significant/eligible for NRHP/CRHR, it is assumed that sites (NS2-08, NS2-21, and NS2-22) (identified as ceramic and lithic scatters), are significant, and Mitigation Measures CR-1 through CR-4 are required in order to reduce potential impacts to a level less than significant.
- c) **Less than Significant Impact with Mitigation Incorporated.** During the construction of the proposed project, grading, excavation and trenching will be required. Although the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during construction. The potential to encounter human remains is considered a significant impact. Mitigation Measure CR-5 would ensure that the potential impact on previously unknown human remains does not rise to the level of significance pursuant to CEQA.

Mitigation Measure:

CR-5 If subsurface deposits believed to be human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist who meets the Secretary of the Interior’s Standards for prehistoric and historic archaeology and is familiar with the resources of the region, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

If the find includes human remains, or remains that are potentially human, the professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Imperial County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented.

If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the



remains. If the landowner does not agree with the recommendations of the MLD, the NAHC may mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the Imperial County Planning and Development Services Department, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

VI. Energy

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

The information in this section is summarized from the *Energy Consumption Assessment for the North Star 2 Project* prepared by ECORP Consulting, Inc. This report is provided as Appendix F of this Initial Study.

Impact Analysis

- a) **Less than Significant Impact.** The project includes the construction of a 130 MW alternating current solar field, consisting of 289,800 tracker modules in 9,660 strings and associated collector and inverter facilities, and a 175 MW BESS, on approximately 614 acres of vacant land. Operation of the proposed project would not result in the consumption of electricity or natural gas and thus, would not contribute to the County wide usage. Instead, the project would directly support the RPS goal of increasing the percentage of electricity procured from renewable sources.

The two sources of energy associated with the project includes the equipment fuel necessary for construction and the automotive fuel necessary for ongoing maintenance activities. For the purposes of this analysis, project increases in construction and automotive fuel consumption are compared with the countywide fuel consumption in 2021 (Table 6), the most recent full year of data. This analysis conservatively assumes that all of the automobile trips projected to arrive at the project site during operations would be new to Imperial County.

Fuel necessary for project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the project site. The fuel expenditure necessary to construct the solar facility and infrastructure would be temporary, lasting only as long as project construction. As indicated in Table 7, the project's gasoline fuel consumption during the onetime construction period is estimated to be 16,453 gallons during the first year of construction, 107,094 gallons during the second year of construction, and 7,488 gallons during the third year of construction. This would increase the annual countywide gasoline fuel use associated with offroad equipment in the County by 0.007 percent, 0.049 percent, and 0.003 percent, respectively. As such, project construction would have a nominal effect on local and regional energy supplies. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. For these reasons, it is expected that construction fuel

consumption associated with the project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

Once construction is completed, the project would be remotely operated. No employees would be based at the project site. The only operational emissions associated with the project would be associated with motor vehicle use for routine maintenance work, water import, and site security as well as panel upkeep and cleaning. Four heavy-duty truck vehicle trips per day for routine maintenance work, site security, and trucking in water was assumed. This is a conservative estimate as most days would require no operational related vehicle trips. As indicated in Table 7, this would estimate to a consumption of approximately 1,336 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.0006 percent. Automotive fuel consumption in Imperial County from 2016 to 2021 is shown in Table 6. Fuel consumption has remained relatively constant between 2016 and 2021. Fuel consumption associated with both the construction equipment needed to construct the project and the vehicle trips generated by the project during ongoing maintenance activities would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region and would therefore be considered a less than significant impact.

Table 6. Automotive Fuel Consumption in Imperial County 2016-2021

Year	Total Fuel Consumption
2021	216,105,185
2020	194,711,440
2019	217,988,585
2018	218,114,145
2017	220,106,315
2016	215,751,500

Source: Appendix F of this Initial Study

Table 7. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Facility Electrical and Natural Gas Consumption (Gallons)		
Electricity Consumption	0 kilowatt-hours	0.000
Natural Gas ¹	0 therms	0.000
Automotive Fuel Consumption		
Year One of Construction ²	16,453	0.007
Year Two of Construction ²	107,094	0.049
Year Three of Construction ²	7,488	0.003
Project Operations ³	1,336	0.000

Source: Appendix F of this Initial Study

Notes: The project increases in electricity and natural gas consumption are compared with all uses in Imperial County in 2020, the latest data available. The project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2021, the most recent full year of data.

- b) **No Impact.** The purpose of the proposed project is the construction of a renewable energy and storage facility in Imperial County. Once in operation, it will decrease the need for energy from fossil fuel-based power plants in the state. The result would be a net increase in electricity resources available to the regional grid, generated from a renewable source. Therefore, the project would directly support the Renewables Portfolio Standard (RPS) goal of increasing the percentage of electricity procured from renewable sources. Additionally, the project would also

be consistent with the County's General Plan Conservation and Open Space Element, Objective 9.2 which encourages renewable energy developments. Therefore, the project would have no impact as it directly supports state and local plans for renewable energy development.



VII. Geology and Soils

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risk to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The information in this section is summarized from the *Geotechnical Report for the proposed North Star 2 Project* prepared by Landmark Consultants, Inc. This report is provided as Appendix G of this Initial Study.

Impact Analysis

- ai) **No Impact.** According to the geotechnical report prepared for the project, the project site is not located within or adjacent to any earthquake fault zone as delineated on the most recent Alquist-Priolo Earthquake Zoning Map. The nearest zoned fault is the Rico Fault, located approximately 0.13-mile southwest of the project site. The proposed project would not result in the construction of any structure intended for human occupancy and all structures and onsite facilities would be designed in accordance with the most recent California Building Code (CBC). Therefore, the proposed project would result in no impact associated with the rupture of a known earthquake fault.
- a ii) **Less than Significant Impact.** Southern California is a seismically active region; therefore, it is highly likely that regional earthquakes would occur that could affect the proposed project. As previously mentioned above, no active faults are underlying the project site, however, the Rico Fault and its associated earthquake fault zone is located approximately 0.13-mile southwest of the project site. All structures and onsite facilities would be designed in accordance with the most recent CBC for peak site ground acceleration. Since the design and construction of the project would be required to conform to the specific mandated structural design requirements to protect against strong seismic shaking, the potential impacts due to strong seismic ground shaking are considered to be a less than significant impact.
- a iii) **Less than Significant Impact.** Four conditions are generally required for liquefaction to occur, including: 1) saturated soil, 2) loosely packed soil, 3) relatively cohesionless soil, and 4) groundshaking of sufficient intensity must occur to trigger the mechanism.

Liquefaction is unlikely to be a potential hazard at the site since the groundwater is believed to be deeper than 50 feet. As required by the County and in accordance with local and state building code requirements, any proposed development would be required to complete a geotechnical evaluation of any onsite hazards. As a standard condition of project approval, the proposed project would be constructed in accordance with the most current CBC and Imperial County Building Code to minimize or avoid the potential hazard of liquefaction. A less than significant impact is identified for this issue area.

- a iv) **Less than Significant Impact.** The hazard of land sliding is unlikely due to the regional planar topography. No ancient landslides are shown on geologic maps, aerial photographs and topographic maps of the region and no indications of landslides were observed during the site investigation. Therefore, the impact associated with landslides is considered less than significant.
- b) **Less than Significant Impact.** Soil erosion and loss of topsoil could result during construction as grading and construction can loosen surface soils and make soils susceptible to wind and water movement across the surface. Construction activities are regulated under the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit) which covers stormwater runoff requirements for projects where the total amount of ground disturbance during construction exceeds 1 acre. The proposed project would be required to comply with the General Construction Permit because ground disturbance would exceed 1 acre. Coverage under a General Construction Permit requires the preparation of a SWPPP and submittal of a Notice of Intent (NOI) to comply with the General Construction Permit. The SWPPP would identify best management practices (BMPs) that would reduce any impacts associated with soil erosion or loss of topsoil. Therefore, this impact is considered less than significant.

c) **Less than Significant Impact.**

Landslides. The hazard of land sliding is unlikely due to the regional planar topography. No ancient landslides are shown on geologic maps, aerial photographs and topographic maps of the region and no indications of landslides were observed during our site investigation.

Liquefaction and Lateral Spreading. Liquefaction is unlikely to be a potential hazard at the site since the groundwater is anticipated to be deeper than 50 feet. The potential for lateral spreading to occur on the project site has not yet been determined. Additional geotechnical investigation would be required in order to assess the risk of lateral spreading to occur on the project site. As required by the County and in accordance with local and state building code requirements, any proposed development would be required to complete a geotechnical evaluation of any onsite hazards. As a standard condition of project approval, the proposed project would be constructed in accordance with the most current CBC and Imperial County Building Code to minimize or avoid the potential hazard of liquefaction and lateral spreading.

Subsidence. The potential for subsidence to occur on the project site has not yet been determined. Additional geotechnical investigation would be required in order to assess the risk of subsidence to occur on the project site. As required by the County and in accordance with local and state building code requirements, any proposed development would be required to complete a geotechnical evaluation of any onsite hazards. As a standard condition of project approval, the proposed project would be constructed in accordance with the most current CBC and Imperial County Building Code to minimize or avoid the potential hazard of subsidence. A less than significant impact is identified for this issue area.

Collapse. Collapsible soil generally consists of dry, loose, low-density material that have the potential collapse and compact (decrease in volume) when subjected to the addition of water or excessive loading. Soils found to be most susceptible to collapse include loess (fine grained wind-blown soils), young alluvium fan deposits in semi-arid to arid climates, debris flow deposits and residual soil deposits. In general, the surface soils are loose to medium dense sands (SP-SM). Due to the nature of the sand deposits, there is a slight risk of collapse upon saturation. As a standard condition of project approval, the proposed project would be constructed in accordance with the most current CBC and Imperial County Building Code to minimize or avoid the potential hazard of collapsible soils. A less than significant impact is identified for this issue area.

d) **Less than Significant Impact.** According to the geotechnical report prepared for the project, the near surface soils in the project site are sands/silty sands which are considered non-expansive.

As required by the County and in accordance with local and state building code requirements, any proposed development would be required to complete a geotechnical evaluation of any onsite hazards. As a standard condition of project approval, the proposed project would be constructed in accordance with the most recent CBC and Imperial County Building Code to minimize or avoid the potential hazard of expansive soil. A less than significant impact is identified for this issue area.

e) **No Impact.** The proposed project would not require the use of septic systems or alternative wastewater systems to accommodate wastewater needs. Therefore, no impact is identified for this issue area.

f) **Less than Significant Impact with Mitigation Incorporated.** Many paleontological fossil sites are recorded in Imperial County and have been discovered during construction activities. Paleontological resources are typically impacted when earthwork activities, such as mass excavation cut into geological deposits (formations) with buried fossils. One area in which paleontological resources appear to be concentrated in this region is the shoreline of ancient Lake Cahuilla, which would have encompassed the present-day Salton Sea. The lake covered much of the Imperial Valley and created an extensive lacustrine environment. Lake Cahuilla experienced several fill recession episodes before it finally dried up about 300

years ago. In 1905, the Colorado River overflowed into the Salton Basin creating the present-day Salton Sea.

According to the Geologic Map of California – San Diego-El Centro Sheet, the project site is underlain by Quaternary Lake deposits (Ql) (Jennings, C.W. 1962). The project site is located in the Imperial Valley which is directly underlain by geologic units comprised of quaternary lake deposits of the ancient Lake Cahuilla. Lakebed deposits of ancient Lake Cahuilla have yielded fossil remains from numerous localities in Imperial Valley. These include extensive freshwater shell beds, fish, seeds, pollen, diatoms, foraminifera, sponges, and wood. Lake Cahuilla deposits have also yielded vertebrate fossils, including teeth and bones of birds, horses, bighorn sheep, and reptiles. Therefore, the paleontological sensitivity of these lakebed deposits within the project site are considered to be high.

Impacts on any surface or near-surface level paleontological resources may occur because of grading and disturbance of the area. Even relatively shallow excavations in the Lake Cahuilla beds exposed in the project site may encounter significant vertebrate fossil remains. Therefore, this potential impact is considered a significant impact. Mitigation Measure GEO-1 would ensure that the potential impacts on paleontological resources do not rise to the level of significance pursuant to CEQA. Implementation of Mitigation Measure GEO-1 would reduce the impact on paleontological resources to a level less than significant.

Mitigation Measure

GEO-1 In the event that unanticipated paleontological resources or unique geologic resources are encountered during ground-disturbing activities, work must cease within 50 feet of the discovery and a paleontologist shall be hired to assess the scientific significance of the find. The consulting paleontologist shall have knowledge of local paleontology and the minimum levels of experience and expertise as defined by the Society of Vertebrate Paleontology's Standard Procedures (2010) for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. If any paleontological resources or unique geologic features are found within the project site, the consulting paleontologist shall prepare a paleontological Treatment and Monitoring Plan to include the methods that will be used to protect paleontological resources that may exist within the project site, as well as procedures for monitoring, fossil preparation and identification, curation of specimens into an accredited repository, and preparation of a report at the conclusion of the monitoring program.

VIII. Greenhouse Gas Emissions

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

Impact Analysis

The following information is summarized from the Air Quality and Greenhouse Gas Emissions Assessment for the NorthStar 2 project prepared by ECORP Consulting, Inc. This report is provided as Appendix B of this Initial Study.

- a) **Less than Significant Impact.** Prominent greenhouse gases (GHGs) contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), and nitrogen oxide (N₂O). Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth’s climate, known as global climate change or global warming.

The project site is located within the Salton Sea Air Basin, regulated by the ICAPCD. To date the ICAPCD has not adopted GHG emission significance thresholds applicable to potential development. Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). Thus, in the absence of any GHG emissions significance thresholds, the projected emissions are compared to the Mojave Desert Air Quality Management District (MDAQMD) numeric threshold of 100,000 metric tons of CO_{2e} annually. While significance thresholds used in the Mojave Desert Air Basin are not binding on the ICAPCD or County of Imperial, they are instructive as a comparative metric of the project’s potential GHG impact. This threshold is also appropriate as the MDAQMD GHG thresholds were formulated based on similar geography and climate patterns as found in Imperial County. Therefore, the 100,000-metric ton of CO_{2e} threshold is appropriate for this analysis.

The following analysis is broken out by a discussion of potential impacts during construction and operation of the project. The CalEEMod version 2020.4.0. air quality model was used to calculate the GHG emissions associated with construction and operation of the proposed project. The CalEEMod worksheets are included in Appendix B of this Initial Study.

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators).

Table 8 summarizes the construction-generated GHG emissions that would result from construction of the project. Consistent with SCAQMD recommendations, project construction GHG emissions have been amortized over the expected life of the project, which is considered to be 30 years for a solar energy generation facility. As shown in Table 8, the project would result in the generation of approximately 167 metric tons of CO₂e in the first year of construction, 1,087 metric tons in the second year of construction, and 76 metric tons in the third year of construction. Therefore, project GHG emissions would not exceed the significance threshold of 100,000 metric tons of CO₂e per year.

Table 8. Project Construction-Generated Emissions

Emissions Source	CO ₂ e (Metric Tons/Year)
Construction Year One	167
Construction Year Two	1,087
Construction Year Three	76
Significance Threshold	100,000
Exceed Significance Threshold?	No

Source: Appendix B of this Initial Study

Operation

Operation of the project would result in an increase in GHG emissions solely associated with motor vehicle trips. Once the solar facility and BESS are operational, very few vehicular trips would be expected. The project would be an unmanned facility that would be operated remotely. Therefore, the project would not generate routine daily trips. Occasional maintenance trips would be required. For purposes of this analysis, it was assumed that up to 6 trips per day would be utilized during operations.

As shown in Table 9, the project would generate approximately 3,529 metric tons of CO₂e per year during operations, which is below MDAQMD’s threshold of 100,000 metric tons of CO₂e per year.

Once construction is complete, the project would be a producer of renewable energy, which generate substantially less GHG emissions compared with the more common types of fossil-fueled energy generation facilities. Table 10 shows the emissions that would potentially be displaced by the proposed project. This estimate only includes that associated with the combustion of fossil fuels; it does not include the vehicle trips associated with the project’s operations, and it does not include operational employee trips associated with natural gas or coal combustion nor the emissions associated with extracting and transporting those power sources. In addition, this estimate only includes the displacement of that portion of the California market that comes from fossil fuels and does not include the approximate 50 percent of the California electricity generated by non-combustion sources (wind, solar, nuclear, hydro-electric). As shown in Table 10, the project would potentially displace approximately 53,220 metric tons of CO₂e per year, and approximately 1,596,596 metric tons of CO₂e over the course of 30 years. While the project would emit some GHG emissions during construction and operations, the contribution of renewable resource energy production to meet the goals of the Renewable Portfolio Standard (Scoping Plan Measure E-3) would result in a net cumulative reduction of GHG emissions. The short-term generation of GHG emissions would be more than offset by the GHG emission reductions associated with solar-generated energy during operation. Therefore, the project’s GHG impact would be less than significant.



Table 9. Operational-Related GHG Emissions (MT/Year)

Emission Source	CO _{2e} (Metric Tons/Year)
Area Source	0
Energy	0
Mobile	3,529
Waste	0
Water	0
Total	3,529
Significance Threshold	100,000
Exceed Significance Threshold?	No

Source: Appendix B of this Initial Study

Table 10. Proposed Project Displaced GHG Emissions (Metric Tons)

	Emissions (Metric Tons)			
	CO ₂	CH ₄	N ₂ O	CO _{2e}
Emissions Displaced Annually (metric tons)				
Displaced Natural Gas-Source Emissions	61,860	0.00	0.00	61,860
Displaced Coal-Source Emissions	7,313	0.048	0.036	7,326
Total	69,173	0.048	0.036	69,186
Emissions Displaced over 30 Years (metric tons)				
Total	2,075,201	1.453	1.090	2,075,575

Source: Appendix B of this Initial Study

- b) **Less than Significant Impact.** As discussed in Response VIII. a) above, the proposed project would generate a relatively small amount of GHG emissions. The proposed project-generated GHG emissions would not exceed the MDAQMD significance thresholds, which were prepared with the purpose of complying with statewide GHG-reduction efforts. While the project would emit some GHG emissions during construction and a very small amount during operations, the contribution of renewable resource energy production to meet the goals of the Renewable Portfolio Standard (Scoping Plan Measure E-3) would result in a net cumulative reduction of GHG emissions, a key environmental benefit. Scoping Plan Measure E-3, Renewable Portfolio Standard, of the Climate Change Scoping Plan requires that all investor-owned utility companies generate 60 percent of their energy demand from renewable sources by the year 2030. Therefore, the short-term minor generation of GHG emissions during construction, which is necessary to create this new, low-GHG emitting power-generating facility, as well as the negligible amount generated during ongoing maintenance operations, would be more than offset by GHG emission reductions associated with solar-generated energy during operation. The proposed project would reduce GHG emissions in a manner consistent with SB 32 and other California GHG-reducing legislation by creating a new source of solar power to replace the current use of fossil-fuel power and reduce GHG emissions power generation and use. Therefore, the proposed project would

not conflict with any applicable plan, policy, or regulation adopted for reducing the emissions of GHGs and a less than significant impact would occur.

IX. Hazards and Hazardous Materials

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

The following information is summarized from the *Phase I Environmental Site Assessment (ESA) Report for the North Star 2 Project* prepared by GS Lyon Consulting, Inc. This report is provided as Appendix H of this Initial Study.

- a) **Less than Significant Impact.** Vehicles and equipment used for construction would contain or require the temporary use of potentially hazardous substances, such as fuels, lubricating oils,

and hydraulic fluid. Hazardous substances would be stored in transportable containment trailers at locations within the construction staging area to minimize potential for accidental releases and/or spills.

Transportation of hazardous materials relating to the battery system includes electrolyte and graphite and would occur during construction, operation (if replacement of batteries is needed) and decommissioning (removal of the batteries). All of these various materials would be transported and handled in compliance with DTSC regulations. Therefore, likelihood of an accidental release during transport or residual contamination following accidental release is not anticipated.

Lithium-ion batteries used in the storage system contain cobalt oxide, manganese dioxide, nickel oxide, carbon, electrolyte, and polyvinylidene fluoride. Of these chemicals, only electrolyte should be considered hazardous, flammable and could react dangerously when mixed with water. The U.S. Department of Transportation (DOT) regulates transport of lithium-ion batteries under the DOT's Hazardous Materials Regulations (HMR) (49 CFR Parts 171-180). The HMR apply to any material DOT determines is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. Lithium-ion batteries must conform to all applicable HMR requirements when offered for transportation or transported by air, highway, rail, or water. Additionally, carbon (as graphite) is flammable and could pose a fire hazard. Fire protection is achieved through project design features, such as monitoring, diagnostics and a fire suppression system. The project would be required to comply with state laws and county ordinance restrictions, which regulate and control hazardous materials handled on site.

Further, the proposed project would be required to comply with all applicable rules and regulations involving hazardous materials, including the State of California CCR Title 23 Health and Safety Regulations, the California Division of Occupational Safety and Health (Cal/OSHA) requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention (CalARP) Program, and the California Health and Safety Code. Compliance with these measures would reduce any potential risk or impact associated with the transport, use, or disposal of hazardous materials. This impact is considered less than significant.

- b) **Less than Significant Impact.** According to the Phase I ESA prepared for the project, no recognized environmental conditions (RECs), historical recognized environmental conditions, *de minimis* conditions, or environmental concerns were found in connection with the project site.

As described in Response IX. a) above, the proposed BESS facility would require the storage of hazardous materials; however, hazardous substances would be stored in transportable containment trailers at locations within the construction staging area to minimize potential for accidental releases and/or spills. No other hazardous or potentially hazardous materials will be brought to the project site. Further, the proposed project would be required to comply with all applicable rules and regulations involving hazardous materials, including the State of California CCR Title 23 Health and Safety Regulations, the California Division of Occupational Safety and Health (Cal/OSHA) requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention (CalARP) Program, and the California Health and Safety Code. Compliance with these measures would reduce any potential risk or impact associated with the release of hazardous materials into the environment.

Protection would be provided as part of the project design by housing the battery units in enclosed structures to provide containment should a fire break out or for potential spills. Any potential fire risk that the traditional lithium-ion cells have will most likely be caused by over-charging or through short circuit due to age. Fire protection systems for battery systems would be designed in accordance with standards and requirements for energy storage system including, but not limited to the following:

- National Fire Protection Association
 - 1 Fire Code
 - 70 National Electrical Code

- 855 Standard for the installation of Energy Storage System
- 111 Stored Electrical Energy Emergency and Standby Power System
- 1710 Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.
- Occupational Safety and Health Administration
 - 29 CFR 1910.134(g)(4)
- California Fire Code
 - Chapter 12 section 1206 Electrical Energy Storage System
 - Chapter 9 Fire Protection and Life Safety System

The project applicant will coordinate with the Imperial County Fire Department on conditions of approval as part of the CUP to ensure the proposed project would not result in extreme hazards to the public, firefighters, and emergency responders. Conditions of approval would include project plans review and inspections, installation of a water supply capable of supplying the required fire flow, development of an Emergency Operation Plan, and compliance with applicable standards and requirements of the National Fire Protection Association, Occupational Safety and Health Administration, and California Fire Code. With adherence of applicable standards and requirements and conditions of approval as part of the CUP. This impact is considered less than significant.

- c) **No Impact.** The project site is not located within 0.25 miles of any existing or proposed schools. The nearest school is Magnolia Union Elementary School located approximately 9 miles west of the project site. Therefore, implementation of the proposed project would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No impact is identified for this issue area.
- d) **No Impact.** As part of the Phase I ESA prepared for the project, a database search was conducted on June 21, 2022 to obtain and review reasonably ascertainable records that would help identify RECs and HRECs in connection with the subject property. Databases that were reviewed include the following:
- EPA’s Federal National Priorities List
 - EPA’s Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLA) List
 - Federal CERCLA – No Further Remedial Action Planned (NFRAP)
 - Federal Resource Conservation Recovery Act (RCRA) List
 - Federal Emergency Response Notification System (ERNS) List
 - State and Tribal NPL List
 - State and Tribal equivalent CERCLA
 - State and Tribal Leaking Underground Storage Tank Sites
 - State and Tribal Underground and Aboveground Storage Tank Sites
 - Solid Waste Disposal/Landfill Facilities (SWF/LF)
 - Unmapped (Orphan) Sites

A review of the databases, along with additional government environmental record databases, identified no risk sites within the project site. Unmapped (orphan) sites are sites or facilities in database records that are not accurately located in relation to the subject property due to incomplete information being supplied to the regulatory agencies. One orphan listing, Salton City Solid Waste Transfer Station, is located approximately six miles northwest of project site and does not pose a risk to the project site. Therefore, implementation of the proposed project would result in no impact related to the project site being located on a listed hazardous materials site pursuant to Government Code Section 65962.5.

- e) **No Impact.** The project site is not located within two miles of a public airport. The nearest airport is the Brawley Municipal Airport located approximately 13 miles west of the project site. The Imperial County Airport Land Use Commission has established a set of land use compatibility criteria for lands surrounding the airports in Imperial County in the Imperial County Airport Land Use Compatibility Plan (1996). As identified in the Imperial County Airport Land Use Compatibility Maps, the project site is outside of the noise contours of all airports. Therefore, the project would not result in a safety hazard or expose people residing or working in the project area to excessive airport noise. No impact is identified for this issue area.
- f) **No Impact.** The proposed project does not include any alteration to the existing public road network and would not involve blocking or restricting any access routes. The proposed access road would be designed in accordance with fire department standards. Therefore, the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan. No impact is identified for this issue area.
- g) **Less than Significant Impact.** The project site is located in the unincorporated area of Imperial County. According to the Seismic and Public Safety Element of the General Plan, the potential for a major fire in the unincorporated areas of the County is generally low (County of Imperial 2022). Based on a review of the California Department of Forestry and Fire Protection's fire hazard severity zone map, the project site is located within a Local Responsibility Area and is classified as a moderate fire hazard severity zone (California Department of Forestry and Fire Protection 2025).

As described above, the project applicant will coordinate with the Imperial County Fire Department on conditions of approval as part of the CUP to ensure the proposed project would not result in extreme hazards to the public, firefighters, and emergency responders. Conditions of approval would include project plans review and inspections, installation of a water supply capable of supplying the required fire flow, development of an Emergency Operation Plan, and compliance with applicable standards and requirements of the National Fire Protection Association, Occupational Safety and Health Administration, and California Fire Code.

With adherence to these applicable standards, requirements, and CUP conditions of approval, the project's impact associated with potential exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires would be less than significant.



X. Hydrology and Water Quality

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

Impact Analysis

- a) **Less than Significant Impact.** The proposed project would require construction activities that would disturb soils. Pollutants typical of construction work, such as sediments, trash, petroleum products, concrete waste, sanitary waste, and chemicals could significantly affect water quality. However, construction activities are regulated under the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity

(General Construction Permit) which covers stormwater runoff requirements for projects where the total amount of ground disturbance during construction exceeds 1 acre. The proposed project would be required to comply with the General Construction Permit because ground disturbance would exceed 1 acre. Coverage under a General Construction Permit requires the preparation of a SWPPP and submittal of a NOI to comply with the General Construction Permit. The SWPPP will be implemented such that stormwater discharges would not adversely impact human health or the environment, nor contribute to any exceedances of any applicable water quality standards contained in the Colorado River Basin Plan. This impact is considered less than significant.

- b) **Less than Significant Impact.** The water demand for the proposed Project will consist of water needed during construction for dust control and soil conditioning during installation of the photovoltaic panels, battery storage units, and related infrastructure. The monthly construction water demand is anticipated to be between 7.2 and 10.8 acre feet over 12 to 18 months, with total construction water demand estimated at 310-acre feet. The operational demand is anticipated to be 10 acre-feet per year for panel washing and other maintenance activities. The operational demand will exist for the life of the Project, which is anticipated to be 25 to 30 years.

The construction water demand is approximately 1.8 percent of the average annual increase in groundwater storage of 17,000 acre-feet per year and 0.002 percent of the volume of groundwater in storage in the Basin. Furthermore, the construction water needs are short-term and temporary. This temporary water use is not anticipated to cause persistent and long-term lowering of groundwater levels. Therefore, the construction water demand will not cause or contribute to overdraft, exhaustion of water supplies, lowering of groundwater levels to depths that would be uneconomic for pumping, land subsidence, or significant alteration of groundwater quality.

The annual operational water needs are equivalent to 0.05 percent of the average annual increase in groundwater storage of 17,000 acre-feet per year and 0.000002 percent of the volume of groundwater in storage in the Basin. Therefore, the long-term operation and maintenance of the project would not have any measurable effect or impact on groundwater resources in the Basin. There will be sufficient water available for existing water uses in the Basin and the project water demand during normal, single dry year, and multiple dry year periods for the anticipated life of the project, which is anticipated to be greater than 20 years (Appendix K of this Initial Study). Therefore, a less than significant impact would occur.

- ci) **Less than Significant Impact.** As discussed in Response X. a) above, the construction of the proposed project would result in ground disturbing activities in an area greater than one acre. Therefore, SWPPP will be developed that implements BMPs that sufficiently avoid any onsite or offsite erosion and runoff from areas proposed for ground disturbance. This is considered a less than significant impact.
- cii) **Less than Significant Impact.** The proposed project would not involve the construction of substantial impervious surfaces that would increase the rate of run-off. Construction activities would be localized to the project site boundary and access road, and the surrounding pervious surface would remain similar to pre-project conditions. Water will continue to percolate through the ground, as a majority of the surfaces on the project site will remain pervious. In this context, the proposed project would not result in substantial increases in run-off. This is considered a less than significant impact.
- ciii) **Less than Significant Impact.** Water will continue to percolate through the ground, as a majority of the surfaces on the project site will remain pervious. The proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provided substantial additional sources of polluted runoff. This is considered a less than significant impact.
- civ) **Less than Significant Impact.** According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (Map Number 06025C1425C), the project site is located

within Zone X, an area of minimal flood hazard. Therefore, the proposed project would not impede or redirect flood flows and a less than significant impact would occur.

- d) **No Impact.** The project site is located over 100 miles inland from the Pacific Ocean. Therefore, the proposed project is not located in an area at risk of tsunamis.

According to the Seismic and Public Safety Element of the General Plan, the most likely location for a significant seiche to occur is the Salton Sea, which is located approximately 25 miles northwest of the project site. While there have been a number of seismic events since the formation of the Salton Sea, no significant seiches have occurred to date. A seiche could occur, however, in the Salton Sea under the appropriate seismic conditions. The Salton Sea is proximal to the San Andreas and San Jacinto faults and would be subject to significant seismic ground shaking that could generate a seiche (County of Imperial 2022). The likelihood of seismic activity producing waves large enough to affect the project site is low and therefore, the risk of release of pollutants attributable to inundation is considered low based on no documented history of seiche-induced flooding of the project site. No substantial damage is expected from seiches on the project site, and implementation of the project would not increase the inherent risk of seiches on the project site. No impact would occur.

- e) **Less than Significant Impact.** The proposed project would be compliant with all local, state, and federal regulations, including compliance with the NPDES permits with the implementation of BMPs. Compliance with the referenced regulations would reduce any potential impact associated with a water quality control plan to a less than significant impact.

XI. Land Use and Planning

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

Impact Analysis

- a) **No Impact.** The project site is located in a sparsely populated portion of Imperial County. There are no established residential communities located within or in the vicinity of the project site. Therefore, implementation of the proposed project would not divide an established community and no impact would occur.
- b) **No Impact.** The project's consistency with applicable land use plans, policies, and regulations is evaluated below.

County of Imperial General Plan. The County adopted the Renewable Energy (RE) and Transmission Element, which includes a RE Zone (RE Overlay Map). The County Land Use Ordinance, Division 17, includes the RE Overlay Zone, which authorizes the development and operation of renewable energy projects with an approved CUP. The RE Overlay Zone is concentrated in areas determined to be the most suitable for the development of renewable energy facilities while minimizing the impact on other established uses. CUP applications proposed for specific renewable energy projects not located in the RE Overlay Zone would not be allowed without an amendment to the RE Overlay Zone.

As shown on Figure 1, the entire project site is located outside of the RE Overlay Zone. Therefore, the proposed project would conflict with the RE Overlay Zone because the project is located outside of area designated for renewable energy projects. Without an amendment to the RE Overlay Zone, the proposed project would not be allowed and would conflict with the RE and Transmission Element of the General Plan. However, the applicant is requesting a General Plan amendment and Zone Change to include/classify the project site into the RE Overlay Zone.

As stated in the RE and Transmission Element:

An amendment to the overlay zone would only be approved by the County Board of Supervisors if a future RE project met one of the following two conditions:

- **Adjacent to the Existing RE Overlay Zone:** An amendment may be made to allow for development of a future RE project located adjacent to the existing RE Overlay Zone if the project:
 - Is not located in a sensitive area
 - Would not result in any significant impacts.
- **“Island Overlay”:** An amendment may be made to allow for development of a future RE project that is not located adjacent to the existing RE Overlay Zone if the project:

- Is located adjacent (sharing a common boundary) to an existing transmission source
- Consists of the expansion of an existing RE operation
- Would not result in any significant environmental impacts (County of Imperial 2016).

The project site is not located adjacent to an existing RE Overlay Zone. Therefore, the proposed project will need to meet the criteria identified for the “Island Overlay” to obtain approval of an amendment to the RE Overlay Zone. Table 11 provides an analysis of the project’s consistency with the “Island Overlay” criteria. As shown in Table 11, the proposed project is not located immediately adjacent to an existing transmission source, however the site is in relative proximity to the KN transmission line, and an interconnection from the project site is feasible.

The General Plan Amendment and Zone Change requests submitted by the project applicant are subject to approval by the County Board of Supervisors. If approved, the project applicant will be able to request for approval of a CUP to allow the construction and operation of the proposed solar facility and BESS, and the proposed project would be consistent with the RE and Transmission Element of the General Plan.

Table 11. Project Consistency with “Island Overlay” Criteria

Criteria	Criteria Met?
Is located adjacent (sharing a common boundary) to an existing transmission source?	While the project site is not immediately adjacent to the KN line, the site is located in relative proximity, approximately 1.25 miles away from the existing IID 230-kV KN transmission line located to the east towards the East Highline Canal. The proposed solar facility would connect to this gen-tie line through an extension from the existing IID 230-kV KN transmission line to the project site.
Consists of the expansion of an existing RE operation?	The proposed project is not an expansion of an existing RE operation.
Would not result in any significant environmental impacts?	The proposed project would implement mitigation measures regarding biological resources and cultural resources. Upon implementation of these mitigation measures, the proposed project would not result in any significant environmental impacts. Further, the proposed project would not be located within any agricultural lands.

Source: County of Imperial 2016

County of Imperial Land Use Ordinance. Implementation of the project would require the approval of a CUP by the County to allow for the construction and operation of the proposed solar energy facility with an integrated battery storage system. The project site is zoned Open Space/Preservation (S-2). The proposed BESS facility will be conducted pursuant to Conditions of Approval of a CUP that has been applied for with Imperial County Planning and Development Services. Pursuant to Title 9, Division 5, Chapter 19, the following uses are permitted in the S-2 zone subject to approval of a CUP from Imperial County:

- i) Major facilities relating to the generation and transmission of electrical energy provide[d] such facilities are not under State or Federal law, to [be] approved exclusively by an agency, or agencies of the State or Federal government, and provided such facilities shall be approved subsequent to coordination review of the Imperial Irrigation District for electrical matters. Such uses shall include but be limited to the following:*

- *Electrical generation plants*
- *Facilities for the transmission of electrical energy (100-200 kV)*
- *Electrical substations in an electrical transmission system (500 kv/230 kv/161 kV)*

The CUP request submitted by the project applicant is subject to approval by the County Board of Supervisors. If the CUP is approved, the proposed project would not conflict with the County's zoning ordinance and no impact would occur.



XII. Mineral Resources

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

Impact Analysis

- a) **No Impact.** Construction of the proposed project would not result in any impacts to known mineral resources or mineral resource recovery sites. The project does not propose any extraction and thus loss of availability of these mineral resources. Additionally, the proposed project would not preclude future mineral resource exploration throughout the project site. No impact would occur.
- b) **No Impact.** As noted in Response XII. a), implementation of the proposed project would not result in any impacts to known mineral resources or mineral resource recovery sites. Additionally, the proposed project would not preclude future mineral resource exploration throughout the project site. No impact would occur.

XIII. Noise

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

The following information is summarized from the *Noise Impact Assessment for the North Star 2 Project* prepared by Ecorp Consulting, Inc. This report is provided as Appendix I of this Initial Study.

- a) **Less than Significant Impact.** The majority of the project area would be considered ambient noise category 6 (very quiet sparse suburban or rural residential areas). These areas are similar to Category 4 (quiet urban and normal suburban residential areas) but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound with 200 people per square mile. Typical Ldn is approximately 42 dBA, daytime Leq is approximately 40 dBA, and nighttime Leq is approximately 34 dBA (Appendix I of this Initial Study).

Construction

Construction noise associated with the proposed project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, pile drivers, and portable generators, can reach high levels. 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. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

The nearest existing noise-sensitive land use to the project site is a single-family residence located approximately 2.5 miles from the western boundary of the project site. The County's General Plan Noise Element states construction equipment operation shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturdays. No commercial construction operations are permitted on Sundays or holidays. Construction noise, from a single piece of equipment or a combination of equipment, shall not exceed 75 dB Leq, when averaged over an eight-hour period, and measured at the nearest sensitive receptor. This standard, established by the County to prevent physical and mental damage consistent with exposure to excessive noise, assumes a construction period, relative to an individual sensitive receptor of days or weeks. In cases of extended length construction times, the standard may be tightened so as not to exceed 75 dB Leq when averaged over a one-hour period.

The anticipated short-term construction noise levels generated for the necessary construction equipment during the onsite solar and battery storage facility component of the proposed project are presented in Table 12.

As shown in Table 12, no individual or cumulative pieces of construction equipment would exceed the 75 dBA County construction noise standard during any phase of construction at the nearby noise-sensitive receptors. It is acknowledged that a limited amount of construction activities associated with the gen-tie line extension would occur nearer to the sensitive residential receptor (1.6 miles at the nearest). In addition to the fact that less construction equipment would be employed at the gen-tie locations, this distance is still great enough to limit all construction noise as experienced at the vicinity residential receptor to near imperceptible levels. All calculated noise levels during construction would fall within the normally acceptable range of the guidance set forth in the County of Imperial General Plan Noise Element. Therefore, the project's construction noise impacts would be less than significant.

Table 12. Construction Average (dBA) Noise Levels at Nearest Receptor

Equipment	Estimated Exterior Construction Noise Level at Existing Residences	Construction Noise Standards (dBA L _{eq})	Exceeds Standards?
Site Preparation			
Rubber Tired Dozers (2)	29.3 (each)	75	No
Tractors/Loaders/Backhoes (2)	31.6 (each)	75	No
Combined Site Preparation Equipment	36.6	75	No
Grading			
Excavators (4)	28.3 (each)	75	No
Graders (3)	32.6 (each)	75	No
Rubber Tired Dozers (2)	29.3 (each)	75	No
Scrapers (2)	31.2 (each)	75	No
Tractors/Loaders/Backhoes (4)	31.6 (each)	75	No
Combined Grading Equipment	42.6	75	No
Facility Construction			
Crane	24.2	75	No
Paver	25.8	75	No
Paving Equipment (2)	34.1 (each)	75	No
Plate Compactors (4)	27.8 (each)	75	No
Forklifts (4)	31.0 (each)	75	No
Tractors/Loaders/Backhoes (4)	31.6 (each)	75	No
Trenchers (2)	28.9 (each)	75	No
Welder	21.6	75	No
Combined Facility Construction Equipment	43.2	75	No

Source: Appendix I of this Initial Study

Operation

The main stationary operational noise associated with the project would be from the proposed transformers, inverters, substation, and transmission lines. Previous measurements were taken by ECORP staff during a weekday in the middle of a solar facility with identified noise levels reaching 47.1 dBA at approximately 50 feet distant. As previously stated, the nearest noise sensitive receptor to the project site is a single-family residence located approximately 2.5 miles (13,200 feet) west of the project site. Noise attenuates a rate of approximately six dB for each doubling of distance from a stationary or point source (FHWA 2011). Considering the solar facility noise measurement of 47.1 dBA at approximately 50 feet distant, the nearest noise sensitive receptor from the proposed project (over two miles away) would experience operational stationary noise levels well below existing ambient noise levels currently experienced, as shown in Table 13.

Section 90702.00 of the Noise Ordinance sets a sound level limit of 50 dBA Leq for daytime hours of 7 a.m. to 10 p.m. and 45 dBA Leq during the noise sensitive nighttime hours of 10 p.m. to 7 a.m. for residential noise sensitive land uses. The proposed project is expected to operate during both daytime and nighttime hours and therefore the most restrictive and conservative approach is to apply the 45 dBA Leq nighttime standard at the property lines.

Table 13 provides an estimate of the projected noise levels from the proposed project operations at the nearest sensitive receptor. Operating sound levels from the project is estimated to be below 20 dBA, which would be below the County’s threshold of 45 dBA at the closest sensitive receptor. Therefore, the project’s operational noise levels would not exceed the County’s noise standards and impacts would be less than significant.

Table 13. Operational Noise Levels at Nearest Sensitive Receptor

Location	Operational Noise Attributed to Project (Leq dBA)	County Daytime Standard (Leq dBA)	County Nighttime Standard (Leq dBA)	Exceed Standard?
Residence located west of project site, 13,200 feet from the western boundary	<20.0	50.0	45.0	No

Source: Appendix I of this Initial Study

Transportation Noise

Project operations would result in minimal additional traffic on adjacent roadways. The only visitors to the site would be that of repair or maintenance workers, whose presence at the site would be required infrequently and inconsistently. According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB. The project would not result in a doubling of traffic on vicinity roadways, and therefore its contribution to existing traffic noise would not be perceptible. Therefore, the project’s transportation-related noise impact is considered less than significant.

Conclusion

Based on the preceding analysis, the project is not anticipated to generate construction or operational noise levels that exceed the applicable noise limits. Therefore, the project’s noise impact is considered less than significant.

- b) **Less than Significant Impact.** Project construction would have the potential to result in temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty

construction equipment, such as dozers and trucks. Pile drivers would be necessary during project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with typical construction equipment at 25 feet distant are summarized in Table 14.

Table 14. Representative Vibration Source Levels for Construction Equipment

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Pile Driver	0.170
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Source: Appendix I of this Initial Study

The County of Imperial does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020b) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. Consistent with FTA recommendations for calculating construction vibration, construction vibration was measured from the center of the project site.

The nearest structure of concern to the construction site, with regard to groundborne vibrations, appears to be a water tank located approximately one mile from the center of the project site.

Based on the representative vibration levels presented for various construction equipment types in Table 11 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the potential project construction vibration levels. From a distance of 5,457 feet, vibration as a result of construction activities would not exceed 0.2 PPV at the nearest structure. Therefore, project construction would not exceed the recommended threshold and vibration impacts would be less than significant.

- c) **No Impact.** The nearest airport is the Brawley Municipal Airport located approximately 13 miles west of the project site. The Imperial County Airport Land Use Commission has established a set of land use compatibility criteria for lands surrounding the airports in Imperial County in the Imperial County Airport Land Use Compatibility Plan (1996). As identified in the Imperial County Airport Land Use Compatibility Maps, the proposed project site lays outside of the noise contours of all airports. Therefore, the project would not expose project workers to excessive airport noise.

XIV. Population and Housing

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

Impact Analysis

- a) **No Impact.** The proposed project would not induce unplanned population growth. The proposed project involves the construction and operation of a solar energy facility and BESS on a vacant parcel. No development of new roads or infrastructure is proposed that would introduce new populations to the project site. The proposed access road would be used only to access the project site. No impact would occur.
- b) **No Impact.** No residential units are on the project site that would require relocation. Therefore, the proposed project would not displace substantial numbers of existing people or housing necessitating the construction of replacement housing elsewhere. No impact would occur.

XV. Public Services

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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:				
i. Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- ai) **Less Than Significant Impact.** Fire protection and emergency medical services in the project area are provided by the Imperial County Fire Department. The nearest Imperial County Fire Department is the Brawley Fire Department Station 2 located approximately 14 miles west of the project site. The project has the potential to increase response times, as energy storage facilities (i.e., the proposed BESS), have the potential to create hazards related to risk of explosion, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, and chemical burns.

The project site is in a relatively remote location, reducing the potential for significant hazards to populations in surrounding areas. However, the project site's remote location would involve longer response times for fire department responses, which in turn, could result in incidents that are more difficult to stabilize and may require additional fire and emergency response resources to manage in a safe manner.

Utility-scale BESS requires specialized and reliable equipment to perform firefighting operations to NFPA recommendations, OSHA requirements, and ICFD standards. These standards are:

NFPA:

- 1 Fire Code
- 70 National Electrical Code
- 855 Standard for the installation of Energy Storage System
- 111 Stored Electrical Energy Emergency and Standby Power System

- 1710 Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments

OSHA:

- 29 CFR 1910.134(g)(4)

CFC:

- Chapter 12 section 1206 Electrical Energy Storage System
- Chapter 9 Fire Protection and Life Safety System

The project applicant will be required to consult and coordinate with the Fire Department and address fire safety and service concerns associated with the proposed project. This will include conditions and requirements that address operational characteristics of the BESS (e.g., battery storage system fire prevention and control systems), as well as emergency fire response access to the project site. Compliance with Fire Department requirements and conditions of approval associated with the Conditional Use Permit, is required so that adequate service is maintained. Potential fire/emergency access under consideration includes access from the west, as discussed in the Project Description, as well as, potential access across the existing bridge over the East Highline Canal.

The project site would continue to be adequately supported by the existing fire protection services since the construction and operation of the project would not induce growth in the project area and the fire risk would not create the need for new or physically altered fire protection facilities. Operation and maintenance would not affect the ability of fire personnel to respond to fires. Based on these considerations, the proposed project would not result in a need for fire facility expansion and no impact is identified.

- a) **No Impact.** Police protection services in the project area is provided by the Imperial County Sheriff's Department. The nearest station for a response to the project site is the Brawley Police Department, which is approximately 15 miles from the project site. The proposed project would not require police services during construction or operation and maintenance beyond routine patrols and response. Construction and operation of the proposed project would not induce growth in the project area that would result in the permanent, and increased need of police protection services. No impact would occur.
- a) **No Impact.** The proposed project does not include the development of residential land uses that would result in an increase in population or student generation. Construction is estimated to take approximately 12-18 months. The number of construction workers is not expected to require a substantial number of workers. Construction of the proposed project would not result in an increase in student population within the Imperial County's School District since it is anticipated that construction workers would commute in during construction operations. Furthermore, no full-time employees are required to operate the project. It is anticipated that maintenance of the project will be minimal to perform periodic visual inspections for security, maintenance, and system monitoring. The proposed project would not result in an increase in student population within the Imperial County's School District. Therefore, the proposed project would have no impact on Imperial County schools.
- a) **No Impact.** Construction is estimated to take approximately 12-18 months. The number of construction workers is not expected to require a substantial number of workers. Furthermore, no full-time employees are required to operate the project. It is anticipated that maintenance of the project will be minimal to perform periodic visual inspections for security, maintenance, and system monitoring. Substantial permanent increases in population that would adversely affect local parks is not anticipated. Therefore, the proposed project would have no impact on parks.

- av) **No Impact.** Construction is estimated to take approximately 12-18 months. The number of construction workers is not expected to require a substantial number of workers. Furthermore, no full-time employees are required to operate the project. It is anticipated that maintenance of the project will be minimal to perform periodic visual inspections for security, maintenance, and system monitoring. Substantial permanent increases in population that would adversely affect libraries and other public facilities (such as post offices) is not anticipated. Therefore, the proposed project would have no impact on other public facilities such as post offices and libraries.

XVI. Recreation

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

Impact Analysis

- a) **No Impact.** The proposed project would not increase the use of existing neighborhood parks and regional parks or other recreational facilities. The proposed project would not induce new populations that would result in the substantial physical deterioration of recreational facilities. No impact would occur.
- b) **No Impact.** The proposed project would not include recreational facilities or require the construction or expansion of recreational facilities. The proposed project would not induce new populations that would require new recreational facilities. No impact would occur.

XVII. Transportation

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

Impact Analysis

The following information is summarized from the *Traffic, Parking and Circulation Assessment for the North Star 2 Project* prepared by ECORP Consulting, Inc. This report is provided as Appendix J of this Initial Study.

- a) **No Impact.** The proposed project would not include any project actions within roadway segments. Additionally, the proposed project is not in the vicinity of a Public Transit route, or Bicycle or Pedestrian Facilities. Therefore, the proposed project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities. Therefore, no impact would occur.
- b) **Less than Significant Impact.** Section 15064.3(b) of the CEQA Guidelines provides guidance on determining the significance of transportation impacts and focuses on the use of vehicle miles traveled (VMT), which is defined as the amount and distance of automobile travel associated with a project. There would be no change in traffic volumes associated with project construction or operation as project construction is temporary and project operation would have no full-time on-site employees. A VMT analysis is not required. This impact would be less than significant.
- c) **Less than Significant Impact.** The average daily trips during construction and operation would be minimal along the State Highways. There is a potential for truck traffic when approaching the project site along SR 78. However, these effects would be temporary and minor, and no long-term effects on geometric design features on Project vicinity roadways would occur that could result in an increase in hazards. This impact would be less than significant.
- d) **Less than Significant Impact.** There is a potential for truck traffic when approaching the project site along SR 78. However, these effects would be temporary and minor, and no long-term effects on emergency access would occur that could result in an increase in hazards. Therefore, the proposed project would not result in inadequate emergency access and this impact would be less than significant.

XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

a-b) **Less than Significant Impact with Mitigation Incorporated.** Assembly Bill 52 was passed in 2014 and took effect July 1, 2015. It established a new category of environmental resources that must be considered under CEQA called tribal cultural resources (Public Resources Code 21074) and established a process for consulting with Native American tribes and groups regarding those resources. Assembly Bill 52 requires a lead agency to begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.

The Viejas Band of Kumeyaay Indians (“Viejas”) indicated that the project site has cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the project area. Viejas requested that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to be informed of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains.

The Agua Caliente Band of Cahuilla Indians (ACBCI) responded on February 1, 2024 and indicated that the project area is not within the boundaries of the ACBCI Reservation; however, the project site is within the Tribe’s Traditional Use Area. The ACBCI Tribal Historic Preservation Office requested the presence of an archaeologist that meets the Secretary of Interior’s standards and approved cultural resource monitor(s) during any ground disturbing activities (including archaeological testing and surveys). On March 19, 2026, the ACBCI submitted a letter to the Imperial County Planning and Development Services Department stating that their concerns have been addressed and that proper mitigation measures have been proposed in the Initial Study to ensure the protection of tribal cultural resources. The letter also indicated the conclusion of consultation under SB 18.

The Historic Preservation Office of the Fort-Yuma Quechan Indian Tribe responded on February 25, 2026 requesting consultation for the project. The project is within the traditional lands of the Fort-Yuma Quechan Indian Tribe.

The project includes ground-disturbing activities such as excavation, grading, trenching, vegetation removal, and soil compaction. These activities may result in potentially significant impacts on previously unknown tribal cultural resources if any are present within the project area. Implementation of Mitigation Measures CR-1 through CR-4 and TCR-1 would reduce the potential impacts on unidentified tribal cultural resources to a level less than significant.

Mitigation Measures:

TCR-1 **Artifact Disposition.** In the event cultural resources are identified during ground disturbing activities, the landowner(s) shall relinquish ownership of all cultural resources, (with the exception of sacred items, burial goods, and Human Remains) and provide evidence to the satisfaction of the Qualified Archaeologist that all archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), have been handled through the following methods.

- **Historic Resources** - Historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), shall be curated at a curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines.
- **Pre-contact Resources** - A fully executed reburial agreement with the appropriate culturally affiliated Native American tribe(s) or band(s). This shall include measures and provisions to protect the reburial area from any future impacts. Reburial shall not occur until all cataloguing; analysis and special studies have been completed on the cultural resources. Details of contents and location of the reburial shall be included in the Cultural Resources Management Plan (see Mitigation Measure CR-1). The details of any disposition of artifacts shall be documented in the Cultural Resources Management Plan.

XIX. Utilities and Service Systems

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis

- a) **Less than Significant Impact.** The proposed project does not currently contain any public utilities or services. The proposed project would not require the construction of any water, wastewater, stormwater, or energy facilities to accommodate the demand of the project. During project construction, water will be needed for dust control and soil conditioning during installation of the photovoltaic panels, battery storage units, and related infrastructure. During the operational phase, water will be needed for routine maintenance activities, which will primarily consist of washing the photovoltaic panels to maintain generation efficiency. The project's water supply will be provided by a new onsite groundwater supply well to be drilled and installed as part of the project. Impacts associated with the project's groundwater well are inherent to the project's construction phase, and impacts have been evaluated throughout this Initial Study under the appropriate subject headings (air quality, biological resources, etc.).

The proposed project would not require the relocation, expansion, or construction of new storm drainage facilities because the proposed solar facility would not generate a significant increase in the amount of impervious surfaces that would increase runoff during storm events and exceed the capacity of existing or planned stormwater drainage systems. Water from solar panel washing would continue to percolate through the ground, as a majority of the surfaces within the project site would remain pervious.

The wastewater generated during construction would be contained within portable toilet facilities and disposed of at an approved site. The minimal volume of wastewater generated during construction would not require the relocation expansion, or construction of wastewater treatment facilities.

Further, no habitable structures (e.g. housing or O&M buildings) are proposed on the project site. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded electric power or natural gas.

- b) **Less than Significant Impact.** Water for the project will be provided by a new well to be drilled on the project site. As such, groundwater will be the sole water supply for both construction and operational water needs. During construction, water will be needed for dust control and soil conditioning during installation of the photovoltaic panels, battery storage units, and related infrastructure. The monthly water demand may range from 7.2 acre-feet to 10.8 acre-feet, on average for 12 to 18 months. The construction water demand is approximately 1.8 percent of the average annual increase in groundwater storage of 17,000 acre-feet per year and 0.002 percent of the volume of groundwater in storage in the Basin. Furthermore, the construction water needs are short-term and temporary. This temporary water use is not anticipated to cause persistent and long-term lowering of groundwater levels. Therefore, the construction water demand will not cause or contribute to overdraft, exhaustion of water supplies, lowering of groundwater levels to depths that would be uneconomic for pumping, land subsidence, or significant alteration of groundwater quality (Appendix K of this Initial Study).

During the operational phase of the project, water will be needed for routine maintenance activities, which primarily consists of washing the photovoltaic panels to maintain generation efficiency. The operational water demand for panel washing and other maintenance needs is based primarily on the number of panels, which relates to the energy production or output, in megawatts. The operational water demand is anticipated to be 32.5 acre-feet per year. Maintenance activities are anticipated to be conducted up to twice a year over a one-to-two-week period each event, so the maintenance water demand is intermittent and not spread throughout the year. The operational water demand will occur throughout the life of the project, which is anticipated to be 25 to 30 years. The annual operational water needs are equivalent to 0.2 percent of the average annual increase in groundwater storage of 17,000 acre-feet per year and 0.00002 percent of the volume of groundwater in storage in the Basin. Therefore, the long-term operation and maintenance of the project would not have any measurable effect or impact on groundwater resources in the Basin (Appendix K of this Initial Study).

Based on the analysis presented in the water supply assessment (Appendix K of this Initial Study), there will be sufficient water available for existing water uses in the Basin and the project water demand during normal, single dry year, and multiple dry year periods for the anticipated life of the project, which is anticipated to be greater than 20 years. Therefore, this impact is considered less than significant.

- c) **No Impact.** The proposed project would not generate wastewater that would need to be treated by a wastewater treatment facility. Onsite wastewater needs will be accommodated by the use of portable toilets that would be removed from the project site once construction is complete. No impact would occur.
- d) **Less than Significant Impact.** Solid waste generation would be minor for the construction and operation of the proposed project. There are several solid waste facilities within Imperial

County and solid waste will be disposed of using a locally-licensed waste hauling service, most likely Allied Waste. Trash would likely be hauled to the Imperial Landfill (13-AA-0019) located in Imperial. The Imperial Landfill has approximately 12,384,000 cubic yards of remaining capacity and is estimated to remain in operation through 2040 (CalRecycle 2023). Therefore, there is ample landfill capacity in the County to receive the minor amount of solid waste generated by construction and operation of the proposed project. A less than significant impact is identified for this issue area.

- e) **Less than Significant Impact.** The proposed project would comply with all applicable statutes and regulations related to solid waste. As discussed in Response XIX. d) above, solid waste generated by the proposed well is expected to be minimal. This impact is considered less than significant.

XX. Wildfire

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Impact Analysis

- a) – d) **No Impact.** Based on a review of the California Department of Forestry and Fire Protection’s fire hazard severity zone map, the project site is located within a Local Responsibility Area and is classified as a moderate fire hazard severity zone. However, the project site is not located within or near a state responsibility area classified as very high fire hazard severity zones. The nearest fire hazard severity zone is classified as moderate and located over 40 miles southwest of the project site (California Department of Forestry and Fire Protection 2025). The proposed project would not involve blocking or restricting any emergency access routes and would not interfere with emergency response plans or operations near the project area. The proposed project would not involve the development of structures that would introduce new populations to the project area that could result in impacts involving wildfires. The proposed project would not exacerbate wildfire risks and no impact is identified.

XXI. Mandatory Findings of Significance

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

Impact Analysis

a) **Less than Significant Impact with Mitigation Incorporated.**

Biological Resources

Special-Status Plants

As described in Response IV. a) above, there is moderate potential for the following nine rare plant species to occur within the project site:

- Peirson's milk-vetch
- Wiggins' croton
- Munz's cholla
- Abram's spurge
- Algodones Dunes sunflower
- Darlington's blazing star

- giant Spanish-needle
- roughstalk witch grass
- sand food

Suitable habitat for these species is present within the creosote bush scrub and desert scrub habitats. Impacts that may occur to the species includes loss of individuals, habitat, and seedbank. Depending on the size of the population, this impact may be significant. However, implementation of proposed Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts on special-status plant species to a level less than significant.

Special-Status Wildlife

As described in Response IV. a) above, four special-status wildlife species were observed onsite during the habitat assessment (Figure 7Figure 6). Burrowing owl, loggerhead shrike, and desert kit fox were all observed in the creosote bush scrub habitat in the solar field portion of the Survey Area. A monarch butterfly was observed within the creosote bush-white bursage scrub in the buffer of the gen-tie line extension. Impacts to these species could be considered significant. However, implementation of Mitigation Measures BIO-2 through BIO-6 would reduce potential impacts on special-status species to a level less than significant.

Three special-status wildlife species were found to have a high potential to occur within the Survey Area: flat-tailed horned lizard, western yellow bat, and Yuma myotis. Four special-status wildlife species were found to have a moderate potential to occur within the Survey Area: Colorado Desert fringe-toed lizard, pallid bat, Townsend's big-eared bat, and American badger. Impacts to these species could be considered significant. However, implementation of Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts on special-status species to a level less than significant.

Foraging habitat for a number of raptor species and breeding habitat for numerous passerine species protected by the MBTA occurs throughout the project site. The project site provides nesting habitat for ground-nesting species as well as species that nest in desert scrub habitat. Impacts to nesting avian species could be considered significant. However, implementation of Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts on nesting avian species to a level less than significant.

The palm trees located within the Survey Area may provide roosting habitats for bat species, particularly western yellow bat, an SSC species. Section 4150 of the California Fish and Game Code prohibits the take of any naturally occurring mammals in California that are nongame mammals, which includes all species of the Order Chiroptera (bats). Furthermore, bat maternity roosting habitats are protected as native wildlife nursery sites under CEQA. Impacts to these species and maternity roosting sites could be considered significant. However, implementation of Mitigation Measures BIO-1 through BIO-27 would reduce potential impacts on bat species to a level less than significant.

Cultural Resources

As described in Response V. b) above, the potential of finding a buried archaeological site during construction is considered low. However, like all construction projects in the state, the possibility exists. This potential impact is considered significant. Implementation of Mitigation Measure CR-1 would reduce the potential impact associated with the inadvertent discovery of archaeological resources to a level less than significant.

As described in Response V. c) above, the potential for encountering subsurface human remains within the project site is low, there remains a possibility that human remains are present beneath the ground surface, and that such remains could be exposed during construction. This potential impact is considered significant. Implementation of Mitigation Measure CR-2 would ensure that the potential impact on previously unknown human remains does not rise to a level of significance pursuant to CEQA.

Geology and Soils

As described in Response I. f) above, the project site is located within an area where paleontological sensitivity is considered to be high. Impacts on any surface or near-surface level paleontological resources may occur because of grading and disturbance of the area. Even relatively shallow excavations in the Lake Cahuilla beds exposed in the project site may encounter significant vertebrate fossil remains. Implementation of Mitigation Measure GEO-1 would ensure that the potential impacts on paleontological resources do not rise to the level of significance pursuant to CEQA.

- b) **Less than Significant Impact with Mitigation Incorporated.** Based on the analysis contained in this Initial Study, the proposed project would not result in significant impacts to aesthetics, agricultural and forestry resources, air quality, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems.

The proposed project would have potential impacts that are significant on the following resources areas: biological resources, cultural resources geology and soils, and tribal cultural resources. However, implementation of mitigation measures (Mitigation Measures BIO-1 through BIO-27, CR-1 through CR-5, and GEO-1) would ensure potential impacts are reduced to less than significant levels. The proposed project would incrementally contribute to cumulative impacts for projects occurring within the vicinity of the project. However, compliance with the mitigation measures (Mitigation Measures BIO-1 through BIO-27, CR-1 through CR-5, and GEO-1) would ensure that no residually significant impacts would result with implementation of the project either directly or indirectly. In the absence of residually significant impacts, the incremental accumulation of effects would not be cumulatively considerable. Therefore, a finding of less than significant is identified for this issue area.

- c) **Less than Significant Impact.** Based on the analysis contained in this Initial Study, the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly. Any effects related to construction of the project would be temporary and short-term and would not result in any long-term or permanent effects on human beings. This is considered a less than significant impact.

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- South Coast Air Quality Management District (SCAQMD). 2003. Air Quality Management Plan. . 1992. Federal Attainment Plan for Carbon Monoxide.
- United States Fish and Wildlife Service (USFWS). 2022a. All Species Occurrences GIS Database – Carlsbad Fish and Wildlife Office.
- 1996. USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants.

List of Preparers

This Initial Study was prepared for the Imperial County Planning and Development Services Department by HDR. The following professionals participated in its preparation:

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Technical Report Preparers

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- Air Quality and Greenhouse Gas Emissions Assessment
- Biological Technical Report
- Cultural Resources Inventory Report
- Energy Consumption Assessment
- Noise Impact Assessment
- Traffic, Parking and Circulation Assessment
- Visual Resources Assessment

Emko Environmental Inc.

- Water Supply Assessment

Hernandez Environmental Services

- Jurisdictional Delineation

Landmark Consultants, Inc.

- Geotechnical Report

GS Lyon Consultants, Inc.

- Phase I Environmental Site Assessment Report

Findings

This is to advise that the County of Imperial, acting as the lead agency, has conducted an Initial Study to determine if the project may have a significant effect on the environment and is proposing this Negative Declaration based upon the following findings:

The Initial Study shows that there is no substantial evidence that the project may have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

The Initial Study identifies potentially significant effects but:

- (1) Proposals made or agreed to by the applicant before this proposed Mitigated Negative Declaration was released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.
- (2) There is no substantial evidence before the agency that the project may have a significant effect on the environment.
- (3) Mitigation measures are required to ensure all potentially significant impacts are reduced to levels of insignificance.

A MITIGATED NEGATIVE DECLARATION will be prepared.

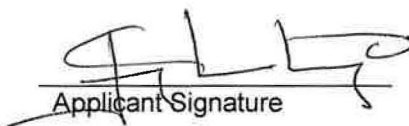
If adopted, the Negative Declaration means that an Environmental Impact Report will not be required. Reasons to support this finding are included in the attached Initial Study. The project file and all related documents are available for review at the County of Imperial, Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 (442) 265-1736.

NOTICE

The public is invited to comment on the proposed Negative Declaration during the review period.

3-26-2026 
Date of Determination Jim Minnick, Director of Planning & Development Services

The Applicant hereby acknowledges and accepts the results of the Environmental Evaluation Committee (EEC) and hereby agrees to implement all Mitigation Measures, if applicable, as outlined in the MMRP.

 3/27/26
Applicant Signature Date

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