PROJECT REPORT

TO: ENVIRONMENTAL EVALUATION COMMITTEE **AGENDA DATE: October 10, 2024**

FROM: PLANNING & DEVELOPMENT SERVICES **AGENDA TIME: 1:30 PM / No. 2**

PROJECT TYPE: Apex Energy Solutions, LLC / Alba Peaker BESS Project CUP #23-0025 SUPERVISOR DIST #3

LOCATION: 1884 Drew Road APN: 051-420-042-000

Seeley, CA 92273 PARCEL SIZE: 6.30-AC

GENERAL PLAN (existing) Seeley Urban Area Plan GENERAL PLAN (proposed) N/A

ZONE (existing) M-2 (Medium Industrial) ZONE (proposed) N/A

GENERAL PLAN FINDINGS ☒ CONSISTENT ☐ INCONSISTENT ☐ MAY BE/FINDINGS

PLANNING COMMISSION DECISION: HEARING DATE: N/A

☐ APPROVED ☐ DENIED ☐ OTHER

PLANNING DIRECTORS DECISION: HEARING DATE: ____________

☐ APPROVED ☐ DENIED ☐ OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 10/10/2024

INITIAL STUDY: #23-0030

☐ NEGATIVE DECLARATION ☐ MITIGATED NEG. DECLARATION ☐ EIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS	☐ NONE	☒ ATTACHED
AG	☒ NONE	☐ ATTACHED
APCD	☐ NONE	☒ ATTACHED
E.H.S.	☒ NONE	☐ ATTACHED
FIRE / OES	☐ NONE	☒ ATTACHED
SHERIFF	☐ NONE	☒ ATTACHED
OTHER	County Executive Office & Imperial Irrigation District	

REQUESTED ACTION:

(See Attached)

EEC ORIGINAL PKG

Draft

Initial Study

Alba Peaker Battery Energy Storage System Project

Initial Study #23-0030

Conditional Use Permit #23-0025

Imperial County, CA

October 2024

Reviewed by:

County of Imperial

Planning & Development Services Department

801 Main Street

El Centro, CA 92243

Prepared by:

HDR Engineering, Inc.

591 Camino de la Reina, Suite 300

San Diego, CA 92108

EEC ORIGINAL PKG

This page is intentionally blank.

EEC ORIGINAL PKG

Contents

EEC ORIGINAL PKG

Tables

Figures

Appendices

Introduction

A. Purpose

This document is a ☐ policy-level; ☒ project-level Initial Study for evaluation of potential environmental impacts resulting with the proposed Alba Peaker Battery Energy Storage System 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 Alba Peaker Battery Energy Storage System 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 Alba Peaker Battery Energy Storage System (BESS) 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.

EEC ORIGINAL PKG

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

3. **Project Title:** Alba Peaker Battery Energy Storage System (BESS) Project

4. **Lead Agency Name and Address:** Imperial County Planning & Development Services Department, 801 Main Street, El Centro, CA 92243

5. **Contact Person and Phone Number:** Gerardo Quero, Planner II, (442) 265-1747

6. **Project Location:** The project site is located on one privately-owned parcel (Assessor Parcel No. (APN) 051-420-042-000). APN No. 051-420-042-000 encompasses approximately 6.3 acres in the unincorporated community of Seeley in Imperial County, California (Figure 1). The project site is vacant and previously disturbed by historical agricultural uses; however, it has not been actively farmed for over two decades. The project site is approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 2). Local vehicular access to the site will be provided via one private dirt road/driveway onto/from Drew Road, adjacent to the eastern boundary of the parcel.

7. **Project Sponsor's Name and Address:** Apex Energy Solutions, LLC, 750 W. Main Street, El Centro, CA 92243

8. **General Plan Designation:** Seeley Urban Area Plan

9. **Zoning:** Medium Industrial (M-2)

10. **Description of Project:** The proposed project consists of issuance of a Conditional Use Permit (CUP) to allow for the construction and operation of a 100-megawatt (MW) BESS (i.e., peaker plant) within a Medium Industrial zone (M-2). The project would include development of a BESS facility that would connect to the existing Imperial Irrigation District's (IID) 92-kilovolt (kV) "LW" Line. The BESS facility would include battery containers and storage sites, perimeter fire access road, an on-site water storage tank/pond for fire suppression purposes, three (3) utility poles, and associated facilities surrounded by perimeter fencing. The conceptual site plan proposes to locate the facility at the eastern boundary of the project site, with the BESS facility, including the fenced in area set back from the north, south, and west property lines (varies depending on direction). Figure 3 depicts the zoning of the project site and immediately surrounding area. Figure 4 depicts the site plan.

    The project will require an on-site switching station to loop in-and-out of the IID "LW" line. The point of interconnection to the existing IID "LW" line is located immediately adjacent to the northwest boundary of the site along Drew Road. Access to the facility is proposed via an existing private dirt road extending onto/from Drew Road.

11. **Surrounding Land Uses and Setting: Briefly describe the project's surroundings:**

    The project site is currently vacant and is surrounded by active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east (Figure 2). The project site is zoned M-2. The parcels immediately surrounding the project site are zoned Light Industrial (M-1) to the east and Medium Industrial (M-2) to the north, west, and south (Figure 3).

EEC ORIGINAL PKG

12. (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

13. 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.?

In accordance with Assembly Bill (AB) 52, the County sent a Notifications of Consultation Opportunity pursuant to Public Resources Code Section 21080.3.1(d) to the Campo Band of Mission Indians and the Quechan Indian Tribe on August 27, 2024. The AB 52 30-day review ended on September 26, 2024. No comments have been received from the Quechan Indian Tribe and Campo Band of Mission Indians for this project to this date.

Environmental Factors Potentially Affected

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

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

EEC VOTES	YES	NO	ABSENT
PUBLIC WORKS	☒	☐	☐
ENVIRONMENTAL HEALTH	☒	☐	☐
OFFICE EMERGENCY SERVICES	☒	☐	☐
APCD	☒	☐	☐
AG	☒	☐	☐
SHERIFF DEPARTMENT	☒	☐	☐
ICPDS	☒	☐	☐

Jim Minnick, Director of Planning/EEC Chairman

Date: 10/18/24

EEC ORIGINAL PKG

This page is intentionally blank.

Project Summary

Project Location

The project site is located on one privately-owned parcel (Assessor Parcel No. (APN) 051-420-042-000). APN No. 051-420-042-000 encompasses approximately 6.3 acres in the unincorporated community of Seeley in Imperial County, California (Figure 1). The project site is vacant and disturbed and was previously used for agricultural cultivation but has not been actively tilled for at least two decades. The project site is approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 2). Local construction and operational vehicular access to the site will be provided via one private driveway/dirt road into the site that is accessed from Drew Road. Access would enter the site from the northern boundary of the parcel (Figure 5).

Project Components

Apex Energy Solutions, LLC (project applicant) proposes to construct and operate a 100 MW BESS (i.e., peaker plant) on a 6.3-acre site within the unincorporated community of Seeley in Imperial County. The proposed project consists of two primary components: 1) BESS; and 2) an interconnection line to IID's existing "LW" Line located immediately northwest of the project site. These two components together are collectively referred to as the "proposed project" or "project." These project components are described in detail below and depicted on Figure 4 – site plan.

Battery Energy Storage System

As shown in Figure 4, the proposed project's BESS facility would include battery containers and inverters, a water tank/pond for fire suppression (onsite water storage capacity to be determined by the Imperial County Fire Department), and associated facilities surrounded by perimeter fencing. The specific BESS system is still to be determined, and would not be ordered by the Applicant until after site plan review and would be based, in part, by Fire Department review and input.

Gen-tie Line

The project will require an on-site switching station to loop in-and-out of the IID "LW" line. The point of interconnection to the existing IID "LW" line is located immediately adjacent to the northwest boundary of the site.

Three power poles are proposed within the project site, that would carry the power lines that collect the power from the BESS and then carry over the project fencing to the off-site point of interconnection. Power from the BESS would ultimately be carried to the Dixieland Substation. No upgrades to the LW line or Dixieland Substation are required.

Site Access

Access to the BESS facility is proposed from Drew Road, which would then be via a private dirt road extending east from Drew Road to the project site. Figure 5 depicts the proposed site access. An encroachment permit will be obtained from the Imperial County Public Works Department for access from Drew Road. No new road crossings of any IID lateral canals or drains are proposed.

EEC ORIGINAL PKG

Construction

Construction is anticipated to be completed in approximately five months. The following provides the proposed project's construction phases and approximate duration of each phase:

- Grading – 14 days
- Pile Installation – 15 days
- Fence Installation – 5 days
- Electrical Installation – 30 days
- Container Installation – 14 days

Operations

Once fully constructed, the project would be operated on an unstaffed basis and be monitored remotely, with periodic on-site personnel visitations for security, maintenance and system monitoring. The project applicant would install video and intrusion surveillance on the project site. Therefore, no full-time site personnel would be required on-site during operations. Any required planned maintenance activities would generally consist of equipment inspection and replacement and would be scheduled to avoid peak load periods. Any unplanned maintenance would be responded to as needed, depending on the event.

Environmental Setting

The project site is located in the unincorporated community of Seeley in Imperial County, California. The project parcel is vacant and disturbed. IID's 92-kV "LW" Line is located immediately adjacent to the northwest boundary of the site. The project site is surrounded by active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east. The parcels immediately surrounding the project site are zoned Light Industrial (M-1) to the east and Medium Industrial (M-2) to the north, west, and south.

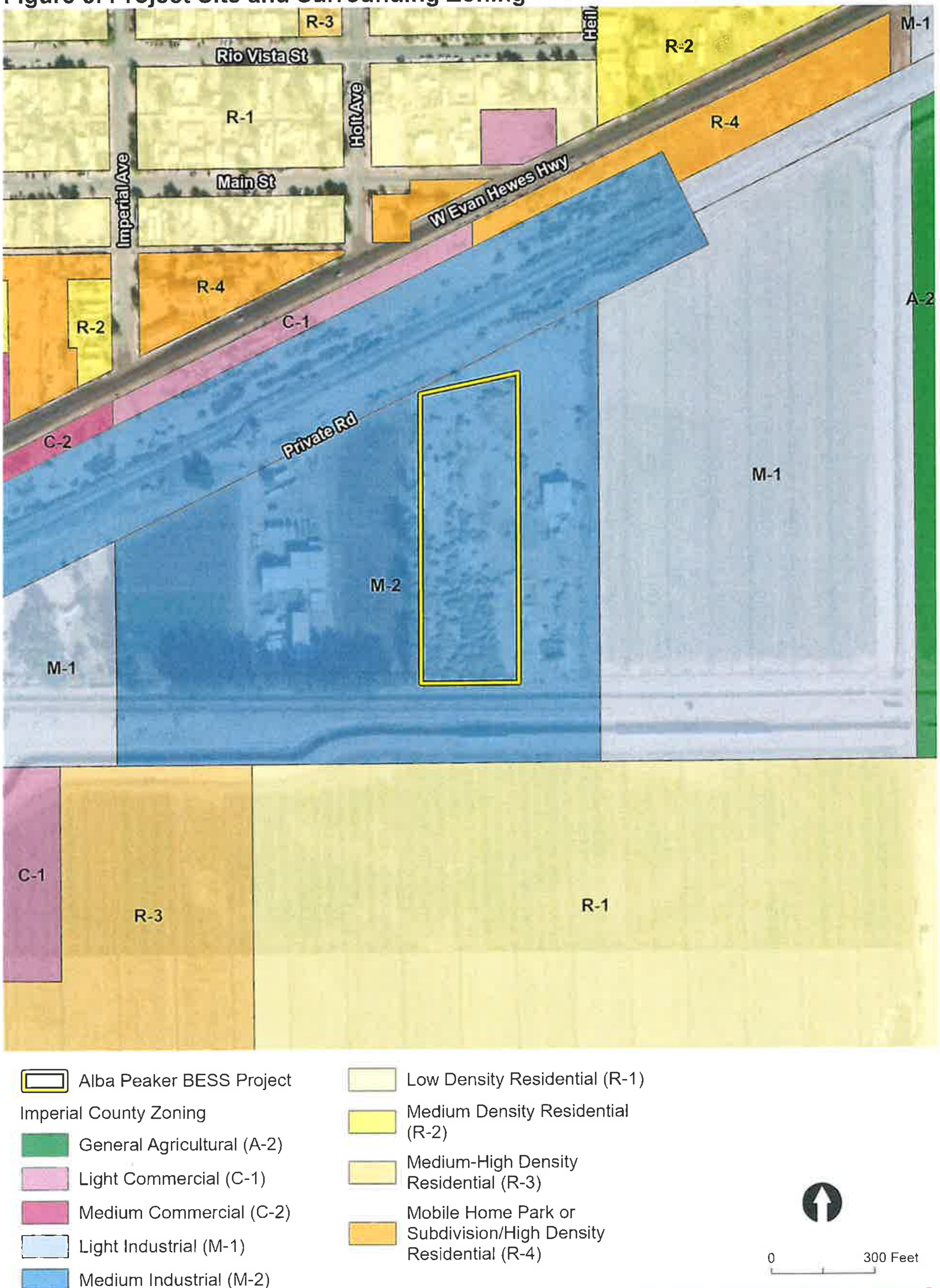
Figure 1. Regional Location

EEC ORIGINAL PKG

Figure 2. Local Vicinity

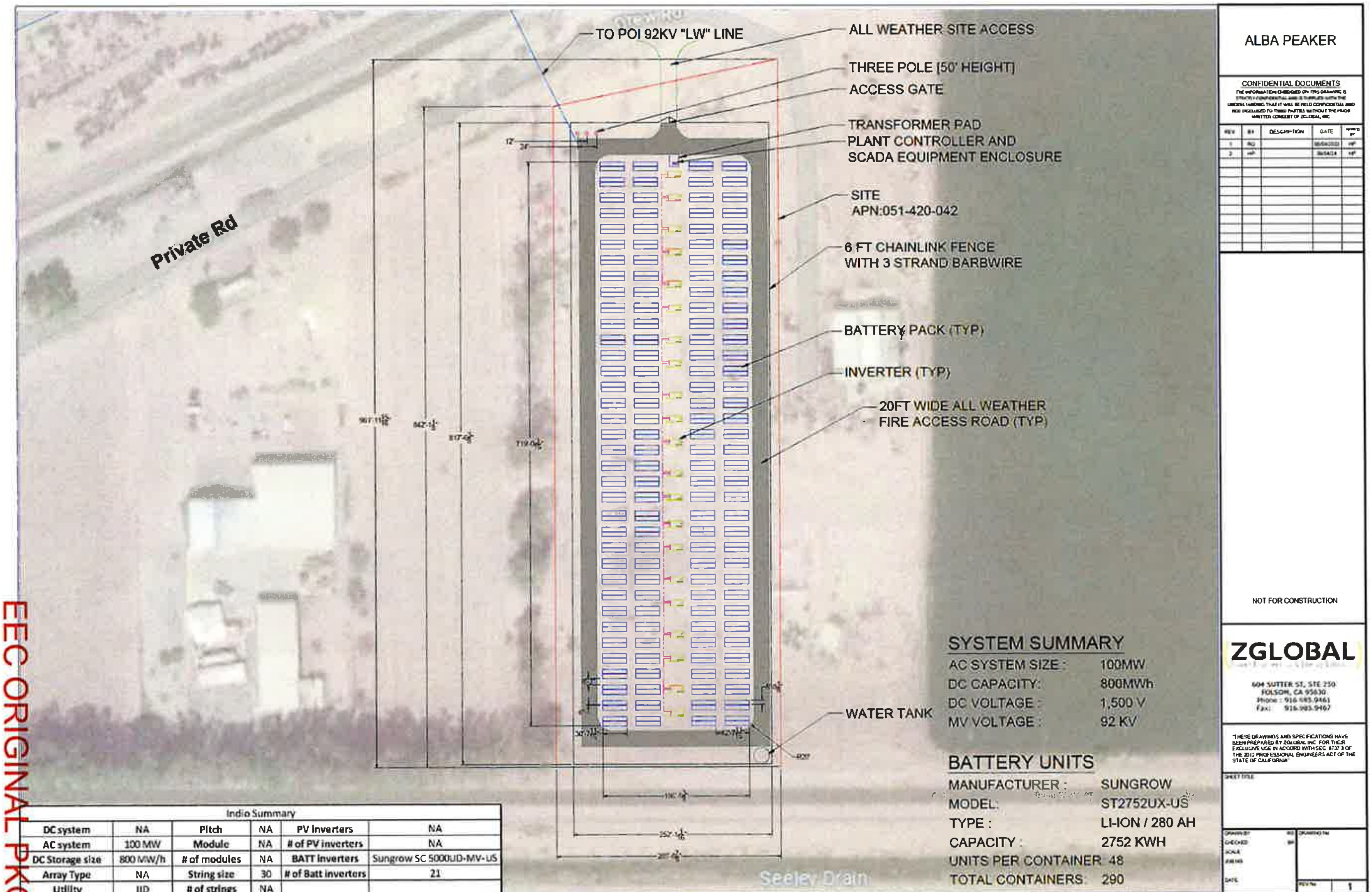
EEC ORIGINAL PKG

Figure 3. Project Site and Surrounding Zoning



EEC ORIGINAL PKG

Figure 4. Site Plan



Indio Summary					
DC system	NA	Pitch	NA	PV Inverters	NA
AC system	100 MW	Module	NA	# of PV inverters	NA
DC Storage size	800 MW/h	# of modules	NA	BATT inverters	Sungrow SC 5000UD-MV-US
Array Type	NA	String size	30	# of Batt inverters	21
Utility	IID	# of strings	NA		

This page is intentionally blank.

Figure 5. Proposed Site Access

This page is intentionally blank.

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.

EEC ORIGINAL PKG

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?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

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 project site is not located within a state scenic highway corridor, nor are there any state scenic highways located in proximity to the project site. The nearest road segment considered eligible for a State scenic highway designation is the portion of Interstate 8 (I-8) that lies between the San Diego County line and its junction with State Route 98 (SR 98) near Coyote Wells (California Department of Transportation 2018). This segment, known as Mountain Springs Grade, has a long, rapid elevation change, remarkable rock and boulder scenery, and plant life variations. The project site is located over 20 miles northeast of the junction of I-8 and SR 98; therefore, the project site would not be visible from a state scenic highway. No impacts to scenic resources within any state scenic highways would occur.

c) **Less than Significant Impact.** The project site is located on a vacant, and previously-disturbed parcel within an urbanized area. The proposed project involves the construction of a BESS facility including battery containers and storage sites, a control room, and associated facilities which will be enclosed by chain-link fencing. Construction of the project would result in a minor change in the existing visual character of the project site and surrounding area.

There are no existing scenic resources on the project site; however, the site is surrounded by residential uses to the north. The battery containers and fencing would be the most prominently visible portion of the project from the residences north of the project site. 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 proposed project does not include the addition of substantial lighting or glare producing components. Ambient lighting and glare in the nearby areas would not significantly increase above existing conditions because minimal lighting is proposed, would be low scale (in and around buildings primarily for security purposes) and would be setback from residential areas. Temporary construction lighting would be used for illuminating the project site during construction. Following the completion of construction, any construction lighting would be disassembled and removed from the site. This impact is less than significant.

II. Agriculture and Forestry Resources

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

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 (DOC 2020). 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.

EEC ORIGINAL PKG

b) **No Impact.** The project site is currently zoned M-2 (Medium Industrial) 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, 2019, 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.

EEC ORIGINAL PKG

III. Air Quality

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

Impact Analysis

The following information is summarized from the *Air Quality Analysis for the Alba Peaker BESS Project* prepared by RECON Environmental, Inc (RECON). This report is provided as Appendix A 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 (O_3), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than 10 microns in diameter (PM_{10}) standards and is also a nonattainment area for the state standards for O_3 and PM_{10}.

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 ICAPCD air quality plans: 2018 PM_{10} 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 PM_{10} 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 latest CalEEMod 2022.1 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 analysis (Appendix A of this Initial Study).

By default, CalEEMod assumes the percentage of paved and unpaved roads for each district as provided by the district. For Imperial County, the default assumption is 50 percent paved and 50 percent unpaved. However, this is not characteristic of the roads in the vicinity of the project site. Construction vehicles would access the site via I-8, West Evan Hewes Highway, and Drew Road, which are all paved. An approximately ½ mile in length of dirt road (private driveway) would be utilized for direct site access off of Drew Road. However, it should be noted that Imperial County roadways do experience higher levels of entrained roadway dust. To account for these dust emissions, ICAPCD recommends modeling 90 percent paved roads during construction activities. Additionally, the project would water the project site, including the unpaved portion of the private driveway/dirt access road, and would reduce speeds on unpaved roads to 25 miles per hour. These measures would be required per the ICAPCD measures listed below. As discussed, watering during ground disturbing activities would achieve a 50 percent reduction in fugitive dust.

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} 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. The project footprint consists of the 6.3-acre project site, which would exceed the 5 acres. 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 PM_{10} 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

EEC ORIGINAL PKG

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 PM_{10} 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. Sources of construction-related emissions include:

- Fugitive dust from grading activities;
- Exhaust emissions form construction equipment;
- Application of chemical coatings (paints, stains, sealants, etc.); and

- Exhaust and fugitive dust emissions from on-road vehicles (trips by workers, delivery trucks, and material-hauling trucks).

Predicted maximum daily emissions associated with project construction are summarized in Table 1. The emissions summarized in Table 1 account for a 50 percent reduction in dust due to daily watering, but do not account for any other emission reductions from any other standard or discretionary measure for dust control or construction equipment. As shown in Table 1, the proposed project would not exceed ICAPCD's construction-related criteria pollutant thresholds. Therefore, this is considered a less than significant impact.

Table 1. Maximum Daily Construction Air Pollutant Emissions

Emission Source	Maximum Daily Emissions (Pounds)					
	ROG	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Grading	2	14	20	<1	82	9
Pile Installation	2	11	20	<1	94	10
Fence Installation	1	8	14	<1	93	10
Electrical Installation	3	20	29	<1	94	10
Container Installation	2	10	20	<1	93	10
Max Daily Emissions	**3**	**20**	**29**	**<1**	**94**	**10**
Significance Threshold	*75*	*100*	*550*	-	*150*	-
Exceeds Threshold?	No	No	No	-	No	-

Source: Appendix A of this Initial Study

Operation

Operation-related sources of air pollutant emissions include the direct emission of criteria pollutants. Common direct emission sources associated with typical projects include mobile sources such as project-generated traffic, area sources such as the use of landscaping equipment, and energy sources such as the combustion of natural gas.

The maximum daily pollutants calculated for operations are shown in Table 2. As shown in Table 2, the proposed project would not exceed ICAPCD thresholds during operations. As such, operations-related emissions would be less than significant for the proposed project.

Table 2. Maximum Daily Operations Air Pollutant Emissions

Emission Source	Maximum Daily Emissions (Pounds					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Mobile Sources	<1	<1	<1	<1	1	<1
Area Sources	2	<1	2	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Total Operations	**2**	**<1**	**3**	**<1**	**1**	**<1**
Significance Threshold	137	137	550	150	150	550
Exceeds Threshold?	No	No	No	No	No	No

Source: Appendix A of this Initial Study

EEC ORIGINAL PKG

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.

ICAPCD Conditions of Approval

ICAPCD has reviewed the CUP application for the proposed project and the following Conditions of Approval will be required as part of the CUP. Compliance with these conditions will occur during construction and operations.

Construction Conditions of Approval:

A. Submit a construction equipment list by Make, Model, Horsepower and actual usage to the Air District on a monthly basis to determine the level of NO_x emissions. Should NO_x emissions exceed the construction NO_x emissions then the applicant will need to abide by Policy 5 of the ICAPCD's CEQA Air Quality Handbook.

B. An Enhanced Dust Control Plan must be submitted for approval by the ICAPCD to assure that fugitive emissions do not cross property lines.

Operational Conditions of Approval:

A. Should the need for back-up power become necessary, the project will submit an Authority to Construct (ATC) Permit to ICAPCD.

B. The project will include a Health Risk Assessment as part of the ATC Permit submittal.

C. A buffer should be established to keep emergency fugitive emissions from impacting the surrounding community.

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).

As shown in Table 1, project construction would not exceed the applicable regional emissions thresholds. The project would implement all standard and discretionary measures for PM_{10} control and standard measures for construction combustion equipment. As shown in Table 2, operation of the project would result in minimal emissions that would be less than the applicable thresholds for all criteria pollutants. Therefore, project construction and operations would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM2_{.5}$, and impacts would be considered less than significant.

EEC ORIGINAL PKG

c) **Less than Significant Impact**. The nearest sensitive receptors are the residential uses located approximately 500 feet north of the project site, on the north side of the railroad tracks and West Evan Hewes Highway.

Diesel Particulate Matter

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project would result in the generation of diesel-exhaust DPM emissions from the use of off-road diesel equipment required for site preparation and grading, and other construction activities and on-road diesel equipment used to bring materials to and from the project site. Generation of DPM from construction projects typically occurs in a single area for a short period. Construction is anticipated to last for approximately five months.

According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (Appendix A of this Initial Study). Thus, if the duration of proposed construction activities near any specific sensitive receptor were five months, the exposure would be one percent (5 months divided by 30 years) of the total exposure period used for health risk calculation. Further, the project would implement the standard measures for construction combustion equipment summarized above in Response III. a). In addition, all construction equipment would be subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment, and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements. Therefore, due to the limited duration of construction activities, implementation of standard measures for construction combustion equipment, and compliance to the In-Use Off-Road Diesel-Fueled Fleets Regulation, DPM generated by the project is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Minimally Exposed Individual or to generate ground-level concentrations of non-carcinogenic toxic air contaminants (TACs) that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hot spots have the potential to violate state and federal CO standards at intersections, even if the broader basin is in attainment for federal and state levels.

The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. No intersections in the vicinity of the project carry this substantial amount of traffic. Additionally, there are no signalized intersections in the vicinity of the project site. Traffic generated by the project would not result in any heavily congested intersections. Thus, the project is not anticipated to result in a CO hot spot.

As discussed above in Response III. a), the criteria pollutant emissions have been calculated for construction and operational activities, which were found to be within the ICAPCD's allowable thresholds for both construction and operations. Due to the limited amount of criteria pollutants created from construction and operational activities and the distance to the

EEC ORIGINAL PKG

nearest sensitive receptor, construction emissions would not expose sensitive receptors to substantial concentrations of criteria pollutants.

Therefore, implementation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

d) **Less than Significant Impact.** During construction, the proposed project presents 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 and temporary 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. Therefore, odors generated during construction would not adversely affect a substantial number of people to odor emissions.

The ICAPCD CEQA Air Quality Handbook provides screening level distances for potential odor sources. If a project is proposed within one mile of a wastewater treatment plant, sanitary landfill, composting station, feedlot, asphalt plant, painting, and coating operation, or rendering plant, a potential odor problem may result (Appendix A of this Initial Study). The project does not include the construction of any of these uses. Energy storage facilities are not known to emit odors during operation. Project operation would include occasional inspection and maintenance. These operational activities are not known to emit odors. Therefore, operational impacts related to odor would also 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?	☐	☒	☐	☐
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?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

The following information is summarized from the *Biological Resources Report for the Alba Peaker BESS Project* prepared by RECON. This report is provided as Appendix B of this Initial Study.

EEC ORIGINAL PKG

a) **Less than Significant with Mitigation Incorporated.** RECON biologists conducted a general biological survey of the project site on March 24, 2023. Prior to conducting field surveys, RECON also conducted a search of existing biological data for the project site, including a review of biological databases for sensitive plant and animal species reported within one mile of the project site, and a review of the site's physical characteristics (e.g., location, elevation, soils/substrate, topography). Databases included the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW] 2023a), and the All Species Occurrences Database (U.S. Fish and Wildlife Service [USFWS] 2019). Additional maps, imagery, and databases reviewed included U.S. Geological Survey (USGS) topographic maps (1979), soils survey maps (U.S. Department of Agriculture [USDA] 1981), and online aerial images.

Plants

No sensitive plant species were observed and no sensitive plant species were determined to have a potential to occur within project site. Two sensitive plant species have historic records from the vicinity of the project but have not been documented in the area in decades. The two species include chaparral sand verbena (Abronia villosa var. aurita) and mud nama (Nama stenocarpa). Given the level of past and current disturbance and lack of suitable habitat, these species are not expected to occur on the site. Based on these considerations, the proposed project would result in no impact on sensitive plant species.

Wildlife

Based on an assessment of species location records, the following three sensitive wildlife species were found to have historic records in the vicinity of the project site. These species include mountain plover (Charadrius montanus), Yuma ridgeway's rail (Rallus obsoletus yumanensis), and California black rail (Laterallus jamaicensis coturniculus). The mountain plover is a winter resident species that prefers grasslands and fields which do not occur on the project site. The Yuma ridgeway's rail and California black rail prefer emergent marshland vegetation associated with wetlands and rivers which do not occur on the project site. One other sensitive wildlife species, burrowing owl (Athene cunicularia), was evaluated for presence on the project site given species observations in the Imperial Valley. This species is not expected to use or breed on the site due to the lack of suitable burrows, evidence of small burrowing mammals (prey species), and overall level of disturbance.

The project site does not support, nor would it affect, any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the CDFW or USFWS. Nesting birds including raptors covered under the California Fish and Game Code Sections 3503 and 3503.5 have potential to be directly impacted by the project if construction activities (i.e., clearing, grubbing, grading) occur during the general nesting season of February 1 to September 15. Direct impacts to nesting birds and raptors would be considered significant and require mitigation measures.

Mitigation Measures:

BIO-1 To avoid direct impacts to avian species, removal of habitat that supports active nests in the proposed area of disturbance should occur outside the general breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the qualified biological monitor would conduct a preconstruction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The preconstruction survey would be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant would submit the results of the pre-construction survey for review and approval prior to initiating any construction activities.

If nesting birds are detected, a letter report or mitigation plan in conformance with applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) would be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan would be submitted for review and approval.

b) **No Impact.** The project site is vacant and disturbed. The project site supports two vegetation communities/land cover types: desert saltbush scrub and disturbed land. Desert saltbush scrub is the predominant vegetation community on the southern half of the project site and as a narrow strip along the western boundary. It is comprised of a single shrub species, big saltbush (Atriplex lentiformis). These bushes have colonized the site and have grown to a large stature, which occurs on 3.2 acres of the project site (Appendix B, Photographs 1 and 2). Total shrub cover ranges between 20 and 60 percent.

Disturbed land consists of mostly bare ground that is subjected to continued disturbance, preventing establishment of substantial vegetation cover. The disturbed land areas occur primarily on the northern half of the site and along the eastern boundary. Some areas contain abandoned farm equipment, vehicles, wooden crates, and other debris in scattered small piles (Appendix B, Photographs 3 and 4).

The project site does not support any riparian habitat or designated sensitive natural communities. Therefore, the proposed project would have no impact to riparian habitat or sensitive natural communities.

c) **No Impact.** The project site does not contain wetlands. Therefore, implementation of the proposed project would not have a substantial adverse effect on federally protected wetlands or waters as defined by Section 404 of the Clean Water Act. No impact is identified for this issue area.

d) **No Impact.** The project site is vacant and disturbed. The project site lies adjacent to a large expanse of agricultural land, which isolates the project site from undisturbed desert habitats. While the project site functions as part of general habitat that provides for local movement of terrestrial wildlife, it does not serve as a corridor between native desert habitat. No impact would occur.

e) **Less than Significant Impact.** The proposed project would not conflict with any local policies or ordinances protecting biological resources. As discussed above, Mitigation Measure BIO-1 would reduce potential impacts to nesting birds to a less than significant level. Therefore, this impact is considered less than significant.

f) **No Impact.** The project site is not located in a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Implementation of the proposed project would result in no impact associated with the potential to conflict with local conservation plans.

V. Cultural Resources

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

Impact Analysis

The following information is summarized from the *Cultural Resources Report for the Alba Peaker BESS Project* prepared by RECON. This study is provided as Appendix C of this Initial Study.

a) **No Impact.** Prior to the cultural resources survey conducted by RECON, a records search was requested from the California Historical Resources Information System, South Coastal Information Center (SCIC) to identify any previously recorded cultural resources within a one-mile radius of the project area. Additionally, on March 22, 2023, a RECON archaeologist and a Native American monitor from Red Tail Environmental conducted a pedestrian survey of the project area.

Sacred Lands File Search

On March 8, 2023, a letter was sent to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File (SLF) to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity. The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals that may have concerns or interests regarding cultural resources potentially occurring within the project area. The NAHC SLF search results response was received on Marh 22, 2023 with positive results.

Records Search

The SCIC records search indicated that there have been eight cultural investigations conducted within one mile of the project site, one of which includes the project site. The records search also indicated five historic-era cultural resources situated within one mile of the project site. These cultural resources are comprised of a railroad, a highway, a government building, foundations, a monument, and a trash scatter. None of the previously recorded cultural resources were mapped to be within the project area.

Pedestrian Survey

No significant or potentially significant prehistoric or historic cultural resources were observed during the pedestrian survey of the project area.

Impacts

The SCIC records search was negative for the project area and returned only historic-era resources within the requested search area of one mile. Furthermore, no significant or potentially significant prehistoric or historic cultural resources were observed during the pedestrian survey of the project area. The possibility of intact buried significant cultural resources being present within the project site is considered low due to past agriculture disturbance of the project site.

Based on the distance from known resources, disturbance from past agricultural activities, and the negative results of the SCIC survey, the proposed project would have no impact on historical resources.

b) **Less than Significant Impact with Mitigation Incorporated.** As described above, no evidence of cultural resources was identified on the project site during the survey. The property has undergone disturbance from agricultural activities in past decades. These agricultural activities have likely disturbed the surface and subsurface of the project area, destroying any intact potential prehistoric or historic-era cultural resources. 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.

Mitigation Measure:

CR-1 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 Department. 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.

c) **Less than Significant Impact with Mitigation Incorporated.** During the construction of the proposed project, grading 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-2 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-2 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:

EEC ORIGINAL PKG

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

Impact Analysis

a) **Less than Significant Impact.** The proposed project would provide energy storage. The use of energy associated with the proposed project includes both construction and operational activities. Construction activities consume energy through the use of heavy construction equipment and truck and worker traffic. The proposed project will use energy-conserving construction equipment, including standard mitigation measures for construction combustion equipment recommended in the ICAPCD CEQA Air Quality Handbook. The use of better engine technology, in conjunction with the ICAPCD's standard mitigation measures will reduce the amount of energy used for the project. The proposed project would involve storage of power from the IID grid during non-peak electricity usage, so that it can be released back into the grid during peak periods, allowing for resiliency on the electrical grid. Based on these considerations, the proposed project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. This is considered a less than significant impact.

b) **Less than Significant Impact.** As described above, the proposed project would involve purchase of power during off-peak energy use, and release of power back into the electrical grid during peak use periods, allowing for energy resiliency. The project's source of energy could be from traditional energy sources, as well as renewable if such electricity is a component of the electrical load on the IID K line. The proposed project would not conflict with or obstruct a state or local plan for renewable energy of energy efficiency. This is considered a less than significant impact.

EEC ORIGINAL PKG

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?	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit 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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

EEC ORIGINAL PKG

Impact Analysis

ai) **No Impact.** According to the DOC's California Earthquake Hazards Zone Application (EQ Zapp), 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 (California DOC n.d.). However, an earthquake fault zone associated with the Wienert Fault is located approximately 5 miles northeast 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, no impact would occur.

aii) **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 underlaying the project site, however, the Wienert Fault and its associated earthquake fault zone is located approximately 5 miles northeast 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.

aiii) **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. All four conditions may exist to some degree at the project site; however, the project site is not located in an area susceptible to liquefaction hazards (California DOC n.d.). Additional geotechnical investigation would be required in order to assess the risk of liquefaction in the project area.

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.

aiv) **Less than Significant Impact.** The project site is located in a relatively flat portion of Imperial County and is not identified as an area at risk of landslide (County of Imperial 1997). 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. As described in Response VII. aiv) above, the project site is located in a relatively flat portion of Imperial County and is not identified as an area at risk of landslide. Therefore, the impact associated with landslides is considered less than significant.

Lateral Spreading. The potential for lateral spreading to occur on the project site has not yet been determined. 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 lateral spreading. A less than significant impact is identified for this issue area.

Subsidence. The potential for subsidence to occur on the project site has not yet been determined. 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.

Liquefaction. As described in Response VII. aiii) above, the project site is not located in an area susceptible to liquefaction hazards (California DOC n.d.). 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.

Collapse. The potential for collapse to occur on the project site has not yet been determined. 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 collapse. A less than significant impact is identified for this issue area.

d) **Less than Significant Impact.** According to the United States Department of Agriculture's Web Soil Survey, soils mapped on the project site include 110 Holtville silty clay, wet, and 115 Imperial-Glenbar silty clay loams, wet, 0 to 2 percent slopes (USDA n.d.). In general, much of the near surface soils within the project site consist of silty clay and clays having a moderate to high expansion potential. Unless properly mitigated, shrink-swell soils could exert additional pressure on buried structures producing shrinkage cracks that could allow water infiltration and compromise the integrity of backfill material. These conditions could be worsened if structural facilities are constructed directly on expansive soil materials.

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 encountered 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
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis

The following information is summarized from the *Greenhouse Gas Analysis* prepared by RECON. This report is provided as Appendix D of this Initial Study.

a) **Less than Significant Impact.** Prominent greenhouse gases (GHGs) contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrogen oxide (N_2O). 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)).

Due to the climate and land use patterns, the Antelope Valley AQMD and Mojave Desert APCD are air districts that are most similar to the ICAPCD's jurisdiction. As outlined in the Antelope Valley AQMD's 2016 California Environmental Quality Act (CEQA) and Federal Conformity Guidelines and Mojave Desert APCD's 2016 California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, the two air districts both recommend use of a GHG emissions significance threshold of 100,000 short tons of CO_2e per year (90,718 CO_2e). Projects with emissions that exceed this threshold are required to incorporate mitigation sufficient to reduce emissions to less than this significance threshold or must incorporate all feasible mitigation. In absence of adopted GHG significance thresholds, the threshold of 90,718 CO_2e is an appropriate CEQA significance threshold for the assessment of GHG emissions for the purposes of this project.

The following analysis is broken out by a discussion of potential impacts during construction and operation of the project. The CalEEMod 2022.1 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 D of this Initial Study.

EEC ORIGINAL PKG

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., water trucks, cranes, tractors).

Table 3 summarizes the specific construction-generated GHG emissions that would result from construction of the project. Consistent with South Coast Air Quality Management (SCAQMD) recommendations, project construction GHG emissions have been amortized over the expected life of the project, which is considered to be 30 years.

Table 3. Construction Phases and Equipment

Equipment	Quantity	Daily Operation Time (hours)
Grading (14 days)		
Tractors/Loaders/Backhoes	2	8
Dump Truck	1	8
Scraper	1	8
Roller	1	8
Water Truck	1	8
Office Generator	1	8
Pile Installation (15 days)		
Drill Rigs	3	8
Welder	1	8
Water Truck	1	8
Office Generator	1	8
Fence Installation (5 days)		
Air Compressor	1	8
Generator	1	8
Water Truck	1	8
Electrical Installation (30 days)		
Tractors/Loaders/Backhoes	3	8
Generators	5	8
Air Compressors	5	8
Forklift	1	8
Water Truck	1	8
Office Generator	1	8
Container Installation (14 days)		
Crane	1	8
Water Truck	1	8
Office Generator	1	8
Note: Each phase would also include vehicles associated with work commutes, dump trucks for hauling, and trucks for deliveries.		

Source: Appendix D of this Initial Study

EEC ORIGINAL PKG

As shown in Table 4, the project would generate approximately 6 metric tons of CO_2e annualized over the lifetime of the project.

Table 4. Construction-Related GHG Emissions

Year	GHG Emissions (MT CO_2e)
2024	191
Amortized Over 30 Years	**6**

Source: Appendix D of this Initial Study

Operation

Once the BESS facility is 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. To account for these trips, a total of one round trip (two one-way trips) was modeled per weekday with a default trip length of 20 miles.

As shown in Table 5, the project buildout operations including amortized construction emissions would generate approximately 401 metric tons of CO_2e per year, which is below the significance threshold of 90,718 metric tons of CO_2e per year. Therefore, the project's GHG impact would be less than significant.

Table 5. Total GHG Emissions

Source	GHG Emissions (MT CO_2e)
Mobile	4
Energy	388
Area	<1
Water	0
Solid Waste	0
Refrigerants	2
Construction	6
Project Total GHG Emissions	**401**
Screening Threshold	**90,718**
Exceeds Screening Threshold of 90,718 MT of CO_2e / Year?	**No**

Source: Appendix D of this Initial Study

b) **Less than Significant Impact.** The proposed project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions. As discussed above in Response VIII. a), the project-generated GHG emissions would not exceed GHG significance thresholds. 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.

EEC ORIGINAL PKG

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?	☐	☐	☒	☐
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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

Impact Analysis

The following information is summarized from the *Phase I ESA Report* prepared by GS Lyon Consultants, Inc. This report is provided as Appendix E 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

EEC ORIGINAL PKG

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, inflammable 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.** 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, Cal/OSHA requirements, the Hazardous Waste Control Act, the 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 Medial Operations, and Special Operations to the Public by Career Fire Departments.

EEC ORIGINAL PKG

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 general approach to fire mitigation at the project site would be prevention of an incident, followed by attempts to isolate and control the incident to the immediately affected equipment. The proposed project is a battery energy storage system. The specific type of technology utilized will be determined at a future date but would be subject to fire department review and approval as part of the site plan review.

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, a less than significant impact would occur.

c) **Less than Significant Impact.** The project site is not located within 0.25 mile of an existing or proposed school. The nearest school is Seeley Elementary School, located over 0.4 mile northwest of the project site. 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, Cal/OSHA requirements, the Hazardous Waste Control Act, the CalARP Program, and the California Health and Safety Code. Compliance with these measures would reduce any potential risk or impact to nearby schools. This impact is considered less than significant.

d) **No Impact.** GS Lyon has performed a Phase I Environmental Site Assessment of the project site in general conformance with the scope and limitations of ASTM E1527-21. GS Lyon Consultants conducted a review of historic aerial photographs, historic topographic maps, historic Sanborn Fire Insurance maps, governmental regulatory databases, other regulatory and agency databases, and historic telephone and city directories to evaluate potentially adverse environmental conditions resulting from previous ownership and uses of the project site (Appendix E). Following the records review, a site reconnaissance was performed by Mr. Steven Williams, a consulting geologist to GS Lyon Consultants, on March 24, 2023. The site reconnaissance was limited to visual and/or physical observation of the exterior and interior of the project site and its improvements, the current uses of the property and adjoining properties, and the current condition of the property. Additionally, GS Lyon interviewed various individuals familiar with the project site, as identified to us, and/or government officials in order to evaluate historical uses and identify potential recognized environmental conditions (REC(s)) existing on the project site.

The Phase I ESA revealed no evidence of RECs, controlled recognized environmental conditions (CREC(s)), or historical recognized environmental conditions (HREC(s)) in connection with the project site.

A *de minimis* condition is a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. The Phase I ESA revealed the following *de minimis* conditions or environmental concerns in connection with the project site:

- Pesticide residues (low concentrations) typical to agricultural crop applications may present in the near surface soils.
- Possible hydrocarbon staining of near surface soils may be present due to historical use of the subject property as an equipment storage area.

Based on the preceding analysis, GS Lyon Consultants concluded that no RECs have been identified in connection with the project site that would warrant further environmental study (Phase II) at this time. 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 2 miles of a public airport. The nearest airport is the Imperial County Airport located over 7 miles northeast of the project site. Therefore, implementation of the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area and no impact would occur.

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) **No Impact.** The project site is located in the unincorporated community of Seeley in 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 not located within a fire hazard severity zone. The nearest fire hazard severity zone is classified as moderate and located over 20 miles southwest of the project site (California Department of Forestry and Fire Protection 2022). The proposed project would not introduce features that directly or indirectly increase the risk of wildfire on the project site. No impact is identified for this issue area.

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?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

a) **Less than Significant Impact.** No known or reasonably expected surface water quality issues are anticipated to result from implementation of the proposed project. 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

EEC ORIGINAL PKG

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) **No Impact.** The proposed project will not involve the use of groundwater. Water to be used during project-related construction activities will be limited to the amount necessary to conduct dust control activities. During construction, construction water would be brought to the site for soil conditioning and dust suppression. Dewatering activities are not anticipated to be performed as part of the project. As a result, the proposed project would not impede groundwater recharge and no 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 06025C1700C), the project site is located within Zone X, which is an area determined to be outside of the 0.2 percent annual chance of a flood (FEMA 2024). The project site is located approximately 0.50 mile north of a Special Flood Hazard Area, Zone A, which is an area subject to inundation by the 1% annual chance flood (100-year flood zone) (FEMA 2024).

The proposed access road would not involve the addition of structures which could impede or redirect flood flows. In addition, the proposed access road would be improved with an all-weather surface allowing runoff to continue to percolate into the ground. Therefore, the proposed access road would not 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 impede or redirect flood flows, and impacts would be less than significant.

d) **No Impact.** The project site is located over 80 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 over 20 miles north 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

EEC ORIGINAL PKG

seismic ground shaking that could generate a seiche (County of Imperial 2002). 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 will not involve the use of groundwater. Water to be used during project-related construction activities will be limited to the amount necessary to conduct dust control activities. During construction, construction water would be brought to the site for soil conditioning and dust suppression. Dewatering activities are not anticipated to be performed as part of the project. As discussed above, 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?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Analysis

a) **No Impact.** The project site is located on a vacant and disturbed parcel within the unincorporated community of Seeley in Imperial County. The project site is surrounded by active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east. The parcels immediately surrounding the project site are zoned Light Industrial (M-1) to the east and Medium Industrial (M-2) to the north, west, and south. The proposed project does not involve project components that could physically divide an established community. 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 Land Use Ordinance. The project site is zoned Medium Industrial (M-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. According to Title 9, Division 5, Chapter 15, the following uses are permitted in the M-2 zone subject to approval of a CUP from Imperial County:

i) Battery Storage

jj) Major facilities relating to the generation and transmission of electrical energy, provided such facilities are not, under state or federal law, to be approved exclusively by an agency, or agencies of the state and/or federal governments, and provided that such facilities shall be approved subsequent to coordination and review with the Imperial Irrigation District for electrical matters. Such uses shall include, but not 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/230kV/161kV)

Therefore, with approval of the CUP, the proposed project would not conflict with the County of Imperial Land Use Ordinance and no impact would occur.

EEC ORIGINAL PKG

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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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 nearest active mines for mineral resources to the project site are construction sand and gravel (County of Imperial 2016). 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.

EEC ORIGINAL PKG

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

Impact Analysis

The following information is summarized from the *Noise Analysis* prepared by RECON. This report is provided as Appendix F of this Initial Study.

a) **Less than Significant Impact.** Existing noise levels at the project site were measured on March 23, 2023, using one Larson-Davis LxT Sound Expert Sound Level Meter. The meter was calibrated before and after the measurements. Noise measurements were taken to obtain typical ambient noise levels at the project site and in the vicinity. The weather was mild and partly cloudy with a slight breeze. The measurement was located near the center of the project site. The meter was set five feet above the ground level. Noise levels were typical of a rural agricultural environment. The main source of noise was agricultural equipment to the west. Noise levels were measured for approximately one hour. The average measured noise level was 50.1 dB(A) L_{eq}.

<u>**Construction**</u>

Construction activities associated with the project would include grading and installation activity for the placement of the BESS storage containers and inverters. Project construction noise would be generated by diesel engine-driven construction equipment. Noise impacts from construction are a function of the noise generated by equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. The loudest construction activities would be those associated with grading. Construction noise levels were calculated assuming the simultaneous use of the following three pieces of construction equipment: a grader, a loader, and a water truck. Water truck noise levels were assumed to be equivalent to a dump truck. Although more construction equipment would be present on-site, not all would be used at the same time. Simultaneous use of this equipment would generate an average hourly noise level of 84.3 dB(A) L_{eq} at 50 feet, which is equivalent to a sound power level of 115.9 dB(A) L_{pw}.

Noise associated with project construction would potentially result in short-term impacts to surrounding properties. Land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east. The nearest sensitive receptors are the residential uses located approximately 500 feet north of the project site, north of the railroad tracks and West Evan Hewes Highway. Construction noise levels were calculated based on the simultaneously use of a grader, loader, and water truck. Noise levels were modeled at a series of 10 receivers located at the adjacent properties and the nearest residential uses. The results are summarized in Table 6.

As shown, construction noise levels are not anticipated to exceed the County's construction noise level limit of 75 dB(A) Leq at the adjacent properties. Construction activities would only occur during the times allowable by the City and County Municipal Codes (7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday). No construction activities that generate impulsive noise levels would be required. Although there are no immediately proximate residences near the project site, the closest existing residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary. Therefore, project construction would not exceed noise level limits established in the County's Land Use Ordinance and would only occur during the daytime hours, and temporary increases in noise levels during construction would be less than significant.

Table 6. Construction Noise Levels

Receiver	Zoning	Construction Noise Level (dBA L_{eq})
1	M-2 (Medium Industrial)	64
2	M-2 (Medium Industrial)	68
3	M-2 (Medium Industrial)	67
4	M-2 (Medium Industrial)	67
5	M-2 (Medium Industrial)	68
6	M-2 (Medium Industrial)	69
7	M-2 (Medium Industrial)	66
8	M-2 (Medium Industrial)	62
9	M-2 (Medium Industrial)	61
10	R-1 (Low Density Residential) R-4 (High Density Residential and Mobile Park/Subdivision)	54

Source: Appendix F of this Initial Study

EEC ORIGINAL PKG

Operation

The County General Plan Noise Element identifies property line noise level limits that apply to noise generation from one property to an adjacent property (excluding construction noise). As stated in the Noise Element, the property line noise level limits imply the existence of a sensitive receptor on the adjacent, or receiving, property. In the absence of a sensitive receptor, an exception or variance to the standards may be appropriate.

County Land Use Ordinances Title 9, Division 7: Noise Abatement and Control, specifies noise level limits. Noise level limits are summarized in Table 7. Noise level limits do not apply to construction equipment.

Table 7. Imperial County Property Line Noise Limits

Zone	Time	One-Hour Average Sound Level [dB(A) L_{eq}]
Residential: All R-1	7:00 a.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
Residential: All R-2, R-3, R-4 and all other residential	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
All Commercial	7:00 a.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	55
Manufacturing, all other industrial, including agricultural and extraction industry	(anytime)	70
General Industrial Zones	(anytime)	75

Source: Appendix F of this Initial Study

The project site and properties to the north, south, east, and west are zoned M-2 (Medium Industrial), and the property south of the Seeley Drain is zoned R-1 (Low Density Residential). It should be noted that the R-1 designated parcel consists mostly of active agricultural land with the single-family residence located approximately 2,500 feet from the project site. Other residentially zoned parcels (R-1 and R-4) are located approximately 500 feet north of the project site, north of the railroad tracks and West Evan Hewes Highway.

The primary noise sources on-site would be the inverters and the BESS containers. Noise levels were modeled at a series of 10 receivers located at the adjacent properties and the nearest residential uses. Future projected noise levels are summarized in Table 8.

As shown in Table 8, operational noise levels would not exceed the County's most restrictive noise level limits. Therefore, project operation would not result in noise levels that exceed City or County standards, and operational noise impacts would be less than significant.

Conclusion

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

Table 8. Operational Noise Levels

Receiver	Zoning	Noise Level Limit Daytime/Nighttime (dBA L_{eq})	Operational Noise Level (dBA L_{eq})
1	M-2 (Medium Industrial)	70/70	50
2	M-2 (Medium Industrial)	70/70	58
3	M-2 (Medium Industrial)	70/70	55
4	M-2 (Medium Industrial)	70/70	52
5	M-2 (Medium Industrial)	70/70	52
6	M-2 (Medium Industrial)	70/70	54
7	M-2 (Medium Industrial)	70/70	49
8	M-2 (Medium Industrial)	70/70	47
9	M-2 (Medium Industrial)	70/70	47
10	R-1 (Low Density Residential) R-4 (High Density Residential and Mobile Park/Subdivision)	50/45 55/50	39

Source: Appendix F of this Initial Study

b) **Less than Significant Impact.** Groundborne vibration could originate from earth movement during the construction phase of the proposed project. However, significant vibration is typically associated with activities such as blasting or the use of pile drivers, neither of which would be required during project construction. The proposed project would be expected to comply with all applicable requirements for long-term operation, as well as with measures to reduce excessive groundborne vibration to ensure that the proposed project would not expose persons or structures to excessive groundborne vibration. Therefore, a less than significant impact has been identified for this issue area.

c) **No Impact.** The project site is not located within 2 miles of a public airport. The nearest airport is the Imperial County Airport located more than 7 miles northeast of the project site. Therefore, implementation of the proposed project would not expose people residing or working in the project area to excessive noise levels and no impact would occur.

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

Impact Analysis

a) **No Impact.** The proposed project would not induce unplanned population growth. The proposed project involves the construction and operation of a BESS facility on a vacant and disturbed 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 proposed BESS facility. 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?	☐	☐	☒	☐
ii. Police Protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒

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 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. Utility-scale BESS requires specialized and reliable equipment to perform firefighting operations to NFPA recommendations, OSHA requirements, and ICFD standards. In order maintain adequate level of service, the Imperial County Fire Department has identified specific conditions of approval that will be incorporated into the CUP for the BESS, including, but not limited to access roads, water supply requirements, automatic fire detection and suppression systems, preparation of a Hazard Mitigation Analysis (HMA), emergency operation plan, emergency evacuation plan and cost recovery. With adherence to the conditions of approval as part of the CUP, the proposed project would not result in a need for fire facility expansion, which in turn, would create a significant impact to the environment, and a less than significant impact is identified.

aii) **Less Than Significant Impact.** Police protection services in the project area is provided by the Imperial County Sheriff's Department. The project site is approximately 10 miles from the Imperial County Sheriff's Office South County Station. 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.

The project applicant will coordinate with the Imperial County Sheriff's Department on conditions of approval as part of the CUP to ensure the proposed project would not result in a significant physical impact to the environmental as a result of police protection services for

EEC ORIGINAL PKG

the project. Conditions of approval identified by the Imperial County Sheriff's Office (ICSO) include the preparation of a detailed safety/security plan and diagram prior to any activity on the site, providing annual training to ICSO employees on safety procedures and protocols in event of an unforeseen emergency, installation of adequate lighting, fencing, and safety measures to prevent or deter criminal activity, and installation of license plate reading cameras at all ingress and egress locations, installation of surveillance cameras at the project site, and appropriate cost reimbursement. With adherence to the conditions of approval as part of the CUP, a less than significant impact would occur.

aiii) **No Impact.** The proposed project does not include the development of any residential land uses that would result in an increase in population or student generation. Construction is estimated to take approximately 5 months. Construction activities are 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 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.

aiv) **No Impact.** Construction is estimated to take approximately 5 months. Construction activities are 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 5 months. Construction activities are 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
Would the project:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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.

EEC ORIGINAL PKG

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?	☐	☐	☒	☐
b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Impact Analysis

The following information is summarized from the *Transportation Analysis* prepared by Linscott, Law & Greenspan (LLG), Engineers. This report is provided as Appendix G of this Initial Study.

a) **Less than Significant Impact.** Interstate 8 provides regional access to the project site and is located approximately one mile north of the project. Adjacent roadways providing local vehicular access to the project site include Drew Road to the west, West Evan Hewes Highway to the north, and Seeley Drain to south. Construction of the project would be temporary, and the traffic volumes generated by construction would be minor. Once the proposed BESS facility is operational, there would be no increase in automobile trips to the area. While it is anticipated that the proposed BESS facility would require periodic maintenance, maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Therefore, the potential for the proposed project to cause an increase in traffic to the existing traffic load and capacity of the street system would be negligible and this is considered a less than significant impact.

The project site is located in the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8. The nearest bus station is at the junction of Evan Hewes Highway and Drew Road, located approximately 0.3 mile west of the project site. According to the Imperial County Transportation Commission (ICTC) Regional Active Transportation Plan, the County has identified 12 potential regional corridor projects based on existing conditions analysis and community engagement, which were then ranked using criteria consistent with state and regional best practices (ICTC 2022). A 7.2-mile regional corridor project between Seeley and the City of El Centro was ranked fifth during the prioritization process. However, the ATP has no determined schedule and is not funded (ICTC 2023). Furthermore, the proposed project would not require any roadway modifications to Drew Road and would not preclude future transit, roadway, bicycle or pedestrian facilities from being constructed. Therefore, the proposed project would result in a less than significant impact related to a conflict with a program plan, ordinance or policy addressing transit, bicycle, and pedestrian facilities

EEC ORIGINAL PKG

b) **Less than Significant Impact.** Imperial County has not yet formally developed guidelines or adopted significance criteria or technical methodologies for VMT analysis. Therefore, LLG utilized the Governor's Office of Planning and Research (OPR) guidelines from the Technical Advisory on Evaluating Transportation Impacts in CEQA, December 2018, to develop technical methodologies for this project. Per OPR guidelines, "vehicle miles traveled" refers to the amount and distance of *automobile* travel attributable to a project. Here the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. VMT does not include trips from heavy-duty trucks. Therefore, the trips generated by the project's truck deliveries are excluded from VMT analysis. LLG determined that the project's employee passenger vehicles are calculated to generate 100 average daily traffic (ADT). Therefore, the employee component of the project can be considered a "small project", assumed to cause a less-than significant impact.

Additionally, construction of the project would be temporary, and the traffic volumes generated by construction would be minor. Given the nature of the project, after construction, there would be a nominal amount of vehicle trips generated by the project. Once the proposed BESS facility is operational, there would be no increase in automobile trips to the area. While it is anticipated that the proposed BESS facility would require periodic maintenance, maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Therefore, the proposed project would result in a less than significant VMT impact.

c) **Less than Significant Impact.** The proposed project does not include any alteration to the existing public road network. The proposed access road immediately off of Drew Road is a private dirt road, and any improvements required to accommodate construction vehicles would be designed to accommodate trucks delivering heavy equipment and ingress and egress for maintenance vehicles for the BESS facility. The proposed access road would not be open to the public and would be maintained as long as the proposed project is being constructed or in use. Once the BESS facility is retired or abandoned, the access road would be returned to pre-project conditions. This impact is considered less than significant.

d) **Less than Significant 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 result in inadequate emergency access and this impact is considered less than significant.

EEC ORIGINAL PKG

XVIII. Tribal Cultural Resources

Environmental Issue Area:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) 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)?	☐	☐	☒	☐
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?	☐	☐	☒	☐

Impact Analysis

a-b) **Less than Significant Impact.** 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.

In accordance with Assembly Bill (AB) 52, the County sent a Notification of Consultation Opportunity pursuant to Public Resources Code Section 21080.3.1(d) to the Campo Band of Mission Indians and the Quechan Indian Tribe on August 27, 2024. The AB 52 30-day review ended on September 26, 2024. No requests for consultation have been received.

Therefore, less than significant impacts would occur.

EEC ORIGINAL PKG

XIX. Utilities and Service Systems

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

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. The project's water use would be limited to the construction phase, and no infrastructure would be required to provide water to the project site. Water will be obtained from IID canals in conformance with IID construction water acquisition requirements. Water will be picked up from the source and delivered to the project site by a water truck which will be capable of carrying approximately 4,000 gallons. The proposed BESS facility would not generate wastewater that would need to be treated by a wastewater treatment facility. Storm water control would be implemented for the project site and access road. Due to the lack of public utilities and services available within the project site, and the lack of need to provide expanded services to accommodate the project, impacts are considered less than significant.

EEC ORIGINAL PKG

b) **Less than Significant Impact.** The project's water use would be limited to grading and dust control during the construction phase. Water will be obtained from IID canals in conformance with IID construction water acquisition requirements. Water will be picked up from the source and delivered to the project site by a water truck which will be capable of carrying approximately 4,000 gallons. Operation of the BESS facility would not require significant amount of water and would be limited to general maintenance activities. 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 Calexico Solid Waste Site (13-AA-0004) located in Calexico. The Calexico Solid Waste Site has approximately 1,561,235 cubic yards of remaining capacity and is estimated to remain in operation through 2179. (CalRecycle 2024). 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
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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 not located within a fire hazard severity zone. The nearest fire hazard severity zone is classified as moderate and located over 20 miles southwest of the project site (California Department of Forestry and Fire Protection 2022). 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.

EEC ORIGINAL PKG

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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact Analysis

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

Biological Resources

As described in Response IV. a) above, nesting birds including raptors covered under the California Fish and Game Code Sections 3503 and 3503.5 have potential to be directly impacted by the project if construction activities (i.e., clearing, grubbing, grading) occur during the general nesting season of February 1 to September 15. Indirect impacts to migratory and nesting birds could also result if they are present in the lands surrounding the project site and project construction produces dust, noise, or other disturbances to this species. Mitigation Measure BIO-1 would avoid take and reduce potential impacts to this species to below a level of significance by requiring pre-construction surveys and preparation of a letter report or mitigation plan in conformance with applicable state and federal law, if nesting birds are detected.

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 and geology and soils. However, implementation of mitigation measures 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 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.

EEC ORIGINAL PKG

References

California Department of Conservation (DOC). 2022. California Important Farmland Finder. Available on-line at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed on July 15, 2024.

——— n.d. California Earthquake Hazards Zone Application. Accessed on August 15, 2024. https://maps.conservation.ca.gov/cgs/EQZApp/app/.

California Department of Forestry and Fire Protection. 2022. SRA FHSZ Rollout Application. Available on-line at: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=fd937aba2b044c3484a642ae03c35677. Accessed on July 15, 2024.

California Department of Resources and Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Summary: Calexico Solid Waste Site (13-AA-0004). Available on-line at: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/591. Accessed don August 15, 2024.

California Department of Transportation. 2018. California State Scenic Highway System Map. Available on-line at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed on July 15, 2024.

County of Imperial. 2016. Imperial County General Plan. Conservation and Open Space Element.

——— 1997. Imperial County General Plan. Seismic and Public Safety Element.

Federal Emergency Management Agency (FEMA). 2024. Flood Insurance Rate Map, Map Number 06025C1700C). Available on-line at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed on July 15, 2024.

Imperial County Transportation Commission (ICTC). 2022. Regional Active Transportation Plan – Final. Available on-line at: https://www.imperialctc.org/assets/documents/transportation-plans-and-studies/ICTC-ATP_Final-Document_2022.02.28_Reduced-Size.pdf. Accessed on August 15, 2024.

——— 2023. ICTC LRTP Projects. Available on-line at: https://www.arcgis.com/apps/dashboards/d2ab54419c30410287e826360ffdc8ee. Accessed on August 15, 2024.

Jennings, C.W. 1967. Geologic map of California: Salton Sea sheet, California Division of Mines and Geology, Geologic Atlas California GAM-13.

United States Department of Agriculture (USDA). n.d. Web Soil Survey. Available on-line at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed on August 15, 2024.

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:

Imperial County Planning and Development Services Department

Jim Minnick, Planning and Development Services Director

Michael Abraham, AICP, Assistant Planning and Development Services Director

Gerardo Quero, Planner II

Rocio Yee, Planner I

HDR

Tim Gnibus, Principal

Emily Barone, Environmental Planner

Sharon Jacobs, Geographic Information Systems Analyst

Trent Lundberg, Geographic Information Systems Analyst

Katherine Turner, Document Production Administrator

Technical Report Preparers

RECON Environmental, Inc.

- Air Quality Analysis
- Biological Resources Report
- Cultural Resources Report
- Greenhouse Gas Analysis
- Noise Analysis

GS Lyon Consultants, Inc.

- Phase I ESA Report

Linscott, Law & Greenspan, Engineers

- Transportation Analysis

EEC ORIGINAL PKG

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.

10/17/24

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.

Applicant Signature

10-17-24

Date

EEC ORIGINAL PKG

This page is intentionally blank.

EEC ORIGINAL PKG

ATTACHMENT #1

COMMENT LETTERS

EEC ORIGINAL PKG

COUNTY EXECUTIVE OFFICE

Miguel Figueroa
County Executive Officer
miguelfigueroa@co.imperial.ca.us
www.co.imperial.ca.us

County Administration Center
940 Main Street, Suite 208
El Centro, CA 92243
Tel: 442-265-1001
Fax: 442-265-1010

RECEIVED

AUG 27 2024

IMPERIAL COUNTY
PLANNING & DEVELOPMENT SERVICES

August 27, 2024

TO: Gerardo Quero, Planning and Development Services Department

FROM: Rosa Lopez, Executive Office

SUBJECT: Request for Comments – Alba Peaker ESS Project / APN 051-420-042-000

The County of Imperial Executive Office is responding to a request for comments: Alba Peaker ESS Project / APN 051-420-042-000. The Executive Office would like to inform the developer of the conditions and responsibilities of the applicant seeking a Conditional Use Permit (CUP). The conditions commence prior to the approval of an initial grading permit and subsequently continue throughout the permitting process. This includes, but not limited to:

- Sales Tax Guarantee. The permittee is required to have a Construction Site Permit reflecting the project site address, allowing all eligible sales tax payments are allocated to the County of Imperial, Jurisdictional Code 13998. The permittee will provide the County of Imperial a copy of the CDTFA account number and sub-permit for its contractor and subcontractors (if any) related to the jobsite. Permittee shall provide in written verification to the County Executive Office that the necessary sales and use tax permits have been obtained, prior to the issuance of any grading permits.
- Construction/Material Budget: The permittee will provide the County Executive Office a construction materials budget: an official construction materials budget or detailed budget outlining the construction and materials cost for the processing facility on permittee letterhead.
- At developers cost, the County Executive Office shall hire a third-party consultant to produce a Fiscal and Economic Impact Analysis & Job and Employment Analysis (FEIA & JEIA) prior to the project being placed on Planning Commission meeting.
- Public Service Agreement. The developer shall enter into a Public Service Agreement with the County of Imperial.

Should there be any concerns and/or questions, do not hesitate to contact me.

IMPERIAL COUNTY SHERIFF'S OFFICE
FRED MIRAMONTES
SHERIFF-CORONER-MARSHAL

Chief Deputy Ryan Kelley
328 Applestill Road
El Centro, Ca. 92243
(442) 265-2003
rkelley@icso.org

RECEIVED
By Imperial County Planning & Development Services at 10:46 am, Sep 09, 2024

September 9, 2024

Imperial County Planning & Development Services
801 Main Street
El Centro, Ca. 92243
(442) 265-1736

Planning & Development Services,

The proposed project site is located within the Imperial County Sheriff's Office jurisdiction. The project is located at 1884 Drew Road, Seeley, California, 92273 (APN: 051-420-042-000). The site is approximately 10 miles from the Imperial County Sheriff's Office and within close proximity of the residential neighborhoods of the township of Seeley, California.

The applicant is proposing to construct the Alba Peaker BESS project through CUP# 23-0025, which consists of developing a 100-megawatt (MW) Battery Energy Storage System (BESS) facility that would connect to the existing Imperial Irrigation District 92-Kilovolt (kV) "LW".

The Imperial County Sheriff's Office provides services to similar projects where calls for service can vary from burglaries, vandalisms, thefts and trespassing. Calls can result in arrests of offenders for felony property crimes. Some investigations require extensive follow up from our criminal investigations division and our scientific investigations unit. The Imperial County Sheriff's Office is committed to facilities operating in our area of responsibility and will deploy every resource available to assist in the apprehension and prosecution of those responsible for these crimes.

The Imperial County Sheriff's Office requests that the below conditions be incorporated onto the Conditional Use Permit #23-0025. This request is in consideration of the potential hazards to the Imperial County Sheriff's Office employees associated with responding to calls for service originating at this facility:

1. The Imperial County Sheriff's Office request that a detailed security/safety plan and diagram be included and approved by the county prior to any activity on the premises.
2. Provide annual training to ICSO employees on safety procedures and emergency response protocols to ensure the safety of our employees in response to an event

or unforeseen emergency at an energy storage facility. Procedures shall be detailed in the safety/security plan for the project site.

3. Install adequate lighting, fencing and safety measures to prevent or deter criminal activity.
4. Install license plate reading cameras at all ingress and regress locations at the project site and grant access to the Imperial County Sheriff's Office to review the data collected. It is requested that these cameras be included in the security plan.
5. Install surveillance cameras at the project site to allow for 24/7, three hundred and sixty degree remote viewing capabilities and recording of activity on the lot. It is requested that the surveillance cameras be included in the security plan.
6. Provide cost reimbursement for direct police services for response to critical incidents that require prolonged use of resources.

The Sheriff's Office feels that this project would create a significant impact and there are safety concerns for Sheriff's Office personnel and members of our community if a natural or manmade disaster were to occur that resulted in damage or destruction to the facility.

As first responders to emergency situations, the Sheriff's Office would deploy our resources from the El Centro Station in the event of a threat to public safety. If there is an increase for calls for service as a result of this project and the Sheriff's Office maintains its current personnel allocations, funding and equipment, service levels may drop below acceptable levels or industry standards for the residents of the County and the Township of Seeley.

The Imperial County Sheriff's Office is available to discuss our concerns with the advancement of CUP #23-0025. If you have any questions, please contact the Imperial County Sheriff's Office at (442)265-2002.

COUNTY OF IMPERIAL

DEPARTMENT OF PUBLIC WORKS

155 S. 11th Street
El Centro, CA
92243

Tel: (760) 482-4462
Fax: (760) 352-1272

Public Works works for the Public

ICDPW

September 11, 2024

Mr. Jim Minnick, Director
Planning & Development Services Department
801 Main Street
El Centro, CA 92243

RECEIVED
By Imperial County Planning & Development Services at 7:45 am, Sep 12, 2024

Attention: Gerardo Quero, Planner II

SUBJECT: CUP 23-0025 Apex Energy Solutions, LLC
Located on 1884 Drew Rd, Seeley, CA
APN 051-420-042

Dear Mr. Minnick:

This letter is in response to your submittal received by this department on August 27, 2024, for the above-mentioned project. The applicant is proposing the Alba Peaker BESS Project which consists of the development for a 100-Megawatt Battery Energy Storage System facility that would connect to the existing Imperial Irrigation District's 92-kilovolt "LW".

Department staff has reviewed the package information, and the following comments shall be Conditions of Approval:

1. The Applicant will need to provide evidence of easements for legal access.
2. At the time of development, if required, by Section 8762(2) of the Professional Land Surveyors' Act, a record of survey shall be filed with the County Recorded of Imperial County.
3. The Applicant shall furnish a Drainage and Grading Plan/Study to provide for property grading and drainage control, which shall also include prevention of sedimentation of damage to off-site properties. The Study/Plan shall be submitted to the Department of Public Works for review and approval. The applicant shall implement the approved plan. Employment of the appropriate Best Management Practices (BMP's) should be included (Per Imperial County Code of Ordinances, Chapter 12.10.020 B).
4. The Applicant shall repair any damage caused to County Roads during construction and maintain such roads in safe conditions as determined by the Imperial County Road Commissioner. Said road repairs shall be completed under an encroachment permit from this department.
5. Prior to the issuance of grading and building permits, a stabilized construction entrance shall be installed under an encroachment permit from this department.
6. Access to sites shall be completed from public roads. The Applicant shall obtain written authorization from any private owners or other agencies for the use of any non-public roads to access sites. A copy of such written approval shall be submitted to this Department prior to the approval of grading plans.

    a. Per Figure 6. Proposed Site Access: Proposed access seems to encroach onto San Diego & Arizona Railroad property as well as private land. Access easements shall be obtained prior to the approval of grading plans.

7. Any unimproved access roads/routes between public roads and access gates shall be improved for all-weather access. Such all-weather improvements shall be completed as recommended by a Geotechnical Engineer licensed to practice in the State of California.
8. Per the information provided, access to project site during and after construction is expected to be completed through private unpaved roads or private property.
    a. The Applicant shall mitigate generation of dust caused by construction traffic as per Rule 805 – Paved and Unpaved Roads of the Imperial County Air Pollution Control District.
9. Per Section 12.10.020 - Street Improvement Requirements of Imperial County Ordinance: Street improvements shall be required:
    a. All access points to project site shall be constructed in accordance with Imperial County Dwg. No. 410B – Commercial Driveway to Rural Road
10. Any activity and/or work within Imperial County right-of-way shall be completed under a permit issued by this Department (encroachment permit) as per Chapter 12.12 - EXCAVATIONS ON OR NEAR A PUBLIC ROAD of the Imperial County Ordinance.
    a. Any activity and/or work may include, but not be limited to, the installation of stabilized construction entrances, primary access driveways, secondary access driveways, site fence installation, underground/overhead electrical crossings, road repairs, road dust mitigation practices and/or improvements, temporary traffic control, or any other road improvements.
11. The Applicant shall coordinate with IID for any work within their Right-of-Way or affecting their facilities. (Gen-tie)
12. The Applicant shall coordinate with San Diego & Arizona Railroad for any work within their Right-of-Way or affecting their facilities.
13. Any permanent structures shall be located outside of the County's ultimate right of way.
14. The Applicant shall prepare and submit a haul route study identifying a construction route through public roads. The haul route study shall evaluate any impacts due to construction traffic to County roads. Said study shall be submitted to the Department of Public Works for review and approval. The haul route study shall include pictures and/or other documents to verify the existing conditions of the impacted County roads before construction begins. The haul route study shall also include recommended mitigation improvements to impacted County roads along with any fair share costs for such improvements. Construction engineering cost estimates shall be included with the study.
15. The Applicant shall enter into a Roadway Maintenance Agreement with the County of Imperial prior to issuance of a Certificate of Occupancy. The developer shall provide financial security to maintain the roads on the approved haul route study during construction.

INFORMATIVE

- All solid and hazardous waste shall be disposed of in approved solid waste disposal sites in accordance with existing County, State and Federal regulations (Per Imperial County Code of Ordinances, Chapter 8.72).
- The project may require a National Pollutant Discharge Elimination System (NPDES) permit and Notice of Intent (NOI) from the Regional Water Quality Control Board (RWQCB) prior county approval of onsite grading plan (40 CFR 122.28).
- A Transportation Permit may be required from road agency(s) having jurisdiction over the haul route(s) for any hauls of heavy equipment and large vehicles which impose greater than legal loads and/or dimensions on riding surfaces, including bridges. (Per Imperial County Code of Ordinances, Chapter 12.10.020 B).
- As this project proceeds through the planning and approval process, additional comments and/or requirements may apply as more information is received.

Should you have any questions, please do not hesitate to contact this office. Thank you for the opportunity to review and comment on this project.

Respectfully,

John A. Gay, PE
Director of Public Works

By: Atondo V.

Veronica Atondo, PE, PLS
Deputy Director of Public Works - Engineering

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

RECEIVED
By Imperial County Planning & Development Services at 2:18 pm, Sep 17, 2024

September 17, 2024

RE: Apex Energy Solutions, LLC, Alba Peaker BESS
1884 Drew Road, Seeley CA 92273, APN: 051-420-042
CUP23-0025, IS23-0030

Imperial County Fire Department Fire Prevention Bureau would like to thank you for the opportunity to review and comment on Apex Energy Solutions, LLC, Alba Peaker (BESS). CUP#23-0025, IS#23-0030.

The project description is developing and operating a one hundred (100) megawatt (MW) battery storage project. This project is located within the Seeley Urban Area Plan at 1884 Drew Road, Seeley CA 92273, APN: 051-420-042.

Energy storage facilities create extreme hazards for firefighters and emergency responders with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, and chemical burns. Due to limited resources, the hazards listed can create potential significant impacts for fire department personnel to safely perform firefighting operations and hazardous material response to a utility-scale energy storage facility. The remote location of the project will result in longer response times. These long response times may result in incidents that are more difficult to stabilize and require additional resources to manage safely. Utility-scale energy storage requires specialized and reliable equipment to perform firefighting operations safely and effectively to NFPA recommendations, OSHA requirements, and ICFD standards.

Standards and requirements for energy storage system includes but not limited to:
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 Medial Operations, and Special Operations to the Public by Career Fire Departments.

OSHA:

29 CFR 1910.134(g)(4)

EEC ORIGINAL PKG

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

CFC:

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

Fire Department requirements are the following:

Battery Energy Storage Systems

- Approved all-weather access roads for fire protection vehicles shall be provided throughout the project, conforming with the California Fire Code Chapter 5, section 503. Access roadways shall be all-weather surface (suitable for use by fire apparatus) right-of-way not less than 20 feet in width.
- Additional access shall be provided to the project site in accordance with the California Fire Code Chapter 5, section 503. Minium two points of entry shall be provided into the project site.
- KNOX Box and/or Locks will be required for all access gates as determined by Imperial County Fire Department.
- BESS site shall be clear of all vegetation.
- An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code Shall be installed and maintained. (Minimum fire flow of 1500 GPM for 2 hours) Private fire service mains and appurtenance shall be installed in accordance with NFPA 20, 22, 24
- An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.
- An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code Chapter 12 and NFPA 855. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.
- Signage shall be provided in accordance California Fire Code Chapter 12
- Compliance with all required sections of the fire code.
- Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.
- Hazard Mitigation Analysis (HMA), Fire Risk Analysis, fire suppression and deflagration protection analysis submittals shall be from a CA licensed fire protection engineer approved by Imperial County Fire Department per CFC [A]104.7.2. Submittals shall have signature and seal.

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

- Owners and operators of ESS must develop and Emergency Operation Plan in conjunction with local fire service personnel, the AHJ, and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology. Lithium-ion battery ESS's must incorporate adequate explosion prevention protection in accordance with NFPA 855 and/or California Fire Code Chapter 12.
- An emergency response/action plan shall be prepared and approved by the Imperial County Fire/OES Department.
- A pre-incident plan shall be developed and approved by the Imperial County Fire/OES Department in a format and using a platform determined by ICFD.
- A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
- All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan

Emergency Evacuation Plan

- Imperial County Fire Department is requiring mitigation analysis of toxic smoke and hazards from BESS fires be conducted regarding impacts on the surrounding community. Mitigation analysis shall be prepared to address toxic smoke, explosion blast and other hazards related to BESS that will affect the surrounding residential and commercial zoning. This mitigation analysis should include public evacuation plans and/or shelter in place for the surrounding community. The applicant shall provide cost reimbursement for evacuations of the public due to hazards related to the project.

Cost Recovery

- The applicant shall provide cost reimbursement for direct fire protection services. Service rate will be consistent with Imperial County Fire Department adopted fee schedule. Cost reimbursement will be from time of call to the conclusion of the incident as defined by the fire department.

Again, thank you for the opportunity to comment. Imperial County Fire Department reserves the right to comment and request additional requirements pertaining to this project regarding fire and life safety measures, California building and fire code, and National Fire Protection Association standards at a later time as we see necessary.

If you have any questions, please contact the Imperial County Fire Prevention Bureau at

ADMINISTRATION / TRAINING
1078 Dogwood Road
Heber, CA 92249

Administration
Phone: (442) 265-6000
Fax: (760) 482-2427

Training
Phone: (442) 265-6011

IMPERIAL COUNTY
CRASH RESCUE
FIRE

OPERATIONS/PREVENTION
2514 La Brucherie Road
Imperial, CA 92251

Operations
Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention
Phone: (442) 265-3020

442-265-3020 or 442-265-3021.

Sincerely

Andrew Loper
Lieutenant/Fire Prevention Specialist
Imperial County Fire Department
Fire Prevention Bureau

CC: David Lantzer Fire Chief
Imperial County Fire Department

150 SOUTH NINTH STREET
EL CENTRO, CA 92243-2850

TELEPHONE: (442) 265-1800
FAX: (442) 265-1799

IMPERIAL COUNTY CALIFORNIA

AIR POLLUTION CONTROL DISTRICT

RECEIVED
By Imperial County Planning & Development Services at 2:59 pm, Sep 18, 2024

September 18, 2024

Jim Minnick
Planning & Development Services Director
801 Main Street
El Centro, CA 92243

SUBJECT: Conditional Use Permit 23-0025 Alba Peaker BESS Project – Apex Energy Solutions

Dear Mr. Minnick:

The Imperial County Air Pollution Control District (Air District) appreciates the opportunity to review and comment on the application for Conditional Use Permit (CUP) 23-0025 (Project). The project proposes the construction and operation of a 100-megawatt (MW) a Battery Energy Storage System (BESS) that would connect to the existing Imperial Irrigation District's 95-Kilovolt "LW". The BESS facility would include battery containers and storage sites, a control room, an on-site water storage pond/tank for fire suppressions purposes, and associated facilities surrounded by fencing. The Project is located at 1884 Drew Rd., Seeley also identified as Assessor's Parcel Number 051-420-042

Air District staff reviews all Air Quality Analyses (AQA) to ensure consistency with the California Environmental Quality Act (CEQA), the Air District's CEQA Handbook (Handbook), Air District rules & regulations, and enforceability. During the review of the AQA the Air District was able to satisfactorily recreate the CalEEMod Analysis and found the modelling to be consistent with Air District guidance.

The Air Quality section of the Initial Study, also, identifies in the conclusion "ICAPCD Conditions of Approval" and lists:

Construction Conditions of Approval:

A. Submit a construction equipment list by Make, Model, Horsepower and actual usage to the Air District on a monthly basis to determine the level of NOx emissions. Should NOx emissions exceed the construction NOx emissions then the applicant will need to abide by Policy 5 of the ICAPCD's CEQA Air Quality Handbook.

B. An Enhanced Dust Control Plan must be submitted for approval by the ICAPCD to assure that fugitive emissions do not cross property lines.

Operational Conditions of Approval:

A. Should the need for back-up power become necessary, the project will submit an Authority to Construct (ATC) Permit to ICAPCD.

B. The project will include a Health Risk Assessment as part of the ATC Permit submittal.

C. A buffer should be established to keep emergency fugitive emissions from impacting the surrounding community.

The Air District finds the above conditions are consistent with measures for impacts from this type of project to remain less than significant and agrees with the addition of the conditions to the CUP.

Given the AQA and supporting modeling was found consistent with the Air District guidance and the Handbook, in conjunction with the inclusion of the above conditions to the CUP, the Air District can concur with the less than significant impact determination of the AQA.

The Air District also requests a copy of the draft CUP prior to recording for review.

For your convenience, the Air District's rules and regulations can be accessed online at https://apcd.imperialcounty.org/rules-and-regulations. Should you have any questions or concerns please feel free to contact the Air District for assistance at (442) 265-1800.

Respectfully,

Ismael Garcia
Environmental Coordinator II

Reviewed by
Monica N Soucier
APC Division Manager

EEC ORIGINAL PKG

IID
A century of service.
www.iid.com
Since 1911

September 25, 2024

Mr. Gerardo Quero
Planner II
Planning & Development Services Department
County of Imperial
801 Main Street
El Centro, CA 92243

SUBJECT: Alba Peaker BESS Project; CUP #23-0025

Dear Mr. Quero:

On September 20, 2024, the Imperial Irrigation District received from the City of Coachella Development Services Department, a request for agency comments on the Alba Peaker BESS Project; Conditional Use Permit No. 23-0025. The applicant, Apex Energy Solutions, LLC ; proposes to develop a 100MW battery energy storage system facility and plans on connecting to the IID 92kV LW-Line. The project site is located at 1884 Drew Road, Seeley, CA (APN 051-420-042-000).

IID has reviewed the project information has the following comments:

1. For distribution-rated electrical service, the applicant should be advised to contact Ignacio Romo, IID project development planner, at 760-482-3426 or e-mail Mr. Romo at IGRomo@IID.com to initiate the customer service application process. In addition to submitting a formal application (available at the IID website http://www.iid.com/home/showdocument?id=12923), the applicant will be required to submit an AutoCAD file of site plan, approved electrical plans, electrical panel size and panel location, operating voltage, electrical loads, project schedule, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to the project

2. Distribution-rated electrical capacity is limited in the project area. A circuit study may be required. Any system improvements or mitigation identified in the circuit study to enable the provision of electrical service to the project shall be the financial responsibility of the applicant.

3. Applicant shall provide a surveyed legal description and an associated exhibit certified by a licensed surveyor for all rights of way deemed by IID as necessary

to accommodate the project electrical infrastructure. Rights-of-Way and easements shall be in a form acceptable to and at no cost to IID for installation, operation, and maintenance of all electrical facilities.

4. The studies to assess the project's interconnection impacts to the IID electrical transmission system have yet to be completed. Consequently, the project description does not currently capture the potential impacts to IID transmission facilities. The interconnect to the 92kV LW line will most likely require a 92kV switching station looping in and out the line to reliably interconnect the project but that is the minimum requirement.

5. IID water facilities that will be impacted include Elder Lateral 13 and Seeley Drain. IID's canal or drain banks may not be used to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (Irrigation, Drainage, Power, etc.) needs.

6. Considering that the project may impact IID drains with site runoff flows and discharge from proposed storm water detention facilities, a comprehensive IID hydraulic drain system analysis will be required to determine impacts and mitigation if the project discharges into IID's drain system. IID's hydraulic drainage system analysis includes an associated drain impact fee.

7. To ensure there are no impacts to IID water facilities, the project's design plans (including grading, drainage and fencing plans) should be submitted to the IID Water Engineering Section prior to final project design. IID Water Engineering can be contacted at (760) 339-9265 for further information.

8. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains, and receive drainage service form IID. Surface-water drainpipe connections are to be modified in accordance with IID Water Department Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction as well as an CRWQCB-issued industrial storm water permit for the operation of the proposed facility. The project's Storm Water Pollution Prevention Plan and storm-water permits from CRWQCB are to be submitted to IID.

9. Pursuant to IID Rules And Regulations Governing the Distribution and Use Of Water, Regulation 21, new water service installations will not be allowed within any areas that have a reasonable access to potable water supplies from a private or municipal water system. Based on records available, the Seeley County Water District owns and operates a water distribution pipeline immediately adjacent to the subject property. Refer to small parcel service restrictions beginning on page 31 of the IID Rules and Regulations (available for download at the district website: Water Rules and Regulations (iid.com)).

10. Regulation 21 was implemented to support IID's Safe Drinking Water Act commitments outlined in its 1998 Compliance Agreement with the California Department of Health Services (now the State Water Resources Control Board's Department of Drinking Water). In this Agreement, IID committed to long-term efforts to reduce, where feasible, service connections where untreated canal water is piped into rural residences in Imperial County. DHS's May 16, 2000 determination that IID is "not a public water system," and a more recent November 5, 2018 audit confirming IID remains in compliance with its SDWA commitments, is of critical importance to the district. The state DDW maintains oversight of IID's SDWA compliance monitoring and overall efforts to improve rural residential access to safe drinking water supplies, and IID values its collaborative working relationship with both the state and the County to work towards identifying potential solutions to improve rural domestic water use access within its water service area.

11. On a case by case basis, construction water may be provided to a project site with the written authorization of the Seeley County Water District.

12. The applicant must submit the estimated quantity of canal water per year they will consume. If it is under 1 AFY, a water supply agreement is not required. A new service delivery will be required for canal water, if needed. If there is surface drainage to IID drain, encroachment permits needed.

13. Public utility easements over all private public roads and additional ten (10) feet in width on both side of the private and public roads shall be dedicated to IID for the construction, operation, and maintenance of its electrical infrastructure.

14. The applicant will be required to provide and bear all costs associated any relocation and/or realignment of IID infrastructure deemed necessary to accommodate the project. Any street or road improvements imposed by the local governing authority shall also be at the project proponent cost.

15. The applicant will be required to provide rights of ways and easements for any proposed power line extensions and/or any other infrastructure needed to serve the project as well as the necessary access to allow for continued operation and maintenance of any IID facilities located on adjoining properties where no public access exists.

16. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions

for its completion are available at https://www.iid.com/about-iid/department-directory/real-estate. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

17. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities.

18. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and/or distribution lines, ancillary facilities associated with the conveyance of energy service; the acquisition and dedication of real property, rights of way and/or easements for the siting and construction of electrical utility substations, electrical transmission and/or distribution lines and ancillary facilities associated with the conveyance of energy service, etc.) need to be included as part of the project's California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully mitigated. **Any mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent.**

19. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies. In general, if an activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, including those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or

indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure must be included in the project description. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App. 4th 713.

20. When a project goes through the CEQA compliance process, it is important to bear in mind that to address the project impacts to the electrical utility (i.e., the IID electrical grid), considered under the environmental factor "Utilities and Services" of the Environmental Checklist/Initial Study, and determine if the project would require or result in the relocation or construction of new or expanded electric power facilities, the construction or relocation of which could cause significant environmental effects; a circuit study/distribution impact study, facility study, and/or system impact study must be performed.

Should you have any questions, please do not hesitate to contact me at (760) 482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

Respectfully,

Donald Vargas
Compliance Administrator II

Jamie Asbury – General Manager
Mike Pacheco – Manager, Water Dept.
Matthew H Smelser – Manager, Power Dept.
Paul Rodriguez – Deputy Mgr., Power Dept.
Geoff Holbrook - General Counsel
Michael P. Kemp – Superintendent General, Fleet & Compliance Services
Laura Cervantes. – Supervisor, Real Estate
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

EEC ORIGINAL PKG

ATTACHMENT #2

CUP#23-0025 APPLICATION PACKAGE

EEC ORIGINAL PKG

CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES – Please type or print -

1. PROPERTY OWNER'S NAME Apex Energy Solutions, LLC	EMAIL ADDRESS c/o jurgheuberger@gmail.com
2. MAILING ADDRESS (Street / P O Box, City, State) 750 W. Main St., El Centro, Ca.	ZIP CODE 92243 / PHONE NUMBER c/o 760-996-0313
3. APPLICANT'S NAME Alba Peaker	EMAIL ADDRESS -------------------
4. MAILING ADDRESS (Street / P O Box, City, State) same as owner	ZIP CODE ------------ / PHONE NUMBER -----------
4. ENGINEER'S NAME N A / CA. LICENSE NO.	EMAIL ADDRESS ---------------------
5. MAILING ADDRESS (Street / P O Box, City, State) -------------------	ZIP CODE ------------ / PHONE NUMBER ----------

6. ASSESSOR'S PARCEL NO. 051-420-042	SIZE OF PROPERTY (in acres or square foot) approx 7.1 ac.	ZONING (existing)

7. PROPERTY (site) ADDRESS
pending assignment by ICPDS

8. GENERAL LOCATION (i.e. city, town, cross street)
7.5 miles west of el centro and about 1 mile north of I-8

9. LEGAL DESCRIPTION see attached PTR for detailed legal

PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail) the project is the development of a 100 MW BESS (battery storage system) using the Tesla system or similar and connect to the existing 92 KV line

11. DESCRIBE CURRENT USE OF PROPERTY vacant

12. DESCRIBE PROPOSED SEWER SYSTEM None

13. DESCRIBE PROPOSED WATER SYSTEM None

14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM on site water storage meeting county standards

15. IS PROPOSED USE A BUSINESS? ☒ Yes ☐ No — IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Ziad Alaywan — ~~Dec~~ Aug 8, ~~2022~~ 2023
Print Name — Date

Ziad alaywan
Signature

Jurg Heuberger for applicant
Print Name — Date

Signature

REQUIRED SUPPORT DOCUMENTS

A. SITE PLAN
B. FEE
C. OTHER
D. OTHER

APPLICATION RECEIVED BY:		DATE	
APPLICATION DEEMED COMPLETE BY:		DATE	
APPLICATION REJECTED BY:		DATE	
TENTATIVE HEARING BY:		DATE	
FINAL ACTION: ☐ APPROVED ☐ DENIED		DATE	

REVIEW / APPROVAL BY OTHER DEPT'S required.
☐ P. W.
☐ E. H. S.
☐ A. P. C. D.
☐ O. E. S.
☐
☐

CUP # 23-0025

EEC ORIGINAL PKG

PROJECT DESCRIPTION:

Alba Peaker Plant

Location:	south of evan hewes hwy and RR tracks and east of Drew Rd, in Seeley, CA
APN:	051-420-042
Battery Type:	Tesla Power Packs or equal
Capacity:	100 MW BESS connection to IID 92 KV line
Owner:	Apex Energy Solutions, LLC
Project Name:	ALBA Peaker, LLC

PROJECT DESCRIPITION:

Apex Energy Solutions LLC is proposing to develop a 100 MW Battery (BESS) energy storage facility just south of the townsite of Seeley. The system will connect to the IID 92 KV line which interconnection will allow the BESS to purchase and sell power. See attached regional location map that shows the Gentie to IID.

The BESS system will be located on the entire 7 +/- acre site, and interconnected to the IID line located on the north side of the RR tracks and Evan Hewes HWY. The site will have access from N. Drew Rd.

There will be a water storage pond or tank to provide a minimum of 20,000 gallons of water for fire fighting use. Additional storage may be provided if so, required by the County Fire Dept. However, given these will be Tesla or equal systems and the design as previously provided to County Fire, there is little need for water.

The entire site will be fenced and have video surveillance security. The project once built will not have on-site employees except for routine maintenance or repairs.

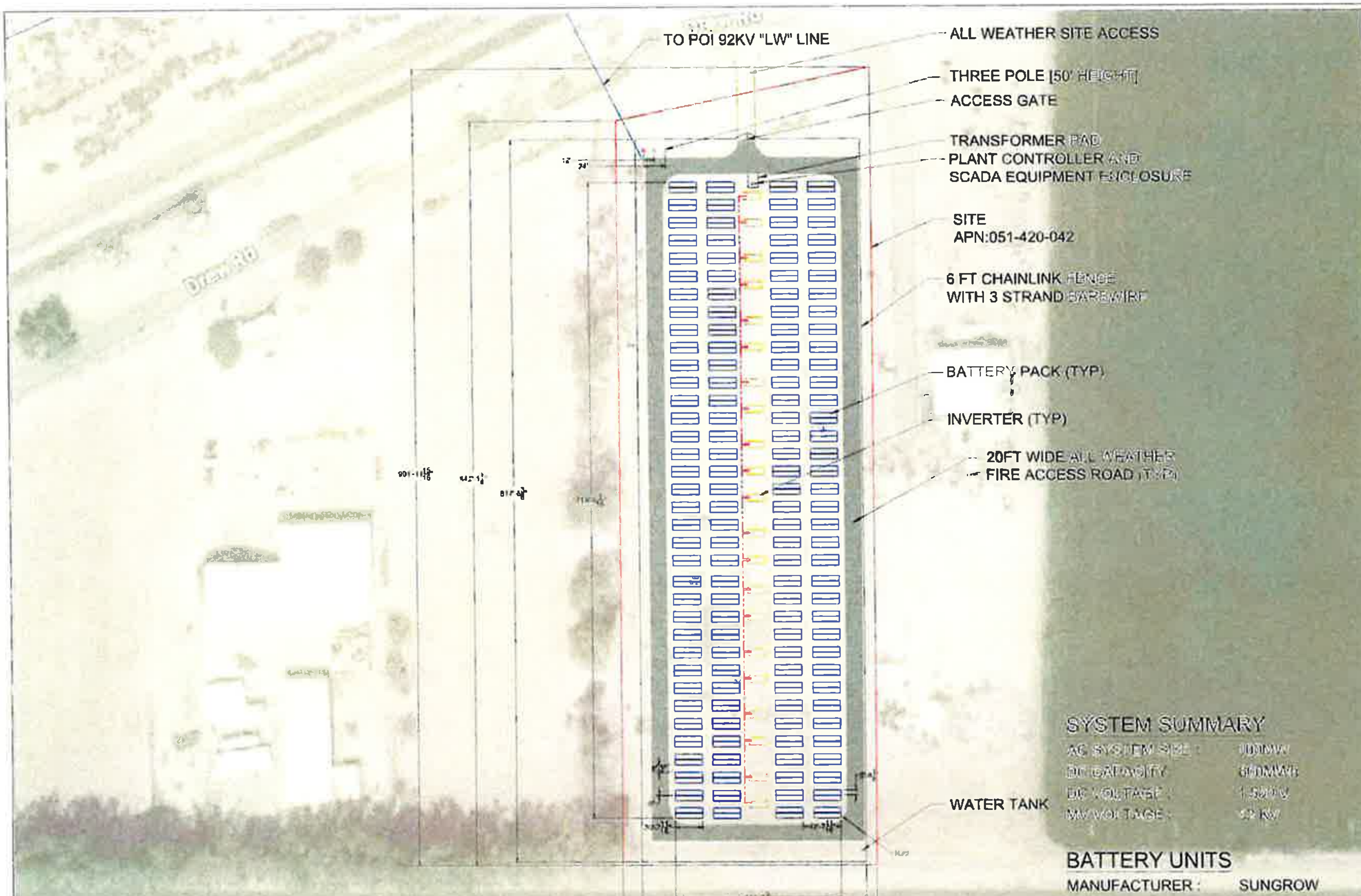
There will be approximately 144 battery packs and approximately 20 inverters. The site will be prepared with a class II base or equal material to minimize and control dust as well as unwanted vegetation.

OPERATION:

The system will be operated by purchasing power from the grid when there is a surplus or the costs are low and then sell the power to the grid when the demand requires it.

The system is entirely remotely operated and monitored with extensive video and intrusion surveillance.

Due to the use of the TESLA or equal battery system, fire protection in the event of a fire will be to simply protect the surrounding areas but not to extinguish the battery fires as that would only prolong the fire and smoke. TESLA system are designed to essentially "melt" within their containers and therefore attempting to extinguish a fire would only make the problem worse.



SYSTEM SUMMARY

BATTERY UNITS

MANUFACTURER :	SUNGROW
MODEL:	ST2752UX-US
TYPE :	LI-ION / 280 AH
CAPACITY :	2752 KWH
UNITS PER CONTAINER:	48
TOTAL CONTAINERS:	290

Indio Summary

DC system	NA	Pitch	NA	PV inverters	NA
AC system	100 MW	Module	NA	# of PV inverters	NA
DC Storage size	800 MW/h	# of modules	NA	BATT inverters	Sungrow SC 5000UD-MV-US
Array Type	NA	String size	30	# of Batt inverters	21
Utility	IID	# of strings	NA		

ALBA PEAKER

EEC ORIGINAL PKG

CONFIDENTIAL DOCUMENTS

NOT FOR CONSTRUCTION

ZGLOBAL

604 SUTTER ST, STE 250
FOLSOM, CA 95630
Phone : 916 985.9461
Fax: 916 985.9467

1

ALBA PEAKER-SEELEY, CA

Apex Energy SOLUTIONS

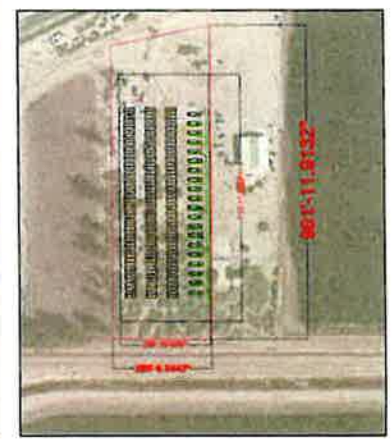
Proposed Gen-Tie Lines

- Gen-Tie Route 1
- Gen-Tie Route 2
- Existing 92 KV "LW" line
- Project Area

GEN-TIE ROUTE 1: 3519.7 FT

GEN-TIE ROUTE 2: 3659.2 FT

EEC ORIGINAL PKG



RECON

An Employee-Owned Company

June 6, 2023

Mr. Ramon Gonzalez
Senior Project Coordinator
Z Global
750 W. Main Street
El Centro, CA 92243

Reference: Air Quality Analysis for the Alba Peaker BESS Project, Seeley, California (RECON Number 10324)

Dear Mr. Gonzalez:

The purpose of this report is to assess potential short-term local and regional air quality impacts resulting from development of the Alba Peaker Battery Energy Storage Site (BESS) Project (project). The analysis of impacts is based on state and federal Ambient Air Quality Standards (AAQS) and assessed in accordance with the regional guidelines, policies, and standards and the Imperial County Air Pollution Control District (ICAPCD).

1.0 Project Description

The project site is located within the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8 (Figure 1). The project site is comprised of Assessor Parcel Number 051-420-042, totaling approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 2). Land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east.

The project would construct and operate a 100-megawatt BESS facility that would connect to an existing 92-kilovolt gen-tie line (Figure 3). The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

2.0 Environmental Setting

2.1 Regulatory Setting

2.1.1 Federal Regulations

AAQS represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 (42 U.S. Code [U.S.C.] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 U.S.C. 7409], the U.S. Environmental Protection Agency (U.S. EPA) developed primary and secondary National AAQS (NAAQS).

Six pollutants of primary concern were designated: ozone, carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), lead (Pb), particulate matter with a diameter of 10 microns and less (PM_{10}), and particulate matter with a diameter of 2.5 microns and less ($PM_{2.5}$). The primary NAAQS "in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health . . . ." and the secondary standards ". . . protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 U.S.C. 7409(b)(2)]. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 1 (California Air Resources Board [CARB] 2016).

If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as non-attainment area for that pollutant. The project is located within the Salton Sea Air Basin (SSAB). The County is classified as a federal moderate non-attainment area for the 2008 8-hour ozone standards, marginal non-attainment area for the 2015 8-hour ozone standards, and a partial moderate non-attainment area for the $PM_{2.5}$ standards.

2.1.2 State Regulations

Criteria Pollutants

The CARB has developed the California AAQS (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Similar to the federal CAA, the state classifies either "attainment" or "non-attainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The County is a non-attainment area for the state ozone standards and the state PM_{10} standard. The California CAA, which became effective on January 1, 1989, requires all areas of the state to attain the CAAQS at the earliest practicable date. The California CAA has specific air quality management strategies that must be adopted by the agency responsible for the non-attainment area. In the case of the SSAB, the responsible agency is the ICAPCD.

Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. Diesel particulate matter (DPM) emissions have been identified as TACs. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The California Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air.

The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone[8]	1 Hour	0.09 ppm ($180\ \mu g/m^3$)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm ($137\ \mu g/m^3$)		0.070 ppm ($137\ \mu g/m^3$)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	$50\ \mu g/m^3$	Gravimetric or Beta Attenuation	$150\ \mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	$20\ \mu g/m^3$		–		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	No Separate State Standard		$35\ \mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	$12\ \mu g/m^3$	Gravimetric or Beta Attenuation	$12\ \mu g/m^3$	$15\ \mu g/m^3$	
Carbon Monoxide (CO)	1 Hour	20 ppm ($23\ mg/m^3$)	Non-dispersive Infrared Photometry	35 ppm ($40\ mg/m^3$)	–	Non-dispersive Infrared Photometry
	8 Hour	9.0 ppm ($10\ mg/m^3$)		9 ppm ($10\ mg/m^3$)	–	
	8 Hour (Lake Tahoe)	6 ppm ($7\ mg/m^3$)		–	–	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm ($339\ \mu g/m^3$)	Gas Phase Chemi-luminescence	100 ppb ($188\ \mu g/m^3$)	–	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm ($57\ \mu g/m^3$)		0.053 ppm ($100\ \mu g/m^3$)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm ($655\ \mu g/m^3$)	Ultraviolet Fluorescence	75 ppb ($196\ \mu g/m^3$)	–	Ultraviolet Fluorescence; Spectro-photometry (Pararosaniline Method)
	3 Hour	–		–	0.5 ppm ($1{,}300\ \mu g/m^3$)	
	24 Hour	0.04 ppm ($105\ \mu g/m^3$)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead[12,13]	30 Day Average	$1.5\ \mu g/m^3$	Atomic Absorption	–	–	High Volume Sampler and Atomic Absorption
	Calendar Quarter	–		$1.5\ \mu g/m^3$ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	–		$0.15\ \mu g/m^3$		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	$25\ \mu g/m^3$	Ion Chroma-tography			
Hydrogen Sulfide	1 Hour	0.03 ppm ($42\ \mu g/m^3$)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm ($26\ \mu g/m^3$)	Gas Chroma-tography			

Table 1
Ambient Air Quality Standards

NOTES:
ppm = parts per million; ppb = parts per billion; μg/m³ = micrograms per cubic meter; – = not applicable.

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Any equivalent measurement method which can be shown to the satisfaction of the Air Resources Board to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standards of 15 μg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 μg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national standards are in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: CARB 2016.

EEC ORIGINAL PKG

The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the ICAPCD Regulation X. Of particular concern statewide are DPM emissions. DPM was established as a TAC in 1998 and is estimated to represent a majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

Following the identification of DPM as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to DPM by 85 percent by 2020.

In April 2005, CARB published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). Sensitive land uses include but are not limited to, schools, hospitals, residences, resident care facilities, and day-care centers. The handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of DPM and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to DPM and other TACs will continue to decline.

State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as air quality management plans, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The ICAPCD is the air district responsible for the project area. Applicable ICAPCD SIPs include:

- Imperial County 2009 State Implementation Plan for Particulate Matter Less than 10 Microns in Aerodynamic Diameter;
- Imperial County 2013 State Implementation Plan for the 2006 24-Hour $PM_{2.5}$ Moderate Non-attainment Area; and
- Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard.

California Environmental Quality Act

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires discussion of any inconsistencies between the project and applicable general plans and regional plans, including the applicable air quality attainment or maintenance plan (or SIP).

2.1.3 Local Regulations

CEQA Air Quality Handbook

The ICAPCD adopted its *CEQA Air Quality Handbook: Guidelines for the Implementation of the California Environmental Quality Act of 1970* in 2007 and amended the handbook in December 2017 (ICAPCD 2017a). The ICAPCD CEQA Air Quality Handbook provides guidance on how to determine the significance of impacts, including air pollutant emissions, related to the development of residential, commercial, and industrial projects. Where impacts are determined to be significant, the ICAPCD CEQA Air Quality Handbook provides guidance to mitigate adverse impacts to air quality from development projects.

Stationary Source Permitting

Pursuant to ICAPCD Rule 207 (New & Modified Stationary Source Review) and associated rules such as Rule 201 (Permits Required) and Rule 208 (Permit to Operate), the construction, installation, modification, replacement, and operation of any equipment which may emit air contaminants requires ICAPCD permits. The ICAPCD requires that all such equipment be assessed for the potential to result in health risk impacts, and permits to operate equipment must be renewed each year equipment is in use or upon the modification of equipment.

Policy Number 5–Off-site Mitigation/In-Lieu Fee

The ICAPCD issued Policy Number 5, Off-site Mitigation/In-lieu Fee in April 2014. The policy references the ICAPCD CEQA Air Quality Handbook and discusses how project proponents may achieve additional mitigation by either proposing an off-site mitigation project or paying an in-lieu mitigation fee. Mitigation fees collected by the ICAPCD are used to fund the emissions offsets projects through the ICAPCD Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program). Specific projects funded by the program achieve emissions reductions by replacing old,. highly polluting equipment with newer, cleaner equipment earlier than required by regulation or through normal attrition. As outlined in Policy Number 5, total in-lieu fees for mitigation of construction emissions are calculated based on the quantity and duration of the project's construction emissions and the cost-effectiveness of the Carl Moyer Program for offsetting oxides of nitrogen (NO_X) and PM_{10} emissions.

Operational Development Fee Mitigation Program

Adopted in November 2007, Rule 310, Operational Development Fee Mitigation Program, is designed to assist in the reduction of excess air emissions resulting from new residential and commercial development (warehousing is considered a commercial use under the program) in Imperial County. Funds collected by the program are used to offset NO_X and PM_{10} emissions through local emission reduction projects, such as paving unpaved roadways to reduce fugitive dust.

Fugitive Dust Control

The ICAPCD Regulation VIII regulates emissions of fugitive dust. Fugitive dust is:

> Particulate Matter entrained in the ambient air which is caused from man-made and natural activities such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind. This excludes Particulate Matter emitted directly in the exhaust of motor vehicles or other fuel combustion devices, from portable brazing, soldering, or welding equipment, pile drivers, and stack emissions from stationary sources (ICAPCD, Rule 800 (c)(18)).

Regulation VIII includes the following specific rules:

- Rule 800–Fugitive Dust Requirements for Control of $PM_{2.5}$
- Rule 801–Construction and Earthmoving Activities
- Rule 802–Bulk Materials
- Rule 803–Carry Out and Track Out
- Rule 804–Open Areas
- Rule 805–Paved and Unpaved Roads
- Rule 806–Conservation Management Practices

ICAPCD Rule 428

Adopted on September 11, 2018, Rule 428, Wood Burning Appliances, is to limit emissions of particulate matter from wood burning appliances. This rule applies to any person who manufactures, sells, offers for sale, or operates a permanently installed, indoor or outdoor, wood burning appliance within the Imperial County $PM_{2.5}$ nonattainment area. This rule also applies to any person who installs a wood burning appliance in any residential or commercial, single- or multi-building unit within the Imperial County $PM_{2.5}$ nonattainment area.

2.2 Existing Air Quality

2.2.1 Climate and Meteorology

Climate conditions at the project site, like the rest of Imperial County, are governed by the large-scale sinking and warming of air in the semi-permanent tropical high-pressure center of the Pacific Ocean. The high-pressure ridge blocks out most storms except in winter when it is weakest and farthest south. The coastal mountains prevent the intrusion of any cool, damp air found in California coastal environs. Because of the barrier and weakened storms, Imperial County experiences clear skies, extremely hot summers, mild winters, and little rainfall (ICAPCD 2017b).

Winters are mild and dry with daily average temperatures ranging between 65 and 75 degrees Fahrenheit. Summers are extremely hot with daily average temperatures ranging between 104 and 115 degrees Fahrenheit. The flat terrain and the strong temperature differentials created by intense solar heating result in moderate winds and deep thermal convection. The combination of subsiding air, protective mountains, and distance from the ocean all combine to severely limit precipitation (ICAPCD 2017b).

Imperial County experiences surface inversions almost every day of the year. Due to strong surface heating, these inversions are usually broken and allow pollutants to be more easily dispersed. In some circumstances, the presence of the Pacific high-pressure cell can cause the air to warm to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, can act as a nearly impenetrable lid to the vertical mixing of pollutants. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest and worst-case ozone levels are often associated with the presence of subsidence inversions (ICAPCD 2017b).

The large daily oscillation of temperature produces a corresponding large variation in the relative humidity. Nocturnal humidity rises to 50 to 60 percent but drops to about 10 percent during the day. Prevailing winds are from the west-northwest through southwest; a secondary flow maximum from the southeast is also evident. The prevailing winds from the west and northwest occur seasonally from fall through spring and are known to be from the Los Angeles area. Occasionally, Imperial County experiences periods of extremely high wind speeds. Wind speeds can exceed 31 miles per hour (mph), and this occurs most frequently during the months of April and May. However, speeds of less than 6.8 mph account for more than one-half of the observed wind measurements (ICAPCD 2017b).

2.2.2 Background Air Quality

Air quality at a particular location is a function of the kinds, amounts, and dispersal rates of pollutants being emitted into the air locally and throughout the basin. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography.

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the CARB or federal standards set by the U.S. EPA. The ICAPCD maintains air quality monitoring stations throughout the SSAB. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The El Centro – 9th Street monitoring station, located at 150 9th Street, approximately seven miles east of the project site, is the nearest station to the project site. The El Centro monitoring station measures ozone, NO_2, PM_{10}, and $PM_{2.5}$. Table 2 provides a summary of measurements collected at the El Centro monitoring station for the years 2017 through 2021.

EEC ORIGINAL PKG

Table 2 Summary of Air Quality Measurements Recorded at the El Centro Monitoring Station					
Pollutant/Standard	2017	2018	2019	2020	2021
Ozone					
Federal Max 8-hour (ppm)	0.092	0.090	0.071	0.077	0.083
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	17	14	1	2	6
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	8	3	0	1	2
State Max 8-hour (ppm)	0.092	0.090	0.071	0.077	0.084
Days State 8-hour Standard Exceeded (0.07 ppm)	17	15	1	2	7
Max. 1-hour (ppm)	0.110	0.102	0.080	0.097	0.096
Days State 1-hour Standard Exceeded (0.09 ppm)	4	2	0	1	1
Nitrogen Dioxide					
Max 1-hour (ppm)	0.0488	0.0341	0.0367	0.0448	0.0558
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0
Days Federal 1-hour Standard Exceeded (0.100 ppb)	0	0	0	0	0
Annual Average (ppm)	--	--	--	--	--
PM_{10}*					
Federal Max. Daily (μg/m³)	268.5	256.3	123.9	197.5	194.5
Measured Days Federal 24-hour Standard Exceeded (150 μg/m³)	5	5	0	2	1
Calculated Days Federal 24-hour Standard Exceeded (150 μg/m³)	5.0	5.1	0.0	2.0	1.0
Federal Annual Average (μg/m³)	41.6	47.3	34.9	41.5	41.8
State Max. Daily (μg/m³)	186.4	253.0	130.0	197.7	186.9
Measured Days State 24-hour Standard Exceeded (50 μg/m³)	60	111	53	92	88
Calculated Days State 24-hour Standard Exceeded (50 μg/m³)	--	113.0	53.7	92.0	88.6
State Annual Average (μg/m³)	--	46.8	35.6	41.5	41.6
$PM_{2.5}$*					
Federal Max. Daily (μg/m³)	23.2	22.4	21.4	28.5	19.1
Measured Days Federal 24-hour Standard Exceeded (35 μg/m³)	0	0	0	0	0
Calculated Days Federal 24-hour Standard Exceeded (35 μg/m³)	0.0	0.0	0.0	0.0	0.0
Federal Annual Average (μg/m³)	8.4	8.6	7.8	9.7	8.2
State Max. Daily (μg/m³)	23.2	22.4	21.4	28.5	19.1
State Annual Average (μg/m³)	8.4	8.7	7.9	9.8	8.3

SOURCE: CARB 2023.
ppm = parts per million; μg/m³ = micrograms per cubic meter; -- = Not available.
*Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

3.0 Thresholds of Significance

Thresholds used to evaluate potential impacts to air quality are based on applicable criteria in the CEQA Guidelines Appendix G. The project would have a significant air quality impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan.
2. 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.
3. Expose sensitive receptors to substantial pollutant concentrations.
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

EEC ORIGINAL PKG

As stated in the State CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). The State CEQA Guidelines encourage lead agencies to adopt regionally specific thresholds of significance. When adopting these thresholds, the amended Guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

The ICAPCD CEQA Air Quality Handbook establishes the following four separate evaluation categories (ICAPCD 2017a):

1. Comparison of calculated project emissions to ICAPCD emission thresholds.
2. Consistency with the most recent Clean Air Plan for Imperial County.
3. Comparison of predicted ambient pollutant concentrations resulting from the project to state and federal health standards, when applicable.
4. The evaluation of special conditions which apply to certain projects.

Any development with a potential to emit criteria pollutants below significance levels defined by the ICAPCD is called a "Tier I project," and is considered by the ICAPCD to have less than significant potential adverse impacts on local air quality. For Tier I projects, the project proponent should implement a set of feasible "standard" mitigation measures (enumerated by the ICAPCD) to reduce the air quality impact to an insignificant level. A "Tier II project" is one whose emissions exceed any of the thresholds. Its impact is significant and the project proponent should select and implement all feasible "discretionary" mitigation measures (also enumerated by the ICAPCD) in addition to the standard measures.

3.1 Operational Impacts

Table 3 provides general guidelines for determining the significance of impacts based on the total emissions that are expected from project operation established by the ICAPCD.

Table 3
Significance Thresholds for Operations

Pollutant	Tier I	Tier II
NO_X and ROG	Less than 137 lbs/day	137 lbs/day and greater
PM_{10} and SO_X	Less than 150 lbs/day	150 lbs/day and greater
CO and $PM_{2.5}$	Less than 550 lbs/day	550 lbs/day and greater

ROG = reactive organic gas; NO_X = oxides of nitrogen; SO_X = oxides of sulfur; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter 2.5 microns or less; lbs/day = pounds per day
SOURCE: ICAPCD 2017a.

As stated above, Tier 1 projects are required to implement all feasible standard measures specified by the ICAPCD. Tier II projects are required to implement all feasible standard measures as well as all feasible discretionary measures specified by the ICAPCD.

3.2 Construction Impacts

The ICAPCD has also established thresholds of significance for project construction. Table 4 provides general guidelines for determining significance of impacts based on the total emissions that are expected from project construction.

Table 4
Significance Thresholds for Construction

Pollutant	Thresholds (pounds/day)
PM_{10}	150
ROG	75
NO_X	100
CO	550

ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less.
SOURCE: ICAPCD 2017a.

Regardless of project size, all feasible standard measures specified by the ICAPCD for construction equipment and fugitive PM_{10} control for construction activities should be implemented at construction sites. Control measures for fugitive PM_{10} construction emissions in Imperial County are found in ICAPCD Regulation VIII and in the ICAPCD CEQA Air Quality Handbook and are discussed below.

3.3 Public Nuisance Law (Odors)

State of California Health and Safety Code Sections 41700 and 41705 and ICAPCD Rule 407 prohibit emissions from any source whatsoever in quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property.

The ICAPCD CEQA Air Quality Handbook provides screening level distances for potential odor sources. If a project is proposed within one mile of a wastewater treatment plant, sanitary landfill, composting station, feedlot, asphalt plant, painting and coating operation, or rendering plant, a potential odor problem may result (ICAPCD 2017a).

4.0 Emission Calculations

The project would result in air pollutant emissions associated with the construction and operation. Emissions were calculated using California Emissions Estimator Model (CalEEMod) Version 2022.1 (California Air Pollution Control Officers Association 2022). The CalEEMod program is a tool used to estimate emissions resulting from land development projects in the state of California. CalEEMod was developed with the participation of several state air districts.

CalEEMod estimates parameters such as the type and amount of construction equipment required, trip generation, and utility consumption based on the size and type of each specific land use using data collected from surveys performed by the South Coast Air Quality Management District (AQMD). Where available, parameters were modified to reflect project-specific data.

4.1 Construction-related Emissions

Construction-related activities are temporary, short-term sources of air pollutant emissions. Sources of construction-related emissions include the following:

- Fugitive dust from grading activities;
- Exhaust emissions from construction equipment;
- Application of chemical coatings (paints, stains, sealants, etc.); and
- Exhaust and fugitive dust emission from on-road vehicles (trips by workers, delivery trucks, and material-hauling trucks).

Heavy-duty construction equipment is usually diesel powered. Based on CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation, heavy-duty construction equipment includes off-road diesel vehicles 25 horsepower or greater. In general, emissions from diesel-powered equipment contain more NO_X, SO_X, and particulate matter than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than do gasoline-powered engines. Standard construction equipment includes tractors/loaders/backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

Primary inputs are the numbers of each piece of equipment and the length of each construction stage. The construction equipment estimates are based on surveys performed by the South Coast AQMD and the Sacramento Metropolitan AQMD of typical construction projects which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters.

The construction schedule and equipment were obtained from the applicant. Construction activities were modeled beginning in January 2024 and lasting approximately five months. Construction stages would include grading, pile installation, fence installation, electrical installation, and container installation.

4.1.1 Fugitive Dust

Fugitive dust would be associated with construction activities that involve ground disturbance. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Calculation of fugitive dust emissions are based on the area of disturbed ground and the fugitive dust measures implemented. Based on discussion with ICAPCD staff, watering during ground disturbing activities would achieve a 50 percent reduction in fugitive dust.

The ICAPCD requires that, regardless of the size of a project, all feasible standard measures for fugitive PM_{10} must be implemented at construction sites. Additionally, all feasible discretionary measures for PM_{10} 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. The project footprint consists of 3.8 acres of the 7.1-acre project site. However, because other portions of the project site may be used for staging areas, it was assumed that the total disturbed area could exceed 5 acres. Standard and discretionary measures from the ICAPCD handbook include the following:

<u>Standard Measures for Fugitive PM_{10} Control:</u>

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.

<u>Discretionary Measures for Fugitive PM_{10} Control</u>

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.

EEC ORIGINAL PKG

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.

4.1.2 Construction Equipment

CalEEMod calculates emissions of all pollutants from construction equipment using emission factors from CARB's off-road diesel equipment emission factors database. All construction equipment required during a phase was modeled over the entire duration of the phase even if it would only be required for a portion of the phase. Additionally, an off-highway truck and a generator were added to each phase to account for a water truck and a generator needed to power the construction office. The modeled construction equipment is summarized in Table 5.

Table 5
Construction Phases and Equipment

Equipment	Quantity	Daily Operation Time (hours)
Grading (14 days)		
Tractors/Loaders/Backhoes	2	8
Dump Truck	1	8
Scraper	1	8
Roller	1	8
Water Truck	1	8
Office Generator	1	8
Pile Installation (15 days)		
Drill Rigs	3	8
Welder	1	8
Water Truck	1	8
Office Generator	1	8
Fence Installation (5 days)		
Air Compressor	1	8
Generator	1	8
Water Truck	1	8
Office Generator	1	8
Electrical Installation (30 days)		
Tractors/Loaders/Backhoes	3	8
Generators	5	8
Air Compressors	5	8
Forklift	1	8
Water Truck	1	8
Office Generator	1	8
Container Installation (14 days)		
Crane	1	8
Water Truck	1	8
Office Generator	1	8
NOTE: Each phase would also include vehicles associated with work commutes, dump trucks for hauling, and trucks for deliveries.		

EEC ORIGINAL PKG

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 the following:

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).

4.1.3 On-Road Vehicles

Construction would generate mobile source emissions from worker trips, hauling trips, and vendor trips. CalEEMod calculates emissions of all pollutants from on-road trucks and passenger vehicles using emission factors derived from CARB's motor vehicle emission inventory program EMFAC2017 (CARB 2017). Vehicle emission factors were multiplied by the model default total estimated number of trips and the average trip length to calculate the total mobile emissions. The project would require up to 50 workers per day and seven deliveries per day. The average worker, hauling, and vendor trip lengths were increased to 20 miles to be conservative.

CalEEMod calculates dust emissions from travel on paved and unpaved roads. By default, CalEEMod assumes the percentage of paved and unpaved roads for each district as provided by the district. For Imperial County, the default assumption is 50 percent paved and 50 percent unpaved. However, this is not characteristic of the roads in the vicinity of the project site. Construction vehicles would access the site via I-8, West Evan Hewes Highway, and Drew Road, which are all paved. However, it should be noted that Imperial County roadways do experience higher levels of entrained roadway dust. To account for these dust emissions, ICAPCD recommends modeling 90 percent paved roads during construction activities.

Additionally, the project would water the project site, including the unpaved portion of Drew Road, and would reduce speeds on unpaved roads to 25 miles per hour. These measures would be required per the ICAPCD measures listed in Section 4.1.1. As discussed, watering during ground disturbing activities would achieve a 50 percent reduction in fugitive dust. Reducing speed would achieve an additional 44 percent reduction in fugitive dust (CAPCOA 2022).

4.1.4 Construction Emission Estimates

Table 6 provides a summary of the criteria pollutant emissions generated by the project construction. CalEEMod output files for project construction and operations are contained in Attachment 1. Fugitive dust emission reduction calculations are contained in Attachment 2.

Table 6 Maximum Daily Construction Air Pollutant Emissions						
	Maximum Daily Emissions (pounds)					
Emission Source	**ROG**	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Grading	2	14	20	<1	82	9
Pile Installation	2	11	20	<1	94	10
Fence Installation	1	8	14	<1	93	10
Electrical Installation	3	20	29	<1	94	10
Container Installation	2	10	20	<1	93	10
Max Daily Emissions	**3**	**20**	**29**	**<1**	**94**	**10**
Significance Threshold	*75*	*100*	*550*	-	*150*	-
Exceeds Threshold?	*No*	*No*	*No*	-	*No*	-

SOURCE: Attachments 1 and 2.
NOTE: Totals may vary due to independent rounding.
ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide;
PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less;
$PM_{2.5}$ = particulate matter with an aerodynamic diameter 2.5 microns or less.

As shown in Table 6, emissions associated with future construction of the project site would be less than all applicable ICAPCD significance thresholds. The emissions summarized in Table 6 account for the 50 percent reduction in dust due to daily watering, but do not account for any other emission reductions from any other standard or discretionary measure for dust control or construction equipment. Therefore, these emissions are conservative.

With implementation of the standard and discretionary measures for fugitive PM_{10} control and standard measures for construction combustion equipment, project construction would not result in a cumulatively considerable net increase of criteria pollutants, and impacts would be less than significant.

4.2 Operation-related Emissions

Operation-related sources of air pollutant emissions include the direct emission of criteria pollutants. Common direct emission sources associated with typical projects include mobile sources such as project-generated traffic, area sources such as the use of landscaping equipment, and energy sources such as the combustion of natural gas.

4.2.1 Mobile Sources

CalEEMod calculates mobile source emissions using emission factors derived from CARB's motor vehicle emission inventory program, EMFAC2017 (CARB 2017). 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. To account for these trips, a total of one round trip (two one-way trips) was modeled per weekday. The default trip length was increased to 20 miles. CalEEMod default emission factors for the soonest operational year of 2024 were modeled.

As discussed under the construction emission methodology for on-road vehicles, CalEEMod calculates dust emissions from travel on paved and unpaved roads. For Imperial County, the default assumption is 50 percent paved and 50 percent unpaved. However, this is not characteristic of the roads in the vicinity of the project site. During project operation, the majority of the access route to and from the project site would be paved, with only the segment of Drew Road being unpaved. Therefore, as with construction activities, to account for these dust emissions and any entrained dust on paved roads, 90 percent paved roads was modeled for operation.

EEC ORIGINAL PKG

4.2.2 Area and Energy Sources

Area source emissions associated with typical development projects include consumer products, natural gas used in space and water heating, architectural coatings, landscaping equipment, and mechanical equipment such as boilers or backup generators. Hearths (fireplaces) and woodstoves are also a source of area emissions. Emissions are generated from energy use such as the combustion of natural gas used in space and water heating. As discussed in Section 4.2.1 above, the project would be an unmanned facility that would not be a source of area or energy emissions. However, as a conservative analysis, the project was modeled as a light industrial land use and default emission factors for light industrial area and energy sources were modeled.

4.2.3 Operational Emission Estimates

Table 7 provides a summary of the criteria pollutant emissions generated by the project operations. CalEEMod output files for project construction and operations are contained in Attachment 1.

Table 7
Maximum Daily Operations Air Pollutant Emissions

Emission Source	Maximum Daily Emissions (pounds)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	<1	<1	<1	<1	1	<1
Area Sources	2	<1	2	<1	<1	<1
Energy Sources	<1	<1	<1	<1	<1	<1
Total Operations	**2**	**<1**	**3**	**<1**	**1**	**<1**
Significance Threshold	*137*	*137*	*550*	*150*	*150*	*550*
Exceeds Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

SOURCE: Attachment 1.
NOTE: Totals may vary due to independent rounding.
ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide;
PM_{10} = particulate matter with an aerodynamic diameter 10 microns or less;
$PM_{2.5}$ = particulate matter with an aerodynamic diameter 2.5 microns or less.

As shown in Table 7, operation of the project would result in minimal emissions that would be less than the applicable thresholds for all criteria pollutants. Therefore, operation of the project would not result in a cumulatively considerable net increase of criteria pollutants, and impacts would be less than significant.

5.0 Air Quality Impact Analysis

1. Would the project conflict with or obstruct implementation of the applicable air quality plan?

CARB is the lead agency for preparation of the SIP, which outlines the state measures to achieve NAAQS. CARB delegates responsibility for preparation of SIP elements to local air districts and requires local air districts to prepare Air Quality Attainment Plans outlining measures required to achieve CAAQS.

The ICAPCD is the air district responsible for the project area. Applicable ICAPCD air quality plans include:

- Imperial County 2009 State Implementation Plan for Particulate matter Less than 10 Microns in Aerodynamic Diameter;
- Imperial County 2013 State Implementation Plan for the 2006 24-Hour $PM_{2.5}$ Moderate Non-attainment Area; and
- Imperial County 2017 State Implementation Plan for the 2008 8-Hour Ozone Standard.

The primary concern for assessing consistency with air quality plans is whether the project would induce growth that would result in a net increase in criteria pollutant emissions that exceed the assumptions used to develop the plan. The criteria pollutant emission projections for the ICAPCD air quality plans are based on Southern California Association of Governments' (SCAG) population growth and regional vehicle miles traveled projections, which are based in part on the land uses established by local general plans. As such, projects that propose development that is consistent with the local land use plans would be consistent with growth projections and air quality plans criteria pollutant emissions estimates. In the event that a project would result in development that is less dense than anticipated by the growth projections, the project would be considered consistent with the air quality plans. In the event a project would result in development that results in greater than anticipated growth projections, the project would result in air pollutant emissions that may not have been accounted for in the air quality plans and thus may obstruct or conflict with the air quality plans.

The project site is designated as an Urban Area land use in the Imperial County General Plan. The Urban Area designation includes areas surrounding the following seven incorporated cities: Brawley, El Centro, Westmorland, Holtville, Calipatria, Imperial, and Calexico. It is anticipated that these areas will eventually be annexed or incorporated. The project would construct a BESS that would not be a significant source of emissions. The project would be consistent with the growth projections and air quality plans criteria pollutant emissions estimates. Furthermore, the project would not construct housing or other uses that would result in regional population growth. The project would provide needed energy storage for the region and the state. Therefore, the project would not result in new growth beyond what was originally anticipated in SCAG's growth projections for Imperial County. Additionally, as summarized in Tables 6 and 7 above, construction and operation of the project would result in emissions that are below all applicable project-level significance thresholds. Therefore, project emissions would be consistent with SCAG's growth projections and the ICAPCD's air quality plans, and impacts would be less than significant.

2. *Would the project 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?*

The project site is in non-attainment areas for NAAQS and CAAQS for ozone and particulate matter. The majority of regional PM_{10} and $PM_{2.5}$ emissions originate from dust stirred up by wind or by vehicle traffic on unpaved roads (ICAPCD 2009). Other PM_{10} and $PM_{2.5}$ emissions originate from grinding operations, combustion sources such as motor vehicles, power plants, wood burning, forest fires, agricultural burning, and industrial processes. Ozone is not emitted directly, but is a result of atmospheric activity on precursors. NO_X and ROG are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone. Approximately 88 percent of NO_X and 40 percent of ROG regional emissions originate from on- and off-road vehicles (ICAPCD 2010). Other major sources include solvent evaporation and miscellaneous processes such as pesticide application.

As shown in Table 6 above, project construction would not exceed the applicable regional emissions thresholds. These thresholds are designed to provide limits below which project emissions would not significantly change regional air quality. The project would implement all standard and discretionary measures for fugitive PM_{10} control and standard measures for construction combustion equipment. Therefore, project construction would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be less than significant.

Long-term emissions of regional air pollutants occur from operational sources. As shown in Table 7 above, operation of the project would result in minimal emissions that would be less than the applicable thresholds for all criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be less than significant.

3. *Would the project expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, day-care centers and project residents) to substantial pollutant concentrations?*

Sensitive land uses include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities. The nearest sensitive receptors are the residential uses located approximately 500 feet north of the project site, on the north side of the railroad tracks and West Evan Hewes Highway.

Diesel Particulate Matter – Construction

Construction of the project and associated infrastructure would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Construction of the project would result in the generation of diesel-exhaust DPM emissions from the use of off-road diesel equipment required for site preparation and grading, and other construction activities and on-road diesel equipment used to bring materials to and from the project site.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction is anticipated to last for approximately five months. The dose of DPM to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015). Thus, if the duration of proposed construction activities near any specific sensitive receptor were five months, the exposure would be one percent (5 months divided by 30 years) of the total exposure period used for health risk calculation. Further, the project would implement the standard measures for construction combustion equipment summarized in Section 4.1.2 above. Additionally, with ongoing implementation of U.S. EPA and CARB requirements for cleaner fuels; off-road diesel engine retrofits; and new, low-emission diesel engine types, the DPM emissions of individual equipment would be reduced over time. All construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation, which limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements. Therefore, due to the limited duration of construction activities, implementation of standard measures for construction combustion equipment, and implementation of the In-Use Off-Road Diesel-Fueled Fleets Regulation, DPM generated by project construction is not expected to create conditions where the probability is greater than 10 in 1 million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than 1 for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial pollutant concentration, and impacts would be less than significant.

Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near signalized intersections. CO hot spots have the potential to violate state and federal CO standards at intersections, even if the broader basin is in attainment for federal and state levels. Due to increased requirements for cleaner vehicles, equipment, and fuels, CO levels in the state have dropped substantially. All air basins are attainment or maintenance areas for CO. Therefore, recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District developed a screening threshold in 2011, which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010, which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. No intersections in the vicinity of the project carry this substantial amount of traffic. Additionally, there are no signalized intersections in the vicinity of the project site. Traffic generated by the project would not result in any heavily congested intersections. Therefore, project construction and operation would not result in a CO hot spot, and impacts would be less than significant.

4. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between the receptor and odor source, and local meteorological conditions. Project construction would result in the emission of diesel fumes and other odors typically associated with construction activities. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term (five months) and temporary in nature. Further, per CARB's Airborne Toxic Control Measures 13 (California Code of Regulations Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons. Therefore, project construction would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.

The ICAPCD CEQA Air Quality Handbook provides screening level distances for potential odor sources. If a project is proposed within one mile of a wastewater treatment plant, sanitary landfill, composting station, feedlot, asphalt plant, painting and coating operation, or rendering plant, a potential odor problem may result (ICAPCD 2017a). The project does not include the construction of any of these uses. Energy storage facilities are not known to emit odors during operation. Project operation would include occasional inspection and maintenance. These operational activities are not known to emit odors. Therefore, project operation would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.

6.0 Conclusions

The project's potential to result in impacts to air quality was assessed in accordance with the guidelines, policies, and standards established by the ICAPCD. The applicable ICAPCD air quality plans include the 2009, 2013, and 2017 SIPs for reducing PM_{10}, $PM_{2.5}$, and ozone. The project would construct a BESS that would not be a significant source of emissions. The project would be consistent with the growth projections and air quality plans criteria pollutant emissions estimates. Additionally, the project would not result in an air quality violation. Therefore, the project would

EEC ORIGINAL PKG

not conflict with or obstruct the implementation of the regional air quality plans, and impacts would be less than significant.

As shown in Table 6 above, project construction would not exceed the applicable regional emissions thresholds. The project would implement all standard and discretionary measures for fugitive PM_{10} control and standard measures for construction combustion equipment. As shown in Table 7 above, operation of the project would result in minimal emissions that would be less than the applicable thresholds for all criteria pollutants. Therefore, project construction and operation would not result in a cumulatively considerable net increase in emissions of ozone, PM_{10}, or $PM_{2.5}$, and impacts would be less than significant.

Project construction would not result in the exposure of sensitive receptors to significant levels of DPM that could result in excess cancer risks. Additionally, the project would not result in the creation of a CO hot spot. Therefore, construction and operation of the project would not expose sensitive receptors to substantial pollutant concentrations, and impacts would be less than significant.

During construction, potential odor sources would be associated with construction equipment; however, exposure to odors associated with project construction would be short term and temporary in nature. Operation of the project would not include any uses that would generate substantial odors. Therefore, the project would not generate odors adversely affecting a substantial number of people, and impacts would be less than significant.

If you have any questions about the results of this analysis, please contact me at jfleming@reconenvironmental.com or (619) 308-9333 extension 177.

Sincerely,

Jessica Fleming

Jessica Fleming
Senior Air Quality Specialist

JLF:jg

Attachment

7.0 Certification

The following is a list of preparers, persons, and organizations involved with the air quality analysis.

RECON Environmental, Inc.
  Jessica Fleming, County-approved Air Quality Consultant
  Jennifer Gutierrez, Production Specialist
  Frank McDermott, GIS Manager

8.0 References Cited

California Air Pollution Control Officers Association (CAPCOA)

2022 California Emissions Estimator Model (CalEEMod), Version 2022.1.

California Air Resources Board (CARB)

2000 Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. California Air Resources Board. Stationary Source Division, Mobile Source Control Division. October.

2005 *Air Quality and Land Use Handbook: A Community Health Perspective*. April.

2016 Ambient Air Quality Standards. May 4.

2017 EMFAC2017 Emissions Database Inventory Model.

2023 California Air Quality Data Statistics. Available at http://www.arb.ca.gov/adam/welcome.html. Top 4 Summary and Hourly Listing. Accessed on February 9, 2023.

Imperial County Air Pollution Control District (ICAPCD)

2009 2009 Imperial County State Implementation Plan for Particulate Matter Less Than 10 Microns in Aerodynamic Diameter. August.

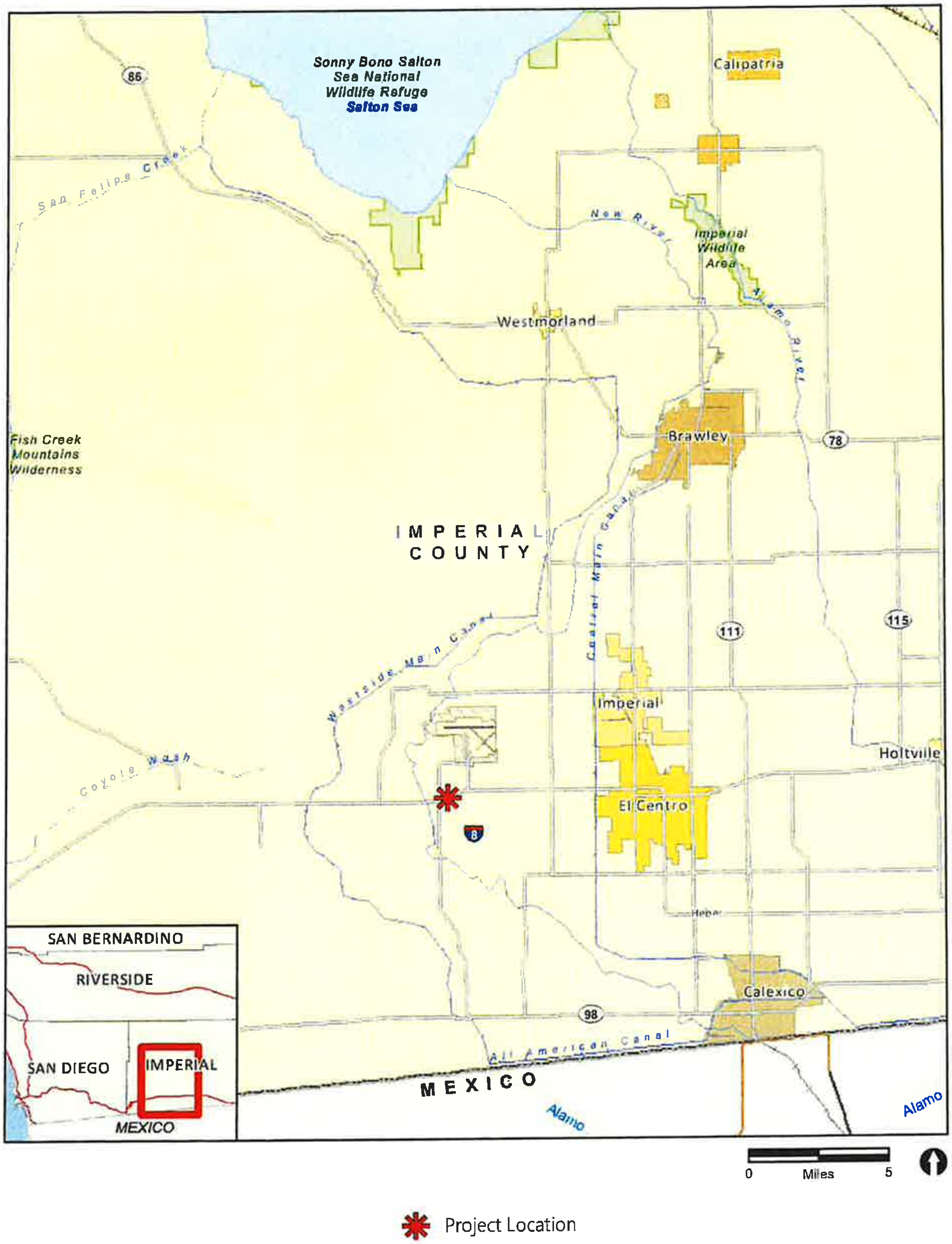
2010 2009 1997 8-Hour Ozone Modified Air Quality Management Plan. July.

2017a *CEQA Air Quality Handbook, Guidelines for the Implementation of the California Environmental Quality Act of 1970*. December.

2017b 2017 Imperial County State Implementation Plan for the 2008 8-Hour Ozone Standard, Draft March.

Office of Environmental Health Hazard Assessment (OEHHA)

2015 Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual), February.



RECON

M:\JOBS6\10324\common_gis\MXD\fig1.mxd 03/08/2023 bma

FIGURE 1
Regional Location

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)

Project Boundary

FIGURE 2

Project Location on Aerial Photograph

RECON

M:\JOBS6\10324\common_gis\MXD\fig2_ai .mxd 6/5/2023 fmm

EEC ORIGINAL PKG

Map Source: ZGLOBAL

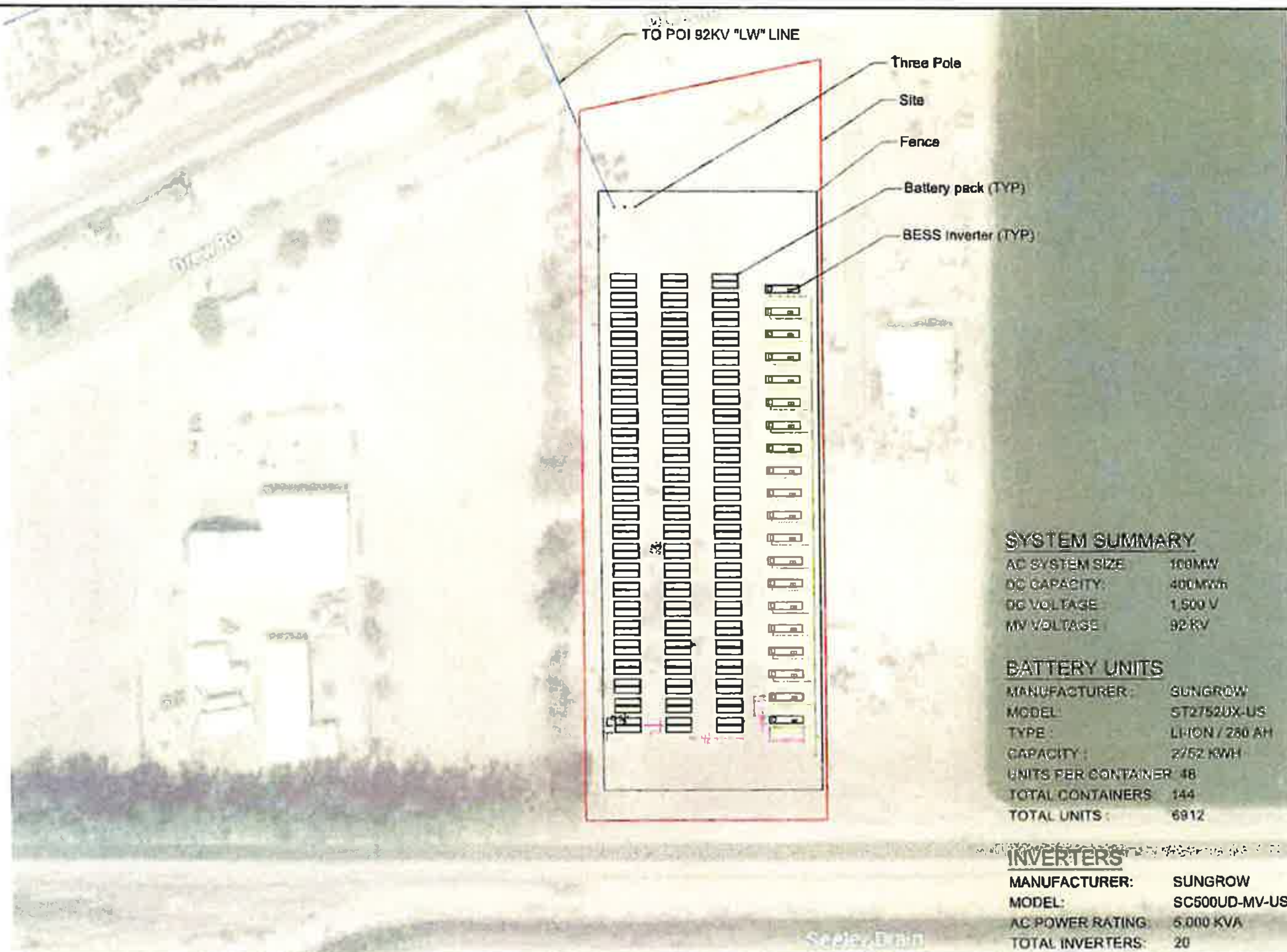


FIGURE 3
Site Plan

RECON

M:\JOBS6\10324\ai\graphics\fig3.ai 06/05/23 lmm

EEC ORIGINAL PKG

ATTACHMENTS

EEC ORIGINAL PKG

ATTACHMENT 1

CalEEMod Output Files

Alba Peaker Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Alba Peaker
Construction Start Date	1/1/2024
Operational Year	2024
Lead Agency	Imeprial County
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	4.80
Location	32.791194308087086, -115.68507278016418
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5605
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

General Light Industry	48.3	1000sqft	7.10	48,260	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.02	1.73	9.54	20.8	0.03	0.32	333	333	0.29	33.5	33.8	—	4,987	4,987	0.17	0.19	8.77	5,057
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.58	2.98	20.2	28.7	0.05	0.74	333	333	0.68	33.5	34.2	—	6,165	6,165	0.24	0.20	0.23	6,232
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.57	0.49	3.14	5.15	0.01	0.11	69.6	69.7	0.10	7.00	7.10	—	1,143	1,143	0.04	0.04	0.77	1,156
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.09	0.57	0.94	< 0.005	0.02	12.7	12.7	0.02	1.28	1.30	—	189	189	0.01	0.01	0.13	191
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	—	—	—	150	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	—	—	—	150	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	—	—	—	No	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.02	1.73	9.54	20.8	0.03	0.32	333	333	0.29	33.5	33.8	—	4,987	4,987	0.17	0.19	8.77	5,057
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.58	2.98	20.2	28.7	0.05	0.74	333	333	0.68	33.5	34.2	—	6,165	6,165	0.24	0.20	0.23	6,232
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.57	0.49	3.14	5.15	0.01	0.11	69.6	69.7	0.10	7.00	7.10	—	1,143	1,143	0.04	0.04	0.77	1,156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.57	0.94	< 0.005	0.02	12.7	12.7	0.02	1.28	1.30	—	189	189	0.01	0.01	0.13	191

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.43	1.60	0.45	2.63	< 0.005	0.04	0.58	0.61	0.04	0.09	0.12	0.00	2,381	2,381	0.18	0.02	12.7	2,403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	1.25	0.44	0.47	< 0.005	0.03	0.58	0.61	0.03	0.09	0.12	0.00	2,368	2,368	0.18	0.02	12.6	2,390
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.24	1.42	0.44	1.48	< 0.005	0.03	0.41	0.44	0.03	0.06	0.10	0.00	2,364	2,364	0.18	0.02	12.6	2,387
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.26	0.08	0.27	< 0.005	0.01	0.08	0.08	0.01	0.01	0.02	0.00	391	391	0.03	< 0.005	2.09	395
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	137	137	550	150	—	—	150	—	—	551	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	137	137	550	150	—	—	150	—	—	551	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7

Area	0.37	1.56	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.43	1.60	0.45	2.63	< 0.005	0.04	0.58	0.61	0.04	0.09	0.12	0.00	2,381	2,381	0.18	0.02	12.7	2,403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Area	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.06	1.25	0.44	0.47	< 0.005	0.03	0.58	0.61	0.03	0.09	0.12	0.00	2,368	2,368	0.18	0.02	12.6	2,390
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	0.41	0.41	< 0.005	0.06	0.06	—	23.9	23.9	< 0.005	< 0.005	0.04	24.3
Area	0.18	1.39	0.01	1.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.26	4.26	< 0.005	< 0.005	—	4.27
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.24	1.42	0.44	1.48	< 0.005	0.03	0.41	0.44	0.03	0.06	0.10	0.00	2,364	2,364	0.18	0.02	12.6	2,387
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Area	0.03	0.25	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71
Energy	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	387	387	0.03	< 0.005	—	388

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08
Total	0.04	0.26	0.08	0.27	< 0.005	0.01	0.08	0.08	0.01	0.01	0.02	0.00	391	391	0.03	< 0.005	2.09	395

3. Construction Emissions Details

3.1. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	13.2	12.1	0.03	0.53	—	0.53	0.49	—	0.49	—	2,948	2,948	0.12	0.02	—	2,958
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.51	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.38	0.00	0.00	11.2	11.2	0.00	1.13	1.13	—	59.2	59.2	< 0.005	< 0.005	0.11	60.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	2.04	2.04	0.00	0.21	0.21	—	9.80	9.80	< 0.005	< 0.005	0.02	9.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.12	9.58	12.4	0.03	0.35	—	0.35	0.32	—	0.32	—	2,786	2,786	0.11	0.02	—	2,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.39	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	< 0.005	< 0.005	—	115
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.0	19.0	< 0.005	< 0.005	—	19.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.40	0.00	0.00	12.0	12.0	0.00	1.21	1.21	—	63.4	63.4	< 0.005	< 0.005	0.11	64.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.68	1.68	< 0.005	0.17	0.17	—	35.5	35.5	< 0.005	< 0.005	0.04	37.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	2.19	2.19	0.00	0.22	0.22	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	5.87	5.87	< 0.005	< 0.005	0.01	6.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.84	5.92	5.59	0.02	0.22	—	0.22	0.20	—	0.20	—	1,716	1,716	0.07	0.01	—	1,722
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	4.00	4.00	0.00	0.40	0.40	—	21.1	21.1	< 0.005	< 0.005	0.04	21.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.56	0.56	< 0.005	0.06	0.06	—	11.8	11.8	< 0.005	< 0.005	0.01	12.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.73	0.73	0.00	0.07	0.07	—	3.50	3.50	< 0.005	< 0.005	0.01	3.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.41	18.4	20.6	0.04	0.73	—	0.73	0.67	—	0.67	—	3,867	3,867	0.16	0.03	—	3,880
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.51	1.69	< 0.005	0.06	—	0.06	0.05	—	0.05	—	318	318	0.01	< 0.005	—	319
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.28	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.6	52.6	< 0.005	< 0.005	—	52.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.80	0.00	0.00	24.0	24.0	0.00	2.41	2.41	—	127	127	0.01	< 0.005	0.23	129
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	3.36	3.36	< 0.005	0.34	0.34	—	70.9	70.9	< 0.005	0.01	0.08	74.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	4.38	4.38	0.00	0.44	0.44	—	21.0	21.0	< 0.005	< 0.005	0.04	21.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.61	0.61	< 0.005	0.06	0.06	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	7.91	6.69	0.02	0.31	—	0.31	0.28	—	0.28	—	2,424	2,424	0.10	0.02	—	2,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	7.91	6.69	0.02	0.31	—	0.31	0.28	—	0.28	—	2,424	2,424	0.10	0.02	—	2,432

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	93.0	93.0	< 0.005	< 0.005	—	93.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.75	0.75	13.7	0.00	0.00	292	292	0.00	29.4	29.4	—	1,700	1,700	0.06	0.05	6.37	1,724
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	2.40	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.38	0.00	0.00	11.2	11.2	0.00	1.13	1.13	—	59.2	59.2	< 0.005	< 0.005	0.11	60.0
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.57	1.57	< 0.005	0.16	0.16	—	33.1	33.1	< 0.005	< 0.005	0.04	34.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	2.04	2.04	0.00	0.21	0.21	—	9.80	9.80	< 0.005	< 0.005	0.02	9.93
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	5.48	5.48	< 0.005	< 0.005	0.01	5.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7
Total	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Total	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305
Total	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Total	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Total	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.2	83.2	0.01	< 0.005	—	83.4
Total	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.2	83.2	0.01	< 0.005	—	83.4

4.3. Area Emissions by Source

4.3.2. Unmitigated

EEC ORIGINALPKG

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.37	0.34	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Total	0.37	1.56	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71
Total	0.03	0.25	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

EEC ORIGINAL PKG

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

EEC ORIGINAL PKG

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	1/1/2024	1/18/2024	5.00	14.0	—
Pile Installation	Building Construction	1/19/2024	2/8/2024	5.00	15.0	—
Fence Installation	Building Construction	2/9/2024	2/15/2024	5.00	5.00	—
Electrical Installation	Building Construction	2/16/2024	3/28/2024	5.00	30.0	—
Container Installation	Building Construction	3/29/2024	4/17/2024	5.00	14.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	1.00	376	0.38

Grading	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Pile Installation	Bore/Drill Rigs	Diesel	Average	3.00	8.00	83.0	0.50
Pile Installation	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Pile Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Pile Installation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Fence Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Fence Installation	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Fence Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Electrical Installation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Electrical Installation	Generator Sets	Diesel	Average	6.00	8.00	14.0	0.74
Electrical Installation	Air Compressors	Diesel	Average	5.00	8.00	37.0	0.48
Electrical Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Electrical Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Container Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Container Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Container Installation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	100	20.0	LDA,LDT1,LDT2
Grading	Vendor	—	20.0	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Pile Installation	—	—	—	—

Pile Installation	Worker	100	20.0	LDA,LDT1,LDT2
Pile Installation	Vendor	14.0	20.0	HHDT,MHDT
Pile Installation	Hauling	0.00	20.0	HHDT
Pile Installation	Onsite truck	—	—	HHDT
Fence Installation	—	—	—	—
Fence Installation	Worker	100	20.0	LDA,LDT1,LDT2
Fence Installation	Vendor	14.0	20.0	HHDT,MHDT
Fence Installation	Hauling	0.00	20.0	HHDT
Fence Installation	Onsite truck	—	—	HHDT
Electrical Installation	—	—	—	—
Electrical Installation	Worker	100	20.0	LDA,LDT1,LDT2
Electrical Installation	Vendor	14.0	20.0	HHDT,MHDT
Electrical Installation	Hauling	0.00	20.0	HHDT
Electrical Installation	Onsite truck	—	—	HHDT
Container Installation	—	—	—	—
Container Installation	Worker	100	20.0	LDA,LDT1,LDT2
Container Installation	Vendor	14.0	20.0	HHDT,MHDT
Container Installation	Hauling	0.00	20.0	HHDT
Container Installation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	14.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	Other	50%	50%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	457	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	1.98	0.00	0.00	516	39.6	0.00	0.00	10,317

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	72,390	24,130	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	1,465,870	457	0.0330	0.0040	1,567,707

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	27.6	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.3
AQ-PM	38.1
AQ-DPM	5.72
Drinking Water	68.6
Lead Risk Housing	41.2

Pesticides	86.9
Toxic Releases	14.4
Traffic	2.20
Effect Indicators	—
CleanUp Sites	78.0
Groundwater	95.2
Haz Waste Facilities/Generators	7.35
Impaired Water Bodies	99.5
Solid Waste	80.0
Sensitive Population	—
Asthma	90.6
Cardio-vascular	83.9
Low Birth Weights	5.49
Socioeconomic Factor Indicators	—
Education	64.5
Housing	51.4
Linguistic	90.5
Poverty	81.2
Unemployment	96.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.96753497
Employed	1.93763634
Median HI	22.3662261

Education	—
Bachelor's or higher	24.38085461
High school enrollment	100
Preschool enrollment	39.0606955
Transportation	—
Auto Access	40.90850764
Active commuting	78.6603362
Social	—
2-parent households	59.96407032
Voting	36.99473887
Neighborhood	—
Alcohol availability	72.73193892
Park access	8.533299115
Retail density	3.785448479
Supermarket access	12.52406005
Tree canopy	1.860644168
Housing	—
Homeownership	48.19709996
Housing habitability	56.46092647
Low-inc homeowner severe housing cost burden	79.66123444
Low-inc renter severe housing cost burden	47.27319389
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	40.25407417
Arthritis	0.0
Asthma ER Admissions	6.4
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	22.5
Cognitively Disabled	41.3
Physically Disabled	20.3
Heart Attack ER Admissions	5.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	59.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	44.5
English Speaking	14.8
Foreign-born	55.7
Outdoor Workers	4.7

Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.7
Traffic Density	18.5
Traffic Access	23.0
Other Indices	—
Hardship	75.1
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	20.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approximately 48,260 square feet inverters and BESS containers 7.1 acre project site
Construction: Construction Phases	Construction equipment and schedule provided by construction team
Construction: Off-Road Equipment	Construction equipment provided by construction team Bobcat modeled as tractor/loader/backhoe Water truck (off-highway truck) and generator (construction office) added to each phase Forklift added to electrical phase for cables/conduit deliveries
Construction: Trips and VMT	50 workers per day (100 one-way trips) Maximum of 7 deliveries per day (14 one-way trips) All trip lengths increased to 20 miles
Construction: On-Road Fugitive Dust	All roads used to access project site are paved. ICAPCD recommends modeling 90 percent paved roads during construction activities.
Operations: Vehicle Data	Unmanned/remote facility. 1 round trip (0.041 trips/ksf) modeled to account for any routine maintenance. Trip length increased to 20 miles.
Operations: Road Dust	Used same paved road % as construction workers
Operations: Water and Waste Water	Unmanned facility, no water use
Operations: Solid Waste	Unmanned facility, no solid waste

EEC ORIGINAL PKG

ATTACHMENT 2

Fugitive Dust Emission Reduction Calculations

EEC ORIGINAL PKG

Alba Peaker - Fugitive Dust Emission Reduction Calculations

Measure	PM Reduction
Water Exposed Areas	50%
Speed Limit	44%

GRADING

	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
On-Site Emissions, No Dust Control						
Off-Road Equipment	0.53		0.53	0.49		0.49
Dust From Material Movement		0.53	0.53		0.06	0.06
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.53	0.53	1.06	0.49	0.06	0.55
Off-Site Emissions, No Dust Control	0.00	291.86	291.86	0.00	29.36	29.36
TOTAL	0.53	292.39	292.92	0.49	29.41	29.90
On-Site Emissions, With Dust Control						
Off-Road Equipment	0.53		0.53	0.49		0.49
Dust From Material Movement		0.27	0.27		0.03	0.03
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.53	0.27	0.80	0.49	0.03	0.52
Off-Site Emissions, With Dust Control	0.00	81.72	81.72	0.49	8.22	8.71
TOTAL	0.53	81.99	82.52	0.98	8.25	9.23

PILE INSTALLATION

	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
On-Site Emissions, No Dust Control	0.35	0.00	0.35	0.32	0.00	0.32
Off-Site Emissions, No Dust Control	0.01	332.75	332.77	0.01	33.48	33.50
TOTAL	0.36	332.75	333.12	0.34	33.48	33.82
On-Site Emissions, With Dust Control	0.35	0.00	0.35	0.32	0.00	0.32
Off-Site Emissions, With Dust Control	0.36	93.17	93.53	0.01	9.38	9.39
TOTAL	0.71	93.17	93.89	0.34	9.38	9.71

FENCE INSTALLATION

	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
On-Site Emissions, No Dust Control	0.22	0.00	0.22	0.20	0.00	0.20
Off-Site Emissions, No Dust Control	0.01	332.75	332.77	0.01	33.48	33.50
TOTAL	0.23	332.75	332.99	0.21	33.48	33.70
On-Site Emissions, With Dust Control	0.22	0.00	0.22	0.20	0.00	0.20
Off-Site Emissions, With Dust Control	0.23	93.17	93.40	0.01	9.38	9.39
TOTAL	0.45	93.17	93.62	0.21	9.38	9.59

ELECTRICAL INSTALLATION

	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
On-Site Emissions, No Dust Control	0.73	0.00	0.73	0.67	0.00	0.67
Off-Site Emissions, No Dust Control	0.01	332.75	332.77	0.01	33.48	33.50
TOTAL	0.74	332.75	333.49	0.68	33.48	34.16
On-Site Emissions, With Dust Control	0.73	0.00	0.73	0.67	0.00	0.67
Off-Site Emissions, With Dust Control	0.74	93.17	93.91	0.01	9.38	9.39
TOTAL	1.47	93.17	94.64	0.68	9.38	10.06

CONTAINER INSTALLATION

	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
On-Site Emissions, No Dust Control	0.31	0.00	0.31	0.28	0.00	0.28
Off-Site Emissions, No Dust Control	0.01	332.75	332.77	0.01	33.48	33.50
TOTAL	0.32	332.75	333.07	0.29	33.48	33.78
On-Site Emissions, With Dust Control	0.31	0.00	0.31	0.28	0.00	0.28
Off-Site Emissions, With Dust Control	0.32	93.17	93.49	0.01	9.38	9.39
TOTAL	0.62	93.17	93.79	0.29	9.38	9.67

EEC ORIGINAL PKG

RECON

Biological Resources Report for the Alba Peaker Battery Energy Storage System Project Imperial County, California

Prepared for
Z Global
750 W. Main Street
El Centro, CA 92243
Contact: Ramon Gonzalez

Prepared by
RECON Environmental, Inc.
3111 Camino del Rio North, Suite 600
San Diego, CA 92108
P 619.308.9333

RECON Number 10324
May 24, 2023

Gerry Scheid

Gerry Scheid, Senior Biologist

TABLE OF CONTENTS

FIGURES

TABLES

PHOTOGRAPHS

Acronyms and Abbreviations

BESS	Battery Energy Storage System
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
ESA	Endangered Species Act
MBTA	Migratory Bird Treaty Act
project	Alba Peaker Battery Energy Storage System Project
RECON	RECON Environmental, Inc.
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 Introduction

This biological resource report was prepared by RECON Environmental, Inc. (RECON) for the Alba Peaker Battery Energy Storage System (BESS) Project (project). The purpose of this biological resources report is to (1) document the existing biological conditions within the project survey area; (2) evaluate the survey area for the potential to support sensitive biological resources; (3) provide an analysis of potential impacts associated with the proposed project; and (4) provide a discussion of potential avoidance, minimization, and mitigation measures that may be required to reduce potential impacts to sensitive biological resources to below a level of significance.

1.1 Project Location

The project site is in the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8 (Figures 1 and 2). The project site is comprised of Assessor's Parcel Number (APN) 051-420-042, totaling approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 3). Land uses surrounding the project site consist of active agriculture to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east.

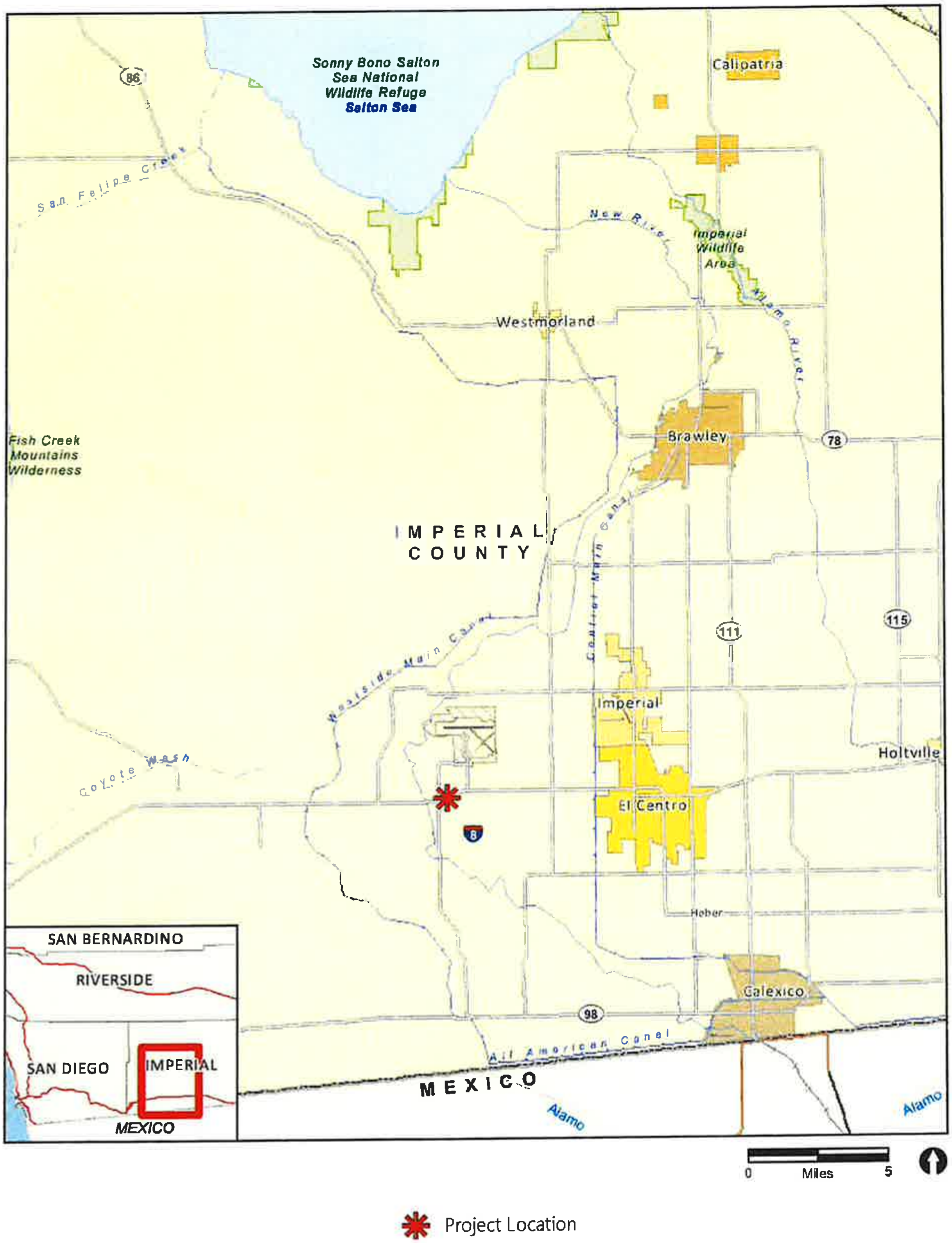
1.2 Project Description

The project would construct and operate a 100-megawatt BESS that would connect to an existing 92-kilovolt gen-tie line. The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

2.0 Methods

Biological resource data for the project resulted from a combination of literature review and a general biological survey. The general biology survey occurred on March 24, 2023, under clear skies, mild winds, and temperatures between 70–72 degrees Fahrenheit. Plant and wildlife species lists were compiled along with mapping of vegetation communities on a recent aerial photograph of the site.

Zoological nomenclature is in accordance with the Checklist of North and Middle American Birds (Chesser et al. 2022); Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico (Crother et al. 2017); the Revised Checklist of North American Mammals North of Mexico (Baker et al. 2003). Floral nomenclature for common plants follows Baldwin (2012) as updated by the Jepson Online Interchange (University of California 2023) and for sensitive plants the California Native Plant Society online database (CNPS; 2019).



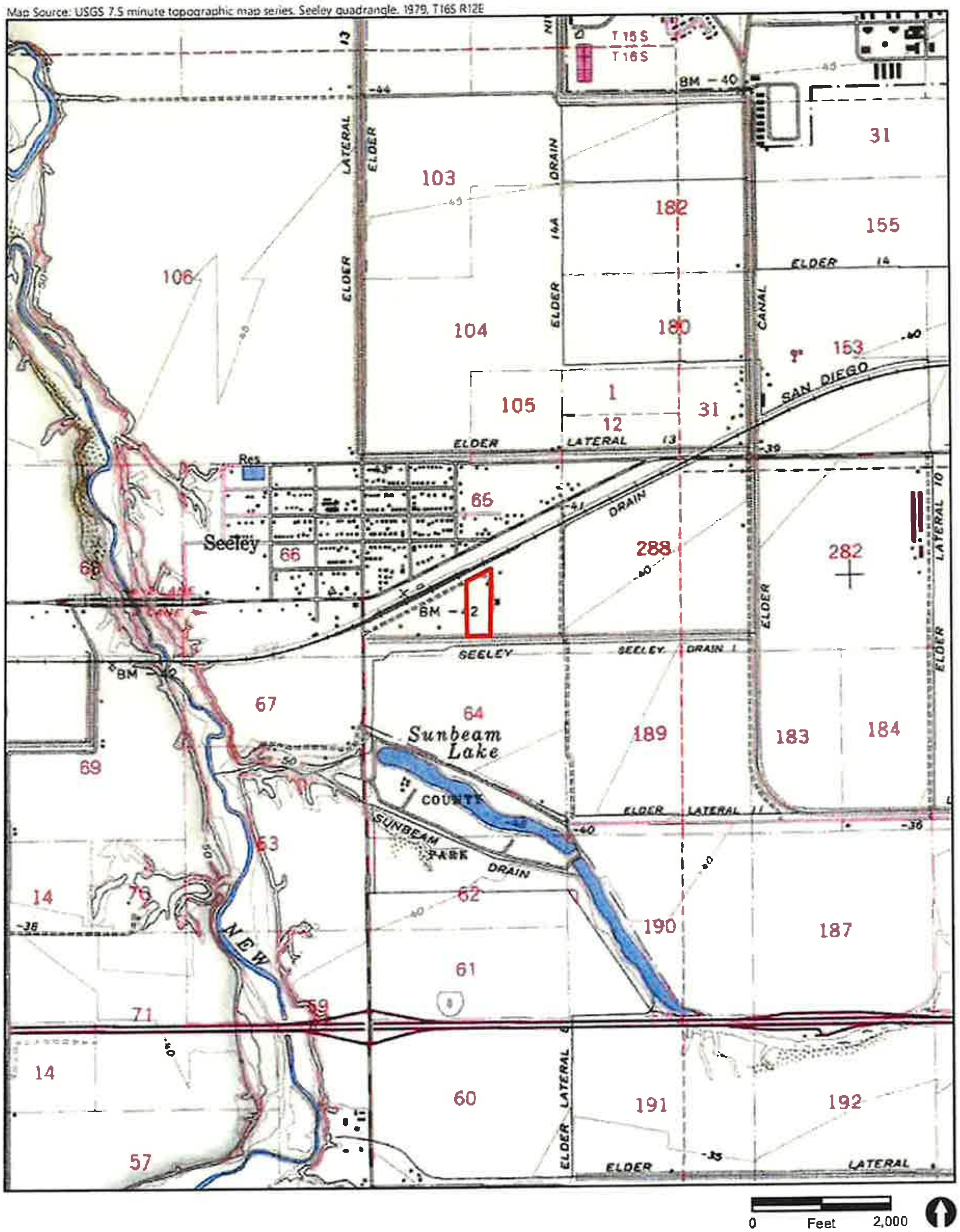
RECON

M:\JOBS6\10324\common_gis\MXD\fig1.mxd 5/15/2023 fmm

FIGURE 1
Regional Location

EEC ORIGINAL PKG

Map Source: USGS 7.5 minute topographic map series. Seeley quadrangle. 1979. T16S R12E



Project Boundary

FIGURE 2
Project Location on USGS Map

RECON

M:\JOBS6\10324\common_gis\MXD\fig2_USGS.mxd 03/08/2023 bma

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)

Project Boundary

FIGURE 3
Project Location on Aerial Photograph

RECON
M:\JOBS6\10324\common_gis\MXD\fig3_aerial.mxd 5/15/2023 fmm

EEC ORIGINAL PKG

RECON conducted an analysis of existing sensitive species data recorded within one mile of the project site. This analysis included searches of the California Natural Diversity Database (CNDDB; California Department of Fish and Wildlife [CDFW] 2023a), and the All Species Occurrences Database (U.S. Fish and Wildlife Service [USFWS] 2019. Additional maps, imagery, and databases reviewed included U.S. Geological Survey (USGS) topographic maps (1979), soils survey maps (U.S. Department of Agriculture [USDA] 1981), and online aerial images.

3.0 Survey Results/Existing Conditions

This section describes the existing physical and biological conditions of the project site. This includes a summary of land use, topographical features, soils, and observed biological resources on the project site.

3.1 Physical Characteristics

3.1.1 Existing Land Use

The project site consists of agriculturally-zoned land that was previously used for agricultural cultivation but has not been actively tilled for at least two decades. Some minor vehicle access still occurs in the north and eastern portion of the site as these areas are devoid of any vegetation. Re-establishment of patches of native vegetation within the less active southern half of the site has occurred.

3.1.2 Topography and Soils

Topography within the project site is generally level. Two soil types are mapped within the project site, Imperial-Glenbar silty clay loams 0 – 2 percent, and Holtville silty clay 0 – 2 percent (USDA 1981; Figure 4). Permeability on both soil types is slow in the surface layers and both are saline to slightly saline. These two soils can be used for crops with irrigation supplied.

3.2 Biological Resources

The botanical and wildlife species observed during the general survey are discussed below. A map showing the location of the vegetation communities that occur on the project site are shown on Figure 5.

3.2.1 Botanical Resources

Two vegetation communities were mapped within the project site; desert saltbush scrub and disturbed land (see Figure 5). Each community is discussed below.

Image Source: NearMap (flown January 2021)

Project Boundary

Soil Type

Holtville Silty Clay, Wet

Imperial-Glenbar Silty Clay Loams, Wet, 0-2% Slopes

FIGURE 4

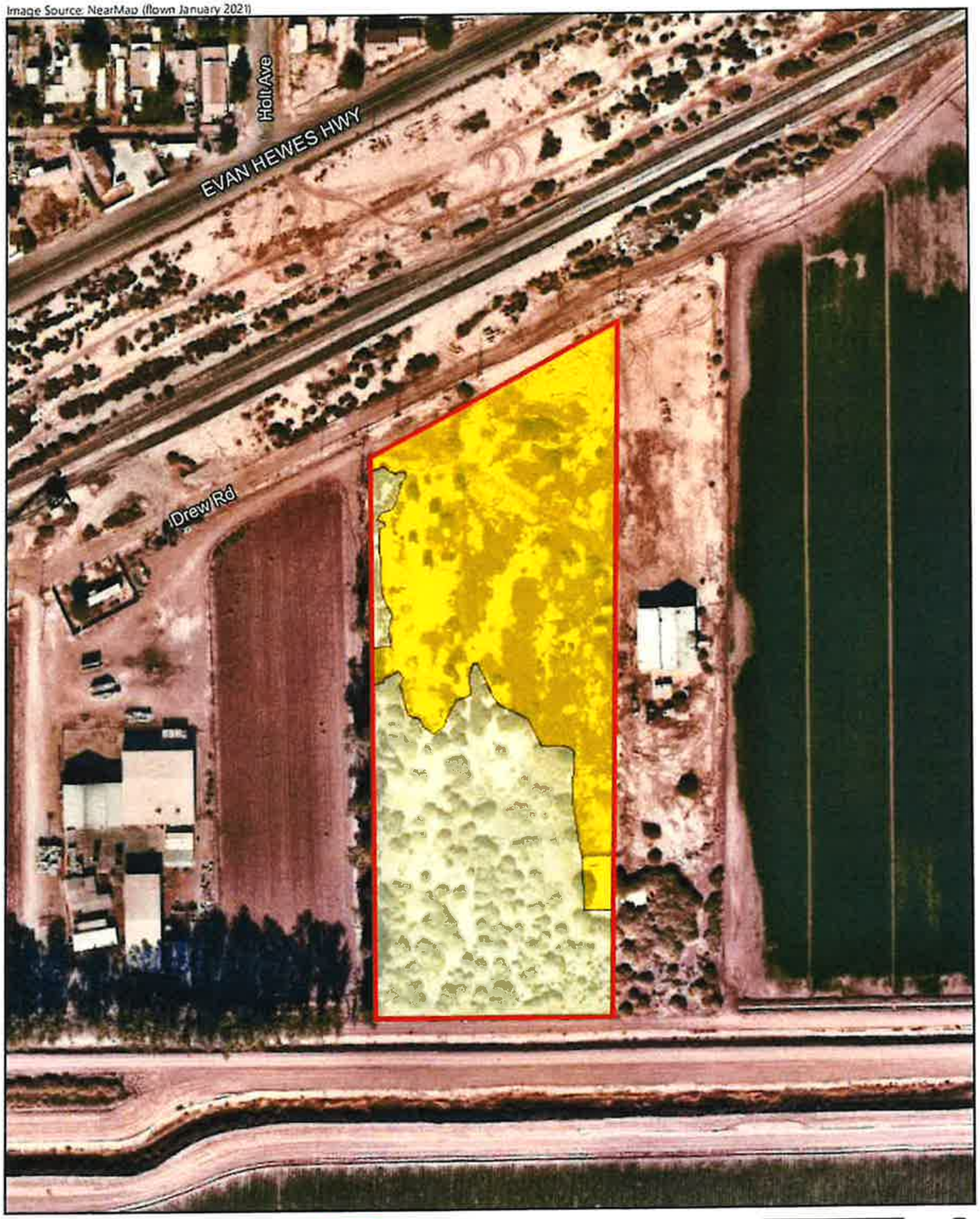
Soils

RECON

M:\JOBS6\10324\common_gis\MXD\fig4.mxd 5/15/2023 fmm

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)



Project Boundary

Vegetation Communities

Disturbed Desert Saltbush Scrub

Disturbed Land

0 Feet 200

RECON

M:\JOBS6\10324\common_gis\MXD\fig5.mxd 5/15/2023 fmm

FIGURE 5

Vegetation Communities

EEC ORIGINAL PKG

Desert saltbush scrub is the predominant vegetation community on the southern half of the project site and as a narrow strip along the western boundary. It is comprised of a single shrub species, big saltbush (*Atriplex lentiformis*). These bushes have colonized the site and have grown to a large stature (Photographs 1 and 2). Total shrub cover ranges between 20 and 60 percent. It occurs on 3.2 acres of the project site.

Disturbed land consists of mostly bare ground that is subjected to continued disturbance, preventing establishment of substantial vegetation cover. The disturbed land areas occur primarily on the northern half of the site and along the eastern boundary (see Figure 5). Some areas contain abandoned farm equipment, vehicles, wooden crates, and other debris in scattered small piles (Photographs 3 and 4). It occurs on 3.9 acres of the project site.

3.2.2 Zoological Resources

A total of eight animal species were detected within the project site. Seven bird species and one mammal species were identified and are typical of Colorado Desert communities and agricultural areas (Table 1). The lack of plant species diversity, soil type, and level of disturbance limit the number of wildlife species that can be supported on the site.

Table 1
Wildlife Species Observed

Major Wildlife Group	Family	Scientific / Common Name	Origin*
Birds	Odontophoridae / New World Quail	*Callipepla gambelii* / Gambel's quail	N
	Falconidae / Falcons	*Falco sparverius* / American kestrel	N
	Columbidae / Pigeons & Doves	*Zenaida macroura* / mourning dove	N
	Trochilidae / Hummingbirds	*Calypte anna* / Anna's hummingbird	N
	Tyrannidae / Tyrant Flycatchers	*Tyrannus verticalis* / western kingbird	N
	Remizidae / Verdin	*Auriparus flaviceps* / verdin	N
	Mimidae / Mockingbirds & Thrashers	*Mimus polyglottos* / northern mockingbird	N
Mammals	Leporidae / Rabbits & Hares	*Sylvilagus audubonii* / desert cottontail	N

*N =Native to locality.

3.3 Sensitive Biological Resources

3.3.1 Regulatory Setting

3.3.1.1 Regulatory Framework

Various federal and state regulations or policies apply to biological resources on the project site and are summarized below.

PHOTOGRAPH 1
View of Desert Saltbush Scrub Looking South

PHOTOGRAPH 2
View of Desert Saltbush Scrub Showing Size of Big Saltbush (*Atriplex lentiformis*)

EEC ORIGINAL PKG

PHOTOGRAPH 3
View of Disturbed Land on Northern Portion of Site Looking North

PHOTOGRAPH 4
View of Disturbed Land on Northern Portion of Site Looking West

a. Federal Regulations

The federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered 'take' under the ESA. Section 9(a) of the ESA defines 'take' as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The ESA is administered by the USFWS.

The Migratory Bird Treaty Act (MBTA; 16 United States Code 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is listed at 50 Code of Federal Regulations (CFR) 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and any part, egg, or nest of such birds (50 CFR 10.12). The MBTA, which is enforced by USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation. The take, possession, import, export, transport, sale, purchase, barter, or offering of these activities is prohibited, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.11). Pursuant to U.S. Department of the Interior Memorandum M-37050, the federal MBTA is no longer interpreted to cover incidental take of migratory birds (U.S. Department of the Interior 2017). Therefore, impacts that are incidental to implementation of an otherwise lawful project would not be considered significant.

b. State Regulations

The California Environmental Quality Act (CEQA) requires an environmental review for projects with potentially adverse impacts on the environment. Adverse environmental impacts are typically mitigated in accordance with state laws and regulations.

The California ESA is similar to the federal ESA in that it provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction.

Section 3503 of the California Fish and Game Code states that it is "unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto," and Section 3503.5 states that it is "unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of any such bird" unless authorized (State of California 1991).

3.3.1.2 Sensitivity Criteria

Vegetation communities are considered sensitive natural communities if they are of limited distribution; have federal, state, or local laws regulating their development; and/or support concentrations of sensitive plant or wildlife species. For purposes of this report, the following natural communities are considered sensitive: (1) communities with state rarity ranks of S1-S3, as reviewed by the Vegetation Classification and Mapping Program (VegCAMP) and CNPS, and recognized by CDFW (2023a); and (2) wetlands and waters under the jurisdiction of federal and state agencies.

For purposes of this report, plant and wildlife species would be considered sensitive if they are: (1) listed by state or federal agencies as rare, threatened, or endangered or are proposed for listing; (2) given a California Rare Plant Rank 1B (considered endangered throughout its range), 2 (considered endangered in California but more common elsewhere), 3 (more information about the plant's distribution and rarity needed), or 4 (plants of limited distribution) in the CNPS Inventory of Rare and Endangered Vascular Plants of California (2023); (3) considered rare, endangered, or threatened by CDFW (2023b-f); or (4) identified by another recognized conservation or scientific group as being depleted, potentially depleted, declining, rare, critical, endemic, endangered, or threatened.

3.3.2 Sensitive Vegetation Communities

No sensitive vegetation communities occur on the site.

3.3.3 Sensitive Plant Species

No sensitive plant species were observed and no sensitive plant species were determined to have a potential to occur within project site. Two sensitive plant species have historic records from the vicinity of the project but have not been documented in the area in decades. The two species include chaparral sand verbena (*Abronia villosa* var. *aurita*) and mud nama (*Nama stenocarpa*; Table 2). Given the level of past and current disturbance and lack of suitable habitat, these species are not expected to occur on the site.

3.3.4 Sensitive Wildlife Species

Based on an assessment of species location records, the following three sensitive wildlife species were found to have historic records in the vicinity of the project site. These species include mountain plover (*Charadrius montanus*), Yuma ridgeway's rail (*Rallus obsoletus yumanensis*), and California black rail (*Laterallus jamaicensis coturniculus*; Table 3). The mountain plover is a winter resident species that prefers grasslands and fields which do not occur on the project site. The Yuma ridgeway's rail and California black rail prefer emergent marshland vegetation associated with wetlands and rivers which do not occur on the project site.

One other sensitive wildlife species, burrowing owl (*Athene cunicularia*), was evaluated for presence on the project site given species observations in the Imperial Valley. This species is not expected to use or breed on the site due to the lack of suitable burrows, evidence of small burrowing mammals (prey species), and overall level of disturbance.

Table 2
Sensitive Plant Species Observed or with the Potential to Occur

Major Plant Group	Family	Scientific Name / Common Name	Federal Status	State Status	CNPS Rare Plant Rank	Habitat Preference / Requirements	Potential to Occur On-site	Basis for Determination of Occurrence Potential
Angiosperms: Eudicots	Namaceae / Nama Family	*Nama stenocarpum* / mud nama	--	--	2B.2	Annual/perennial herb; marshes and swamps, lake margins, riverbanks; blooms January–July; elevation less than 1,700 feet.	Low	Site lacks suitable wet habitat required by the species.
	Nyctaginaceae / Four O'clock Family	*Abronia villosa* var. *aurita* / chaparral sand verbena, foothill sand-verbena*	--	--	1B.1	Annual herb; sandy floodplains in inland, arid areas of coastal sage scrub and open chaparral; blooms January–September; elevation 300–5,300 feet.	Low	Site is not part of a sandy floodplain; lacks suitable habitat.

California Native Plant Society (CNPS): California Rare Plant Ranks (CRPR)
1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
0.1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
0.2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).

Table 3
Sensitive Wildlife Species Observed or with the Potential to Occur

Major Wildlife Group	Family	Scientific Name / Common Name	Federal Status	State Status	Habitat Preference / Requirements	Potential to Occur On-Site	Basis for Determination of Occurrence Potential
Birds	Rallidae / Rails, Gallinules, & Coots	*Laterallus jamaicensis coturniculus* / California black rail		ST, CFP	Tidal marshes, grassy marshes. Resident populations extirpated.	Low	Site lacks suitable wetland emergent vegetation. The past and current level of disturbance make it unlikely for the site to support this species.
		Rallus obsoletus [=*longirostris*] *yumanensis* / Yuma Ridgway's [=clapper] rail	FE	ST, CFP	Marshland vegetation, dense cattail stands, bulrush, reeds. Resident.	Low	Site lacks suitable wetland emergent vegetation. The past and current level of disturbance make it unlikely for the site to support this species.
	Charadriidae / Lapwings & Plovers	*Charadrius montanus* / mountain plover		SSC	Grasslands, fields, valleys. Localized winter resident.	Low	Site lacks suitable habitat for this species. The past and current level of disturbance makes the site unlikely to support this species.
	Strigidae / Typical Owls	*Athene cunicularia* / burrowing owl		SSC	Grassland, agricultural land, coastal dunes. Require rodent burrows. Declining resident.	Low	Site lacks suitable burrowing mammals and associated burrows. No evidence of burrowing owl habitat or usage was observed on the site.

STATUS CODES

Federal Status
FE = Listed as endangered by the federal government

State Status
CFP = California fully protected species
ST = Listed as threatened by the state of California
SSC = California Department of Fish and Wildlife species of special concern

EEC ORIGINAL PKG

3.3.5 Wildlife Movement Corridors

Wildlife movement corridors are defined as areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. The project site lies adjacent to a large expanse of agricultural land, which isolates the project site from undisturbed desert habitats. While the project site functions as part of general habitat that provides for local movement of terrestrial wildlife, it does not serve as a corridor between native desert habitat.

4.0 Project Impact Analysis

Although the final footprint of the completed BESS facility would not occupy the entire project site, construction activities would likely have direct impacts to the entire 7.1 acres (Figure 6). Thus, there would be impacts to 3.2 acres of desert salt bush scrub and 3.9 acres of disturbed land. The significance of these impacts to biological resources is discussed below.

In accordance with Appendix G of the CEQA Guidelines, the project would have a significant impact if it would:

- 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 CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Project Boundary
Battery Storage Facility

Vegetation Communities

Disturbed Desert Saltbush Scrub

Disturbed Land

RECON

M:\JOBS6\10324\common_gis\MXD\fig6.mxd 5/15/2023 fmm

FIGURE 6
Project Impacts

EEC ORIGINAL PKG

The project site does not support, nor would it affect, any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the CDFW or USFWS. The project site does not support any riparian habitat or other sensitive natural community. The project site does not contain any federally protected wetlands. Development of the site would not conflict with any local policies or ordinances protecting biological resources nor would it conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. Therefore, no significant impacts to biological resources in these categories would occur from the project.

Nesting birds including raptors covered under the California Fish and Game Code Sections 3503 and 3503.5 have potential to be directly impacted by the project if construction activities (i.e., clearing, grubbing, grading) occur during the general nesting season of February 1 to September 15. Direct impacts to nesting birds and raptors would be considered significant and require avoidance measures.

5.0 Avoidance Measures and Monitoring Recommendations

As currently designed, the project has the potential to result in significant direct impacts to nesting birds. The following general mitigation for biological resource protection during construction would be included in the environmental document:

> To avoid direct impacts to avian species, removal of habitat that supports active nests in the proposed area of disturbance should occur outside the general breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, the qualified biological monitor would conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey would be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). The applicant would submit the results of the pre-construction survey for review and approval prior to initiating any construction activities.
>
> If nesting birds are detected, a letter report or mitigation plan in conformance with applicable state and federal law (i.e., appropriate follow up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) would be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan would be submitted for review and approval.

6.0 References Cited

Baker, R. J., Lisa C. Bradley, Robert D. Bradley, Jerry W. Dragoo, Mark D. Engstrom, Robert S. Hoffman, Cheri A. Jones, Fiona Reid, Dale W. Rice, and Clyde Jones

2003 Revised Checklist of North American Mammals North of Mexico. Occasional Papers, Museum of Texas Tech University No. 229. December.

Baldwin, B. G., D. Goldman, D. J, Keil, R. Patterson, T. J. Rosatti, and D. Wilken (editors)

2012 *The Jepson Manual: Vascular Plants of California.* Second edition, thoroughly revised and expanded. University of California Press, Berkeley, Los Angeles, and London. January.

California Department of Fish and Wildlife (CDFW)

2023a California Sensitive Natural Communities list. Accessed on April 19, 2019. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

2023b State and Federally Listed Endangered, Threatened, and Rare Plants of California. Natural Diversity Database. August 6.

2023c Special Animals List. Periodic Publication. 67 pp. Natural Diversity Database. November.

2023d State & Federally Listed Endangered & Threatened Animals of California. Natural Diversity Database. August 6.

2023e Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento. Accessed March. RareFind Version 5.2.14.

2023f Special Vascular Plants, Bryophytes, and Lichens List. Quarterly Publication. 140 pp. Natural Diversity Database. March.

California Native Plant Society (CNPS)

2019 Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Accessed on April 17, 2019. http://www.rareplants.cnps.org.

California, State of

1991 Fish and Game Code of California.

Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, B. E. Hernández-Baños, R. A. Jiménez, A. W. Kratter, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., D. F. Stotz, and K. Winker

2022 Check-list of North American Birds (online). American Ornithological Society. https://checklist.americanornithology.org/taxa/.

Crother, B. I., Ronald M. Bonett, Jeff Boundy, Frank T. Burbrink, Kevin de Queiroz, Darrel R. Frost, Richard Highton, John B. Iverson, Elizabeth L. Jockusch, Fred Kraus, Kenneth L. Krysko, , Adam D.

Leaché, Emilly Moriarty Lemmon, Roy W. McDiarmid, Joseph R. Mendelson III, Peter A. Meylan, Tod W. Reeder, Sara Ruane, and Michael E. Seidel
2017 *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding*, Eighth Edition. Society for the Study of Amphibians and Reptiles Herpetological Circular No. 43.

U.S. Department of Agriculture (USDA)
1981 Soil Survey, Imperial Valley Area, California. Edited by Robert P. Zimmerman. Soil Conservation Service.

U.S. Fish and Wildlife Service (USFWS)
2019 All Species Occurrences Database. Accessed March 2019. https://www.fws.gov/carlsbad/GIS/CFWOGIS.html.

U.S. Department of the Interior
2017 Memorandum M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take. December 22.

U.S. Geological Survey (USGS)
1979 Seeley, California 7.5 Minute Topographic Map.

University of California
2023 Jepson eFlora. The Regents of the University of California. Accessed March 2023. http://ucjeps.berkeley.edu/eflora/.

RECON

An Employee-Owned Company

May 31, 2023

Mr. Ramon Gonzalez
Senior Project Coordinator
Z Global
750 W. Main Street
El Centro, CA 92243

Reference: Cultural Resources Report for the Alba Peaker Battery Energy Storage System Project, Seeley, California (RECON Number 10324)

Dear Mr. Gonzalez:

This report details the results of a cultural resources survey conducted for the Alba Peaker Battery Energy Storage System (BESS) Project (project). This report has been prepared to provide necessary information to identify the effects of the project on historical resources.

PROJECT LOCATION AND DESCRIPTION

The project site is located within the unincorporated community of Seeley, in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8 (Figure 1). The project site occurs within Section 72, Township 16 South, Range 12 East of the U.S. Geological Survey 7.5-minute topographic map, Seeley quadrangle (Figure 2). The project site is comprised of Assessor's Parcel Number (APN) 051-420-042, totaling approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain. Land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east (Figure 3).

The project would construct and operate a 100-megawatt BESS facility that would connect to an existing 92-kilovolt gen-tie line (see Figure 3). The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

Area of Potential Effect

The 7.1-acre parcel is considered the area potential effect (APE).

METHODS

To determine if the project would adversely impact historical resources, background research, review of topographic maps and historic aerial photographs, and an on-foot survey were completed. Prior to the survey, a records search was requested from the California Historical Resources Information System, South Coastal Information Center (SCIC) to identify any previously recorded cultural resources within a one-mile radius of the APE. On March 22, 2023, RECON Environmental, Inc. (RECON) archaeologists Nathanial Yerka and Charlie Musser accompanied by Anthony LaChappa, a Native American monitor from Red Tail Environmental, conducted a pedestrian survey of the APE using 15-meter transects. Carmen Zepeda-Herman served as principal investigator. Ms. Zepeda-Herman is a member of the

Register of Professional Archaeologists (RPA) and meets the Secretary of the Interior Standards for Archaeology and Historic Preservation.

The primary goal of this survey was to determine (1) if there are previously unrecorded cultural resources present, and if so, document the resources' locations and what they consist of and (2) to update conditions of previously recorded cultural resources. The APE was inspected for evidence of archaeological materials such as flaked and ground stone tools or fragments, ceramics, milling features, and human remains. Photographs were taken to document the environmental setting and general conditions. RECON used an Apple iPad running ESRI's ArcGIS Collector application paired with a Trimble R1 sub-meter global positioning system (GPS) containing shapefiles and aerial photography to pinpoint our location in real-time, which was used to navigate the APE.

NATIVE AMERICAN CONSULTATION

A letter was sent on March 8, 2023, to the Native American Heritage Commission (NAHC) requesting a search of their Sacred Lands File to identify spiritually significant and/or sacred sites or traditional use areas in the project vicinity. The NAHC was also asked to provide a list of local Native American tribes, bands, or individuals that may have concerns or interests regarding cultural resources potentially occurring within the APE. The NAHC responded on March 22, 2023, indicating that their search of the Sacred Lands File was positive. The NAHC attached a list of Native American tribes who may also have knowledge of cultural resources in the project area (Attachment 1).

BACKGROUND RESEARCH

The SCIC records search indicated that there have been eight cultural investigations conducted within one mile of the APE, one of which includes a portion of the APE (Confidential Attachment 1). The record search also indicated five historic-era cultural resources situated within one mile of the APE (Table 1). These cultural resources are comprised of a railroad, a highway, a government building, foundations, a monument, and a trash scatter. None of the previously recorded cultural resources were mapped within the APE.

Table 1
Cultural Resources within a One-Mile Radius of the APE

Primary #	Trinomial	Period	Site Type	Recording Events
P-13-008418	CA-IMP-007886	Historic	Highway	2001, 2009, 2011 (ASM Affiliates); 2007 (McKenna); 2007 (SWCA); 2009 (URS); 2011 (AECOM)
P-13-009223		Historic	Trash scatter	2007 (Jones & Stokes)
P-13-009224		Historic	Foundations; Monument	2007 (Jones & Stokes)
P-13-009225		Historic	Government building	2007 (Jones & Stokes)
P-13-009302	CA-IMP-008489	Historic	Railroad	2007, 2009 (McKenna et al.); 2007 (SWCA); 2009, 2011 (ASM); 2009 (URS); 2010, 2011 (AECOM)

A review of topographic maps and historic aerial photographs show that the APE has been subject to agricultural cultivation since at least 1953—the first available aerial photograph—with the northern boundary being the present-day Drew Road alignment, the southern boundary on the down slope of a drain alignment, and the western and eastern boundaries established by tilling rows. The next available aerial from 1984 exhibits the parcel free of all vegetation and a building towards the southeastern corner of the APE. Also in 1984, the building adjacent to the eastern boundary near the center of the parcel is exhibited. By 1985, the superstructure of the southern building is removed leaving only a concrete foundation. A structure is represented as occurring at the northeast corner of the APE on the 1958 topographic map and continues on the subsequent 1961, 1976, 1980, and 1983 maps. The structure does not appear on any available photographs. The 1980 topographic map first represents the building adjacent to the east and continues to appear on subsequent maps. The building towards the south within the APE is never represented on any topographic map. By 2002, several alignments of vehicle and materials storage occur across the APE. The parcel is kept free of vegetation through 2016, but by 2017, most vehicles and materials have been removed from the southern two-thirds and non-native vegetation takes over. No apparent changes occur within the APE in subsequent photographs dating to 2019 and 2020 (Nationwide Environmental Title Research LLC 2023).

RESULTS OF SURVEY

No significant or potentially significant prehistoric or historic cultural resources were observed during the survey of the APE. RECON and Red Tail Environmental completed the survey under sunny and mild conditions. The survey commenced in the southeast corner utilizing east-west transects and translated north across the APE. The entirety of the APE has been subject to ground disturbance from past agricultural activity. Ground visibility averaged approximately 60 percent across the APE with areas of dense ground cover composed of non-native weeds and bushes, as well as materials staging and dumping, assorted vehicles, and assorted agricultural equipment. The remainder is open soil (Photographs 1-3). The APE is fenced on the western, northern, and southern sides, with the eastern boundary open to the adjacent parcel. The dominant feature of the APE is the circa 1980, 75-foot (north/south) by 50-foot (east/west) concrete foundation that is 1 foot in height on the south side and 3 feet in height on the north side. Along the eastern edge of the concrete foundation and towards its southeast corner is an angled metal traffic guard that is approximately 8 feet in length (Photographs 4 and 5). Towards the southeast corner of the APE, there are several utility poles that make up the eastern boundary. A pair of north-south pole alignments is situated near the western boundary that was used as a mid-2000s shade structure for vehicle storage (Photograph 6). There are three areas along the western boundary used as wheel and tire dumps. Other staged material includes numerous stacked wooden pallets, cut wood rounds, and agricultural equipment. Other surface disturbances include several trash burn areas, assorted metal, concrete and asphalt fragments, dimensional lumber, and modern rubbish comprised of assorted paper, plastic, and consumer bottle glass.

REGULATORY CONTEXT

The project is subject to state and County of Imperial environmental regulations. The County is the lead agency for the California Environmental Quality Act (CEQA) guidelines and regulations.

California Environmental Quality Act

The regulatory framework and methods for determining impacts on cultural resources include compliance with CEQA requirements as defined in Section 15064.5 of the CEQA Guidelines, Determining the Significance of Impacts to Archaeological and Historical Resources. These guidelines require the identification of cultural resources that could be affected by the project, the evaluation of the significance of such resources, an assessment of project impacts on significant resources, and a development of a research design and data recovery program to avoid or address adverse effects to significant resources. Significant resources, also called historical resources, are those cultural resources (whether prehistoric or historic) that have been evaluated and determined to be eligible for listing in the California Register of Historical Resources.

According to CEQA Section 15064.5(a), a historical resource includes the following:

1. A resource listed in, or determined to be eligible for listing on, the California Register of Historical Resources.
2. A resource included in the local register.

3. A resource which an agency determines to be historically significant. Generally, a resource shall be considered to be "historically significant," if the resource meets the criteria for listing on the California Register of Historical Places (Public Resources Code Section 5024.1 Title 14 California Code of Regulations, Section 4852) including the following:
   A. Is associated with events that have made a significant contribution to the broad patterns of California's history or cultural heritage;
   B. Is associated with the lives of persons important in our past;
   C. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of an important creative individual, or possesses high artistic values; or
   D. Has yielded, or maybe likely to yield, information important to prehistory or history.
4. The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources or a local register does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

A resource must meet one of the above criteria and must have integrity; that is, it must evoke the resource's period of significance or, in the case of criterion D, it may be disturbed, but it must retain enough intact and undisturbed deposits to make a meaningful data contribution to regional research issues.

MANAGEMENT RECOMMENDATIONS

No significant or potentially significant prehistoric or historic cultural resources were observed during the survey of the APE. The SCIC records search was negative for the APE and returned only historic-era resources within the requested search area. The possibility of intact buried significant cultural resources being present within the APE is considered low due to past agricultural cultivation. RECON recommends no additional cultural resource work for this project.

Please call Ms. Zepeda-Herman at (619) 308-9333 ext. 133 if you have any questions or concerns about this project.

Sincerely,

Nathanial Yerka,
Project Archaeologist

Carmen Zepeda-Herman

Carmen Zepeda-Herman, M.A., RPA
Principal Investigator

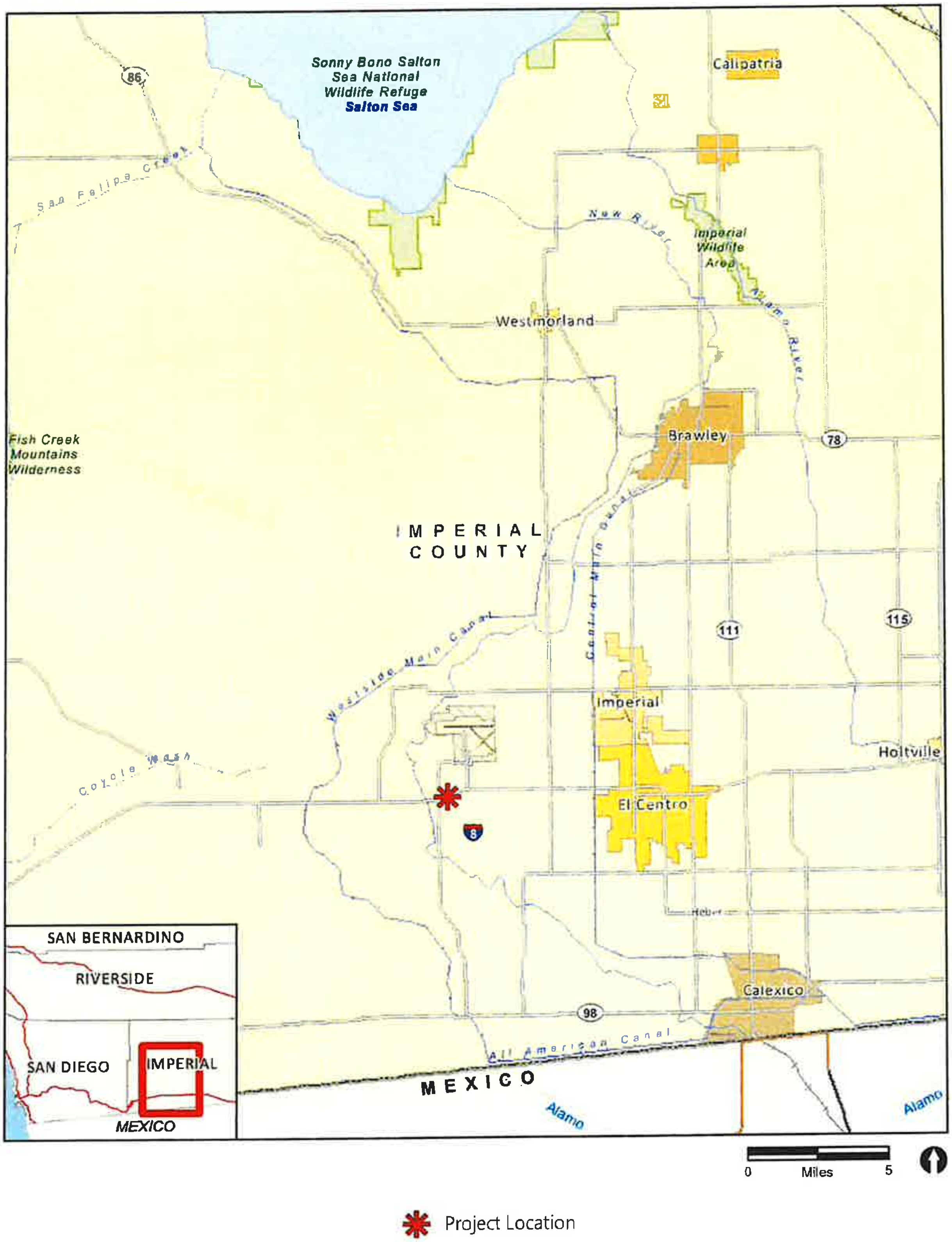
NDY:CZH:sh

Attachment

REFERENCE CITED

Nationwide Environmental Title Research
2023 Historic Aerials. http://www.historicaerials.com/. Accessed on May 19, 2023.

EEC ORIGINAL PKG



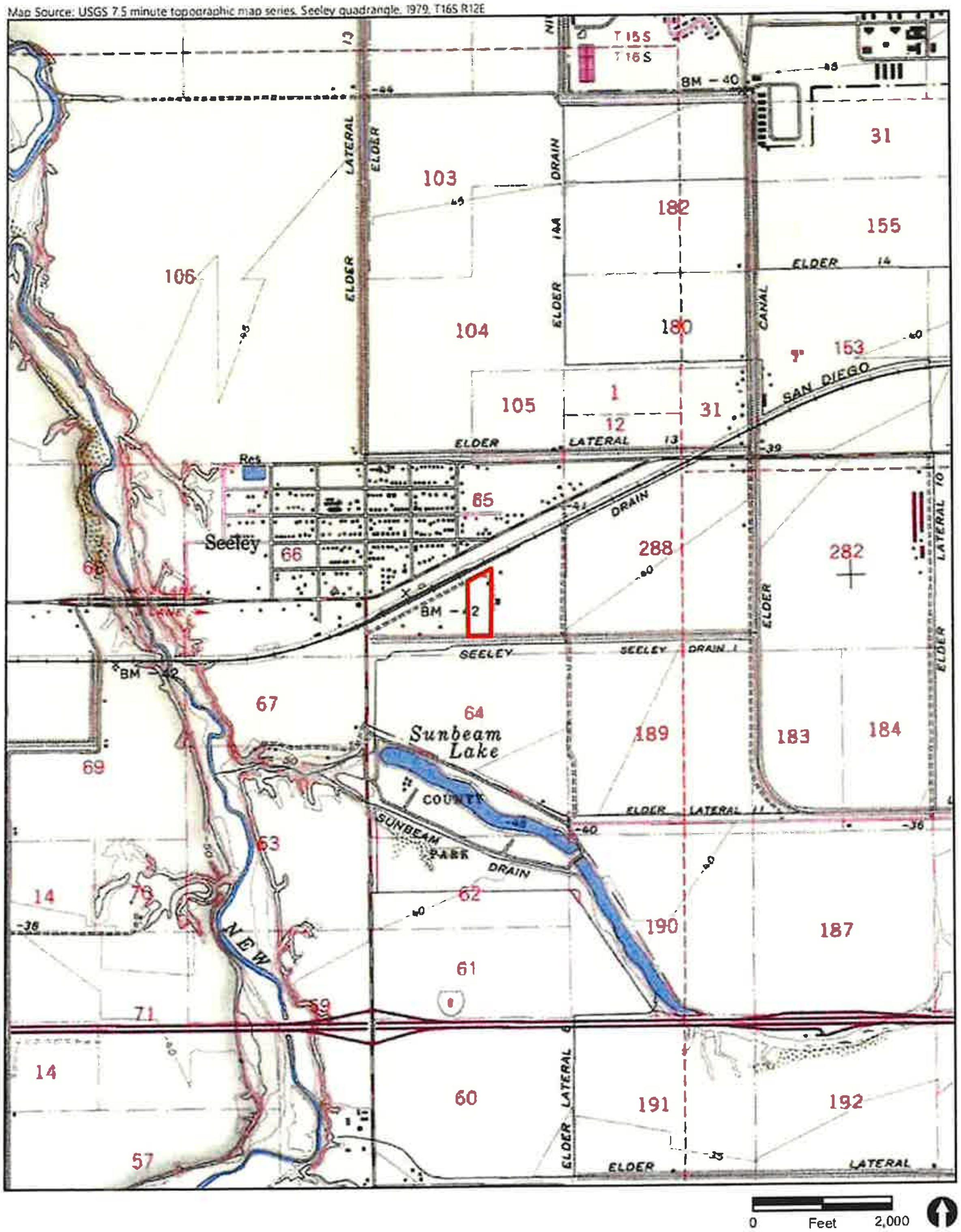
RECON

M:\JOBS6\10324\common_gis\MXD\fig1.mxd 03/08/2023 bma

FIGURE 1
Regional Location

EEC ORIGINAL PKG

Map Source: USGS 7.5 minute topographic map series. Seeley quadrangle, 1979, T16S R12E



Project Boundary

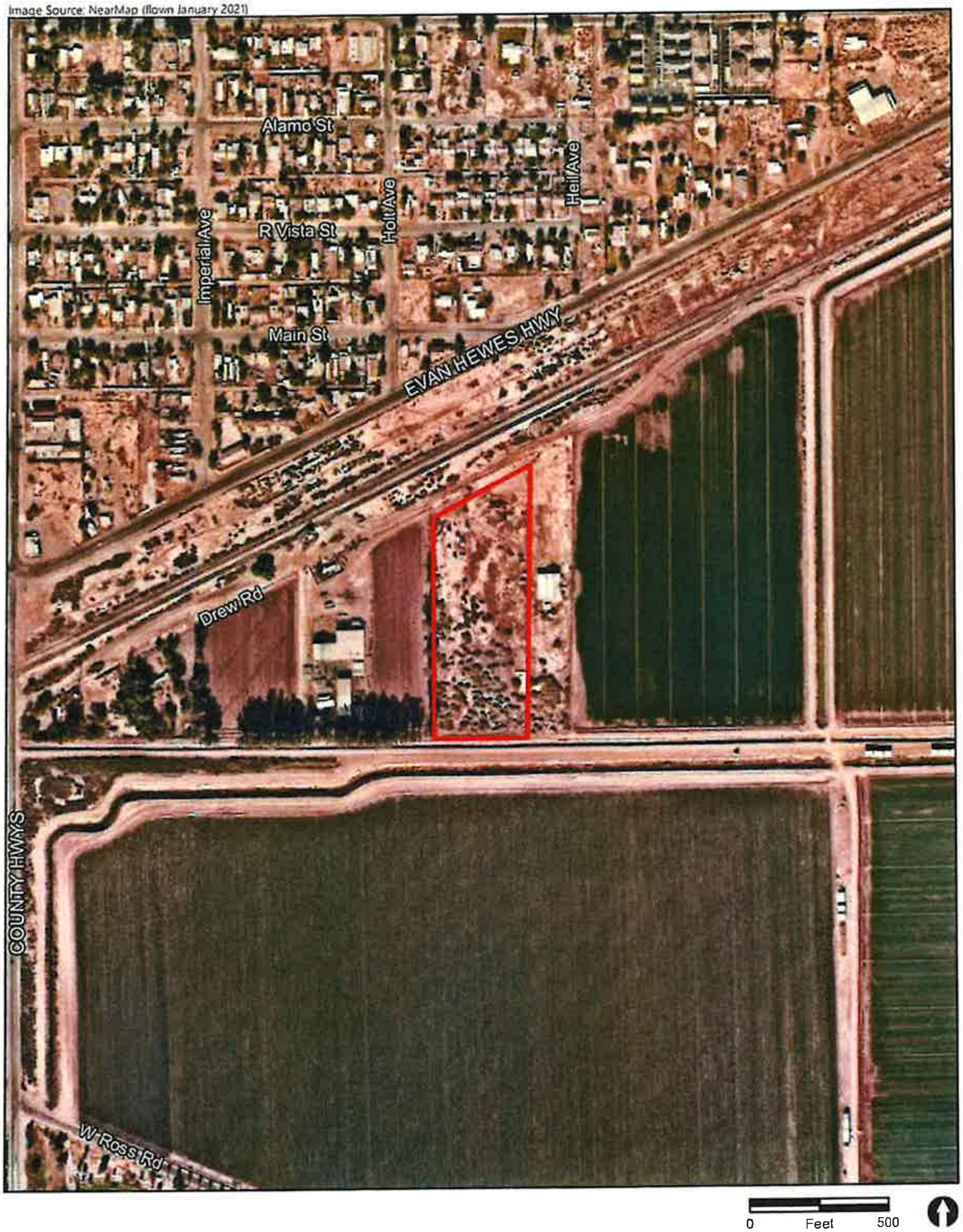
FIGURE 2
Project Location on USGS Map

RECON

M:\JOBS6\10324\common_gis\MXD\fig2_USGS.mxd 03/08/2023 bma

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)



Project Boundary

FIGURE 3

Project Location on Aerial Photograph

RECON

M:\JOBS6\10324\common_gis\MXD\fig3_aerial.mxd 03/08/2023 bma

EEC ORIGINAL PKG

PHOTOGRAPH 1
Overview of Survey Area in Southern Portion of APE, Looking North

PHOTOGRAPH 2
Overview of Materials Staging in Northern Portion of APE, Looking North-Northeast

PHOTOGRAPH 3
Overview of Survey Area from Northwestern APE Corner, Looking Southeast

PHOTOGRAPH 4
Overview of circa 1980 Concrete Foundation in Southeast Project APE, Looking Northwest

EEC ORIGINAL PKG

PHOTOGRAPH 5
Overview of circa 1980 Concrete Foundation in Southeast Project APE, Looking Southeast

PHOTOGRAPH 6
Overview of Shade Structure Support Poles, Looking Southwest

RECON

An Employee-Owned Company

June 6, 2023

Mr. Ramon Gonzalez
Senior Project Coordinator
Z Global
750 W. Main Street
El Centro, CA 92243

Reference: Greenhouse Gas Analysis for the Alba Peaker BESS Project, Seeley, California
(RECON Number 10324)

Dear Mr. Gonzalez:

The purpose of this letter report is to assess potential greenhouse gas (GHG) impacts associated with construction and operation of the Alba Peaker Battery Energy Storage Site (BESS) Project (project). As discussed in this analysis, the project would not make a cumulatively considerable contribution to total GHG emissions in Imperial County or California. As California procures increasing amounts of renewable energy to meet the goals of Senate Bill (SB) 100, the state will need to deploy a significant amount of energy storage capability. As the project would provide energy storage, it would assist the state's goal of utilizing 100 percent renewable energy by 2045. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs, and impacts would be less than significant.

1.0 Project Description

The project site is located within the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8 (Figure 1). The project site is comprised of Assessor Parcel Number 051-420-042, totaling approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 2). Land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east.

The project would construct and operate a 100-megawatt BESS facility that would connect to an existing 92-kilovolt gen-tie line (Figure 3). The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

2.0 Environmental Setting

2.1 State GHG Inventory

The California Air Resources Board (CARB) performs statewide GHG inventories. The inventory is divided into nine broad sectors of economic activity: agriculture, commercial, electricity generation, forestry, high global warming potential (GWP) emitters, industrial, recycling and waste, residential, and transportation. Emissions are quantified in million metric tons of carbon dioxide equivalent (MMT CO_2E). Table 1 shows the estimated statewide GHG emissions for the years 1990, 2005, 2012, and 2018. Although annual GHG inventory data is available for years 2000 through 2020, the years 1990, 2005, 2012, and 2018 are highlighted in Table 1 because 1990 is the baseline year for established reduction targets, and 2005, 2012, and 2018 correspond to the same years for which inventory data for the region is available.

Table 1 California GHG Emissions by Sector				
Sector	1990[1] Emissions in MMT CO_2E (% total)[2]	2005[3] Emissions in MMT CO_2E (% total)[2]	2012[3] Emissions in MMT CO_2E (% total)[2]	2018[3] Emissions in MMT CO_2E (% total)[2]
Electricity Generation	110.5 (25.7%)	108.1 (22.6%)	99.1 (22.8%)	65.1 (15.8%)
Transportation	150.6 (35.0%)	187.6 (39.2%)	161.8 (37.2%)	169.6 (41.3%)
Industrial	105.3 (24.4%)	102.3 (21.4%)	91.0 (20.9%)	93.7 (22.8%)
Commercial	14.4 (3.4%)	16.1 (3.4%)	19.6 (4.5%)	22.3 (5.4%)
Residential	29.7 (6.9%)	30.3 (7.0%)	27.9 (6.4%)	28.1 (6.8%)
Agriculture & Forestry	18.9 (4.4%)	33.7 (7.0%)	35.2 (8.1%)	32.2 (7.8%)
Not Specified	1.3 (0.3%)	--	--	--
Total[4]	**430.7**	**478.1**	**434.6**	**411.0**

SOURCE: CARB 2007 and 2022a.
[1]1990 data was obtained from the CARB 2007 source and are based on Intergovernmental Panel on Climate Change (IPCC) fourth assessment report GWPs.
[2]Percentages may not total 100 due to rounding.
[3]2005, 2012, and 2018 data was retrieved from the CARB 2022a source and are based on IPCC fourth assessment report GWPs.
[4]Totals may vary due to independent rounding.

As shown in Table 1, statewide GHG source emissions totaled approximately 431 MMT CO_2E in 1990, 478 MMT CO_2E in 2005, 435 MMT CO_2E in 2012, and 411 MMT CO_2E in 2018. Many factors affect year-to-year changes in GHG emissions, including economic activity, demographic influences, environmental conditions such as drought, and the impact of regulatory efforts to control GHG emissions. As shown in Table 1, transportation-related emissions consistently contribute to the most GHG emissions.

2.2 Regional GHG Inventory

The Imperial County (County) Regional Climate Action Plan (Regional CAP) was adopted in June 2021 (Imperial County 2021). The Regional CAP inventoried existing emissions within the County and each of its incorporated cities. The results of the countywide emissions inventories are summarized in Table 2. As shown in Table 2, agricultural-related GHG emissions contributed the most countywide.

Table 2 Imperial Valley Regional GHG Emissions Inventory							
	2005		2012		2018		
Emissions Sector	MT CO_2E[1]	% Total	MT CO_2E[1]	% Total	MT CO_2E[1]	% Total	% Change from 2005
Transportation	656,655	16.3%	650,729	17.3%	748,111	19.7%	+13.9%
Energy	1,006,987	25.1%	757,037	20.2%	484,863	12.8%	-51.9%
Water	28,114	0.7%	30,158	0.8%	34,291	0.9%	+22.0%
Solid Waste	218,847	5.4%	132,773	3.5%	148,337	3.9%	-32.2%
Agriculture	2,081,481	51.8%	2,155,325	57.4%	2,354,168	61.9%	+13.1%
Propane	13,698	0.3%	14,856	0.4%	19,112	0.5%	+39.5%
Calexico POE[2]	12,649	0.3%	12,649	0.3%	12,649	0.3%	0.0%
Total[3]	**4,018,430**	**100%**	**3,753,527**	**100%**	**3,801,531**	**100%**	**-5.4%**

SOURCE: Imperial County 2021.
NOTE: Totals may vary due to independent rounding.
[1]MT CO_2E = metric tons of carbon dioxide equivalent.
[2]Data for emissions at the ports of entry (POEs) was only available for 2015. For purposes of this inventory, emissions estimates from 2015 were assumed constant for each inventory year. Emissions from POEs are not apportioned to individual jurisdictions.
[3]Electricity consumption associated with potable water treatment and delivery is not included in this total, as data for this activity was not available for unincorporated County.

2.4 Regulatory Setting

In response to rising concern associated with increasing GHG emissions and global climate change impacts, several plans and regulations have been adopted at the international, national, and state levels with the aim of reducing GHG emissions. The main source of GHG emissions associated with the project would be construction activities. The following is a discussion of the plans and regulations most applicable to the project.

2.4.1 Federal

On September 27, 2019, the United States Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" (84 Federal Register 51310). The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On April 30, 2020, the U.S. EPA and the National Highway Traffic Safety Administration published the final SAFE Vehicles Rule: Part Two (85 Federal Register 24174). The SAFE Vehicles Rule proposes amended Corporate Average Fuel Economy and Light-Duty Vehicle Greenhouse Gas Emissions Standards. The SAFE Rule relaxed federal GHG emissions and Corporate Average Fuel Economy standards to increase in stringency at only about 1.5 percent per year from model year 2020 levels over model years 2021 through 2026. The previously established emission standards and related "augural" fuel economy standards would have achieved about 4 percent per year improvements through model year 2025. Part Two of the SAFE Vehicles Rule set amended fuel economy and CO_2 standards for Passenger Cars and Light Trucks for model years 2021 through 2026.

EEC ORIGINAL PKG

2.4.2 State

2.4.2.1 Executive Orders and statewide GHG Emission Targets

Executive Order S-3-05

This Executive Order (EO) established the following GHG emission reduction targets for the state of California:

- by 2010, reduce GHG emissions to 2000 levels;
- by 2020, reduce GHG emissions to 1990 levels; and
- by 2050, reduce GHG emissions to 80 percent below 1990 levels.

This EO also directs the secretary of the California Environmental Protection Agency to oversee the efforts made to reach these targets, and to prepare biannual reports on the progress made toward meeting the targets and on the impacts to California related to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. With regard to impacts, the report shall also prepare and report on mitigation and adaptation plans to combat the impacts. The first Climate Action Team Assessment Report was produced in March 2006 and has been updated every two years.

Executive Order B-30-15

This EO establishes an GHG emission reduction goal for the State of California by 2030 of 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05. Additionally, this EO directed California Air Resources Board (CARB) to update its Climate Change Scoping Plan to address the 2030 goal.

2.4.2.2 California Global Warming Solutions Act

In response to EO S-3-05, the California Legislature passed Assembly Bill 32 (AB) 32, the California Global Warming Solutions Act of 2006, and thereby enacted Sections 38500–38599 of the California Health and Safety Code. The heart of AB 32 is its requirement that CARB establish an emissions cap and adopt rules and regulations that would reduce GHG emissions to 1990 levels by 2020. AB 32 also required CARB to adopt a plan by January 1, 2009, indicating how emission reductions would be achieved from significant GHG sources via regulations, market mechanisms, and other actions.

In 2008, CARB estimated that annual statewide GHG emissions were 427 MMT CO_2E in 1990 and would reach 596 MMT CO_2E by 2020 under a business as usual (BAU) condition (CARB 2008). To achieve the mandate of AB 32, CARB determined that a 169 MMT CO_2E (or approximate 28.5 percent) reduction in BAU emissions was needed by 2020. In 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. CARB determined that the economic downturn reduced the 2020 BAU by 55 MMT CO_2E; as a result, achieving the 1990 emissions level by 2020 would require a reduction in GHG emissions of 21.7 (not 28.5) percent from the 2020 BAU. California has achieved its 2020 goal.

Approved in September 2016, SB 32 updates the California Global Warming Solutions Act of 2006 and enacts EO B-30-15. Under SB 32, the state would reduce its GHG emissions to 40 percent below 1990 levels by 2030. This is equivalent to an emissions level of approximately 260 MMT CO_2E for 2030. In implementing the 40 percent reduction goal, CARB is required to prioritize emissions reductions to consider the social costs of the emissions of GHGs; where "social costs" is defined as "an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year."

2.4.2.3 Climate Change Scoping Plan

As directed by the California Global Warming Solutions Act of 2006, in 2008, CARB adopted the *Climate Change Scoping Plan: A Framework for Change* (*Scoping Plan*), which identified the main strategies California implemented to achieve the GHG reductions necessary to reduce forecasted BAU emissions in 2020 to the state's historic 1990 emissions level (CARB 2008). The 2020 reduction goals were met. In November 2017, CARB released the 2017 Climate Change Scoping Plan Update, the Strategy for Achieving California's 2030 Greenhouse Gas Target (2017 Scoping Plan; CARB 2017a). The 2017 Scoping Plan identifies state strategies for achieving the state's 2030 GHG emissions reduction target codified by SB 32. Measures under the 2017 Scoping Plan Scenario build on existing programs such as the Low Carbon Fuel Standard, Advanced Clean Cars Program, Renewables Portfolio Standard (RPS), Sustainable Communities Strategy, Short-Lived Climate Pollutant Reduction Strategy, and the Cap-and-Trade Program. Additionally, the 2017 Scoping Plan proposes new policies to address GHG emissions from natural and working lands. The 2022 Scoping Plan was adopted in December 2022. The 2022 Scoping Plan assesses the progress towards the 2030 GHG emissions reduction target identified in the 2017 Scoping Plan and lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The 2022 Scoping Plan identifies strategies related to clean technology, energy development, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities (CARB 2022b).

2.4.2.4 Regional Emissions Targets – Senate Bill 375

SB 375, the 2008 Sustainable Communities and Climate Protection Act, was signed into law in September 2008 and requires CARB to set regional targets for reducing passenger vehicle GHG emissions in accordance with the Scoping Plan. The purpose of SB 375 is to align regional transportation planning efforts, regional GHG reduction targets, and fair-share housing allocations under state housing law. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy or Alternative Planning Strategy to address GHG reduction targets from cars and light-duty trucks in the context of that MPO's Regional Transportation Plan. Southern California Association of Governments (SCAG) is the region's MPO. In 2018, CARB set targets for the SCAG region of an 8 percent reduction in GHG emissions per capita from automobiles and light-duty trucks compared to 2005 levels by 2020 and a 19 percent reduction by 2035. These targets are periodically reviewed and updated.

2.4.2.5 Renewables Portfolio Standard

The RPS promotes diversification of the state's electricity supply and decreased reliance on fossil fuel energy sources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. Originally adopted in 2002 with a goal to achieve a 20 percent renewable energy mix by 2020 (referred to as the "Initial RPS"), the goal has been accelerated and increased by EOs S-14-08 and S-21-09 to a goal of 33 percent by 2020. In April 2011, SB 2 (1X) codified California's 33 percent RPS goal. SB 350 (2015) increased California's renewable energy mix goal to 50 percent by year 2030. SB 100 (2018) further increased the standard set by SB 350 establishing the RPS goal of 44 percent by the end of 2024, 52 percent by the end of 2027, and 60 percent by 2030.

2.4.3 Local

2.4.3.1 Regional Climate Action Plan

The Regional CAP was prepared to address the impacts of climate change and reduce GHG emissions in the Imperial Valley region which includes the County and its seven incorporated cities. The Regional CAP is consistent with statewide legislation and regulatory mandates, and establishes local strategies, measures, and actions aimed at

EEC ORIGINAL PKG

reducing GHG emissions. Reduction targets for the County were established in alignment with SB 32 and EO S-3-05, based on the 2005 GHG inventory and sector-specific targets in the 2017 Scoping Plan. For the County, they include reducing emissions to 24 percent below 2005 levels by 2030 and to 34 percent below 2005 levels by 2050. To meet these targets, the County would need to reduce communitywide emissions to 2,022,285 MT CO_2E by 2030 and 1,771,509 MT CO_2E by 2050 (Imperial County 2021).

2.4.3.2 Imperial County General Plan

The Imperial County General Plan Renewable Energy and Transmission Element was adopted in October 2015. As stated in the element, the benefits of renewable energy development include reduction in potential GHG by displacing fossil-fuel-generated electricity with renewable energy, which does not add to the greenhouse effect; contribution towards meeting the state's RPS mandate; and minimization of impacts to local communities, agriculture, and sensitive resources (Imperial County 2015). Of importance to the project, the General Plan contains the following objectives:

3.3 Encourage the development of services and industrial associated with renewable energy facilities.

5.2 Encourage development of utility-scale distributed generation projects in the County.

3.0 Guidelines for Determining Significance

Based on the CEQA Guidelines Appendix G, impacts related to GHG emissions would be significant if the project would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs.

As stated in the State CEQA Guidelines, these questions are "intended to encourage thoughtful assessment of impacts and do not necessarily represent thresholds of significance" (Title 14, Division 6, Chapter 3 Guidelines for Implementation of the CEQA, Appendix G, Environmental Checklist Form). The State CEQA Guidelines encourage lead agencies to adopt regionally specific thresholds of significance. When adopting these thresholds, the amended Guidelines allow lead agencies to consider thresholds of significance adopted or recommended by other public agencies, or recommended by experts, provided that the thresholds are supported by substantial evidence.

The project site is in the Salton Sea Air Basin. The Imperial County Air Pollution Control District (ICAPCD) is responsible for regulating air quality within the Imperial County portion of the Salton Sea Air Basin. No GHG emission significance threshold has been adopted by the County or the ICAPCD for land development projects. Thus, in the absence of a threshold of significance for GHG emissions that has been adopted in a public process following environmental review, this analysis considers guidance promulgated by other agencies.

The County is a member of Southern California Association of Governments (SCAG). SCAG is comprised of several different counties including Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Air districts responsible for managing air quality within the SCAG boundaries include the South Coast Air Quality Management District (AQMD), the Mojave Desert Air Pollution Control District (APCD), Ventura County APCD, and the Antelope Valley AQMD.

Due to the climate and land use patterns, the Antelope Valley AQMD and Mojave Desert APCD are air districts that are most similar to the ICAPCD's jurisdiction. The Antelope Valley AQMD is within the northern part of Los Angeles County, and the Mojave Desert APCD contains San Bernardino County's high desert region and Riverside County's Palo Verde Valley region. These jurisdictions are in inland desert regions with rural land use patterns; with a substantial number large-scale agricultural, warehousing/distribution, industrial, and military operations. Additionally, both of these agencies have adopted GHG thresholds for use in CEQA analysis. As outlined in the Antelope Valley AQMD's 2016 *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines and Mojave Desert APCD's 2016 California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, the two air districts both recommend use of a GHG emissions significance threshold of 100,000 short tons of CO_2E per year (90,718 MT CO_2E). Projects with emissions that exceed this threshold are required to incorporate mitigation sufficient to reduce emissions to less than this significance threshold or must incorporate all feasible mitigation.

This recommended significance threshold is consistent with the federal trigger level for GHG emissions "subject to regulation" under the U.S. EPA's Clean Air Act Title V Permitting requirements (40 Code of Federal Regulations 70.2). Additionally, as ICAPCD Title IX Regulations are based on Clean Air Act Title V Permitting requirements, this recommended significance threshold is also consistent with local ICAPCD Rule 900–Procedures for Issuing Permits to Operate for Sources Subject to Title V of the Federal Clean Air Act Amendments of 1990 and Rule 904–Prevention of Significant Deterioration Permit Program.

In the absence of adopted GHG significance thresholds, the threshold of 90,718 MT CO_2E is an appropriate CEQA significance threshold for the assessment of GHG emissions for the purposes of this project. The project was also evaluated qualitatively for how it will support the state's renewable energy goals.

4.0 Project Impact Analysis

1. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Operational GHG emissions associated with a project break down into the following five categories: mobile (on-road vehicles), energy (electricity, natural gas), area (landscape maintenance equipment), water and wastewater, and solid waste sources. GHG emissions also result from construction activities. Emissions were calculated using California Emissions Estimator Model (CalEEMod) Version 2022.1 (California Air Pollution Control Officers Association [CAPCOA] 2022). The CalEEMod program is a tool used to estimate emissions resulting from land development projects in the state of California. CalEEMod was developed with the participation of several state air districts.

CalEEMod estimates parameters such as the type and amount of construction equipment required, trip generation, and utility consumption based on the size and type of each specific land use using data collected from surveys performed in South Coast AQMD. Where available, parameters were modified to reflect project-specific data.

4.1 Construction-related Emissions

Construction activities emit GHGs primarily through combustion of fuels (mostly diesel) in the engines of off-road construction equipment and through combustion of diesel and gasoline in on-road construction vehicles and the commute vehicles of the construction workers.

Primary inputs are the numbers of each piece of equipment and the length of each construction stage. The construction equipment estimates are based on surveys performed by the South Coast AQMD and the Sacramento Metropolitan AQMD of typical construction projects which provide a basis for scaling equipment needs and schedule with a project's size. GHG emission estimates in CalEEMod are based on the duration of construction phases;

construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters.

The construction schedule and equipment were obtained from the applicant. Construction activities were modeled beginning in January 2024 and lasting approximately five months. Construction stages would include grading, pile installation, fence installation, electrical installation, and container installation.

CalEEMod calculates emissions of all pollutants from construction equipment using emission factors from CARB's off-road diesel equipment emission factors database. All construction equipment required during a phase was modeled over the entire duration of the phase even if it would only be required for a portion of the phase. Additionally, an off-highway truck and a generator were added to each phase to account for a water truck and a generator needed to power the construction office. The modeled construction equipment is summarized in Table 3.

Table 3
Construction Phases and Equipment

Equipment	Quantity	Daily Operation Time (hours)
Grading (14 days)		
Tractors/Loaders/Backhoes	2	8
Dump Truck	1	8
Scraper	1	8
Roller	1	8
Water Truck	1	8
Office Generator	1	8
Pile Installation (15 days)		
Drill Rigs	3	8
Welder	1	8
Water Truck	1	8
Office Generator	1	8
Fence Installation (5 days)		
Air Compressor	1	8
Generator	1	8
Water Truck	1	8
Office Generator	1	8
Electrical Installation (30 days)		
Tractors/Loaders/Backhoes	3	8
Generators	5	8
Air Compressors	5	8
Forklift	1	8
Water Truck	1	8
Office Generator	1	8
Container Installation (14 days)		
Crane	1	8
Water Truck	1	8
Office Generator	1	8
NOTE: Each phase would also include vehicles associated with work commutes, dump trucks for hauling, and trucks for deliveries.		

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 the following (ICAPCD 2017):

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 would also generate mobile source emissions from worker trips, hauling trips, and vendor trips. CalEEMod calculates emissions of all pollutants from on-road trucks and passenger vehicles using emission factors derived from CARB's motor vehicle emission inventory program EMFAC2017 (CARB 2017b). Vehicle emission factors were multiplied by the model default total estimated number of trips and the average trip length to calculate the total mobile emissions. The project would require up to 50 workers per day and seven deliveries per day. The average worker, hauling, and vendor trip lengths were increased to 20 miles to be conservative.

Based on guidance from the SCAQMD, total construction GHG emissions resulting from a project should be amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of a project (SCAQMD 2009).

4.2 Operation-related Emissions

4.2.1 Mobile Sources

GHG emissions from vehicles come from the combustion of fossil fuels in vehicle engines. The vehicle emissions are calculated based on the vehicle type and the trip rate for each land use. CalEEMod calculates mobile source emissions using emission factors derived from CARB's motor vehicle emission inventory program, EMFAC2017 (CARB 2017b). 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. To account for these trips, a total of one round trip (two one-way trips) was modeled per weekday. The default trip length was increased to 20 miles. CalEEMod default emission factors for the soonest operational year of 2024 were modeled.

4.2.2 Energy Sources

GHGs are emitted as a result of activities in buildings for which electricity and natural gas are used as energy sources. GHGs are emitted during the generation of electricity from fossil fuels off-site in power plants. These emissions are considered indirect but are calculated in association with a building's operation. Combustion of fossil fuel emits criteria pollutants and GHGs directly into the atmosphere. When this occurs in a building, this is considered a direct emissions source associated with that building. Energy source GHG emissions were calculated using the default emission factors for a light industrial land use. This is conservative since the project would not be a source of natural gas emissions.

4.2.3 Area Sources

Area sources include GHG emissions that would occur from the use of landscaping equipment. The use of landscape equipment emits GHGs associated with the equipment's fuel combustion. The project would not include any landscape maintenance. However, as a conservative analysis, area-source emissions were calculated using the default emission factors for a light industrial land use.

4.2.4 Water and Wastewater Sources

The amount of water used and wastewater generated by a project has indirect GHG emissions associated with it. These emissions are a result of the energy used to supply, distribute, and treat the water and wastewater. In addition to the indirect GHG emissions associated with energy use, wastewater treatment can directly emit both methane and nitrous oxide. As the project would be an unmanned facility, it would not include any water use.

4.2.5 Solid Waste Sources

The disposal of solid waste produces GHG emissions from anaerobic decomposition in landfills, incineration, and transportation of waste. As the project would be an unmanned facility, it would not generate any operational waste.

4.2.6 Refrigerant Sources

Small amounts of GHG emissions result from refrigerants used in air conditioning and refrigeration equipment. CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Emissions due to refrigerants were calculated using CalEEMod default values for a light industrial land use, which are based on industry data from the U.S. EPA.

4.3 Total GHG Emissions

Table 4 shows the estimated annual GHG construction emissions associated with the project, as well as the amortized construction emissions over a 30-year project life. Table 5 summarizes the total project GHG emissions.

Table 4
Construction-Related GHG Emissions

Year	GHG Emissions ($MT\ CO_2E$)
2024	191
Amortized Over 30 Years	6
SOURCE: Attachment 1.	

EEC ORIGINAL PKG

Table 5 Total GHG Emissions	
Source	GHG Emissions ($MT\ CO_2E$)
Mobile	4
Energy	388
Area	<1
Water	0
Solid Waste	0
Refrigerants	2
Construction	6
Total	**401**
Screening Threshold	*90,718*
Exceeds Threshold?	No
SOURCE: Attachment 1. NOTE: Totals may vary due to independent rounding.	

As shown in Table 5, the project would result in a total emission of 401 MT CO_2E annually. This is less than the 90,718 MT CO_2E screening threshold. Therefore, the project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and impacts would be less than significant.

2. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs?*

State GHG emissions reduction policy was established by EOs S-3-05 and B-30-15 and was subsequently codified by AB 32 and SB 32. EO S-3-05 established GHG emission reduction targets of year 2000 GHG emission levels by 2010, year 1990 GHG emission levels by 2020, and 80 percent below year 1990 levels by 2050; and EO B-30-15 established an interim GHG emission reduction target of 40 percent below year 1990 levels by 2030. AB 32 launched the CARB Climate Change Scoping Plan that outlined the reduction measures needed to reach the 2020 target, which has been achieved. SB 32 enacts the EO B-30-15 target of reducing GHG emissions to 40 percent below year 1990 levels by 2030.

As shown in Table 5 above, the project's annual GHG emissions would be less than the screening threshold of 90,718 MT CO_2E per year. Additionally, the project would support the state's goal to increase use of renewable energy. In September 2018, the California Legislature passed SB 100, which set a goal that "renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045." As California procures increasing amounts of renewable energy to meet the goals of SB 100, the state will need to deploy a significant amount of energy storage capability. Renewable energy resources such as wind and solar generate electricity intermittently. Energy storage allows utilities and system operators to manage the effect of intermittent renewable generation on the grid and create reliable, dispatchable generation upon demand. Energy storage also allows excess solar energy produced during the day to be stored and dispatched optimally during peak evening hours or other periods of high demand. Therefore, the project would serve as an integral component of the state's overarching renewable energy strategy that would reduce use of fossil fuel and associated GHG emissions by providing necessary energy storage. The project would assist the state's goal of utilizing 100 percent renewable energy by 2045, which would result in a net decrease in use of fossil fuel and GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of GHGs, and impacts would be less than significant.

If you have any questions about the results of this analysis, please contact me at jfleming@reconenvironmental.com or (619) 308-9333 extension 177.

Sincerely,

Jessica Fleming
Air Quality Specialist

JLF:jg

5.0 Certification

The following is a list of preparers, persons, and organizations involved with the GHG analysis.

RECON Environmental, Inc.
- Jessica Fleming, County-approved Air Quality Consultant
- Jennifer Gutierrez, Production Specialist
- Frank McDermott, GIS Manager

6.0 References Cited

California Air Pollution Control Officers Association (CAPCOA)
2022 California Emissions Estimator Model (CalEEMod), Version 2022.1.

California Air Resources Board (CARB)
2007 California Greenhouse Gas Inventory – Summary by Economic Sector. Last updated November 19.

2008 *Climate Change Scoping Plan: A Framework for Change.* http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. December.

2017a The 2017 Climate Change Scoping Plan Update, The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 20.

2017b EMFAC2017 Emissions Database Inventory Model.

2022a Greenhouse Gas Inventory Data—2000 to 2020 (last updated October 26). https://ww2.arb.ca.gov/ghg-inventory-data.

2022b 2022 Scoping Plan for Achieving Carbon Neutrality, November 16. Accessed February 1, 2023 at https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf.

Imperial County

2015 County of Imperial General Plan, Renewable Energy and Transmission Element. October 6.

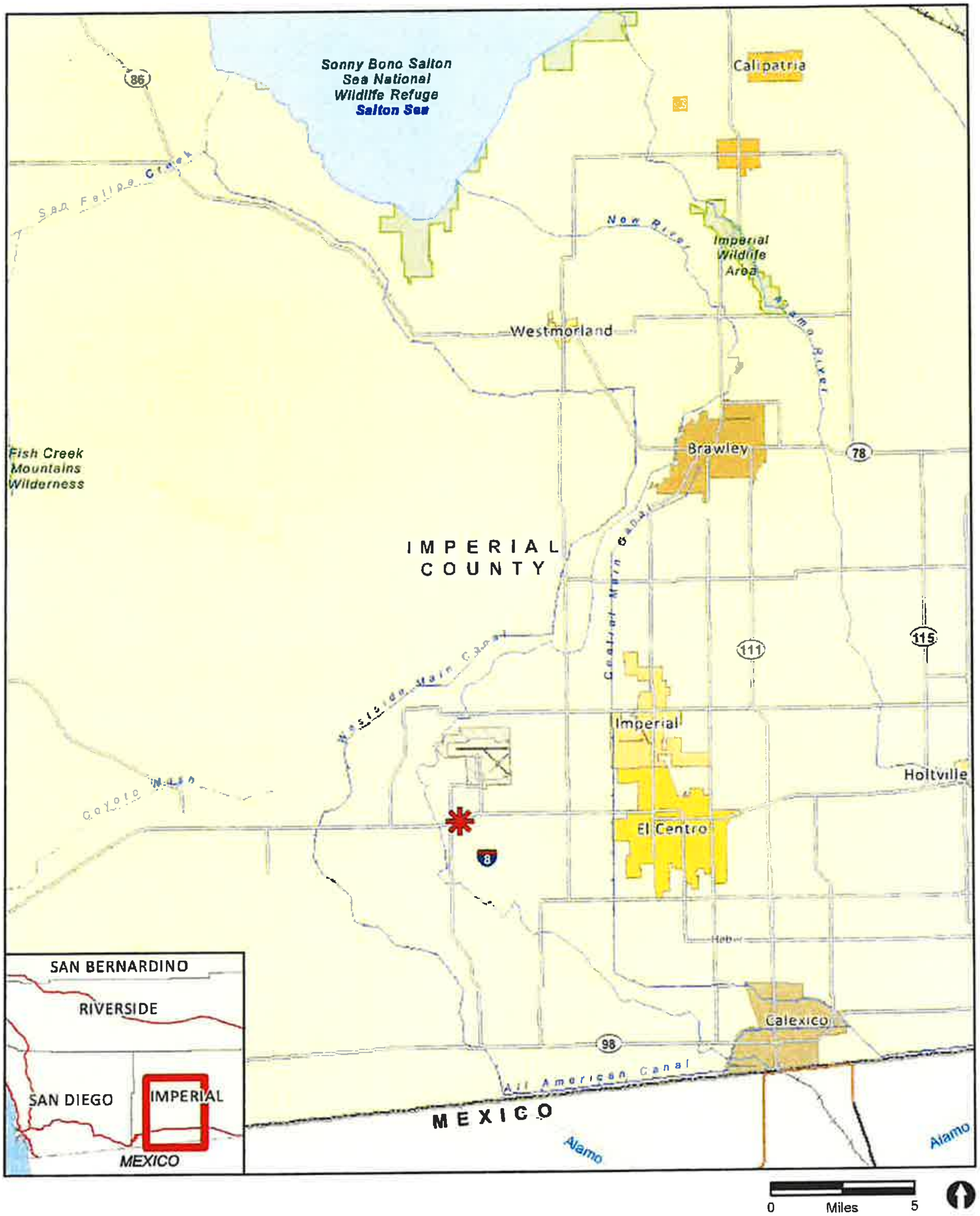
2021 Imperial County Regional Climate Action Plan. Prepared by Ascent Environmental for the Southern California Association of Governments and Imperial County Transportation Commission. June.

Imperial County Air Pollution Control District (ICAPCD)

2017 *CEQA Air Quality Handbook, Guidelines for the Implementation of the California Environmental Quality Act of 1970*. December.

South Coast Air Quality Management District (SCAQMD)

2009 Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group 14. November 19.



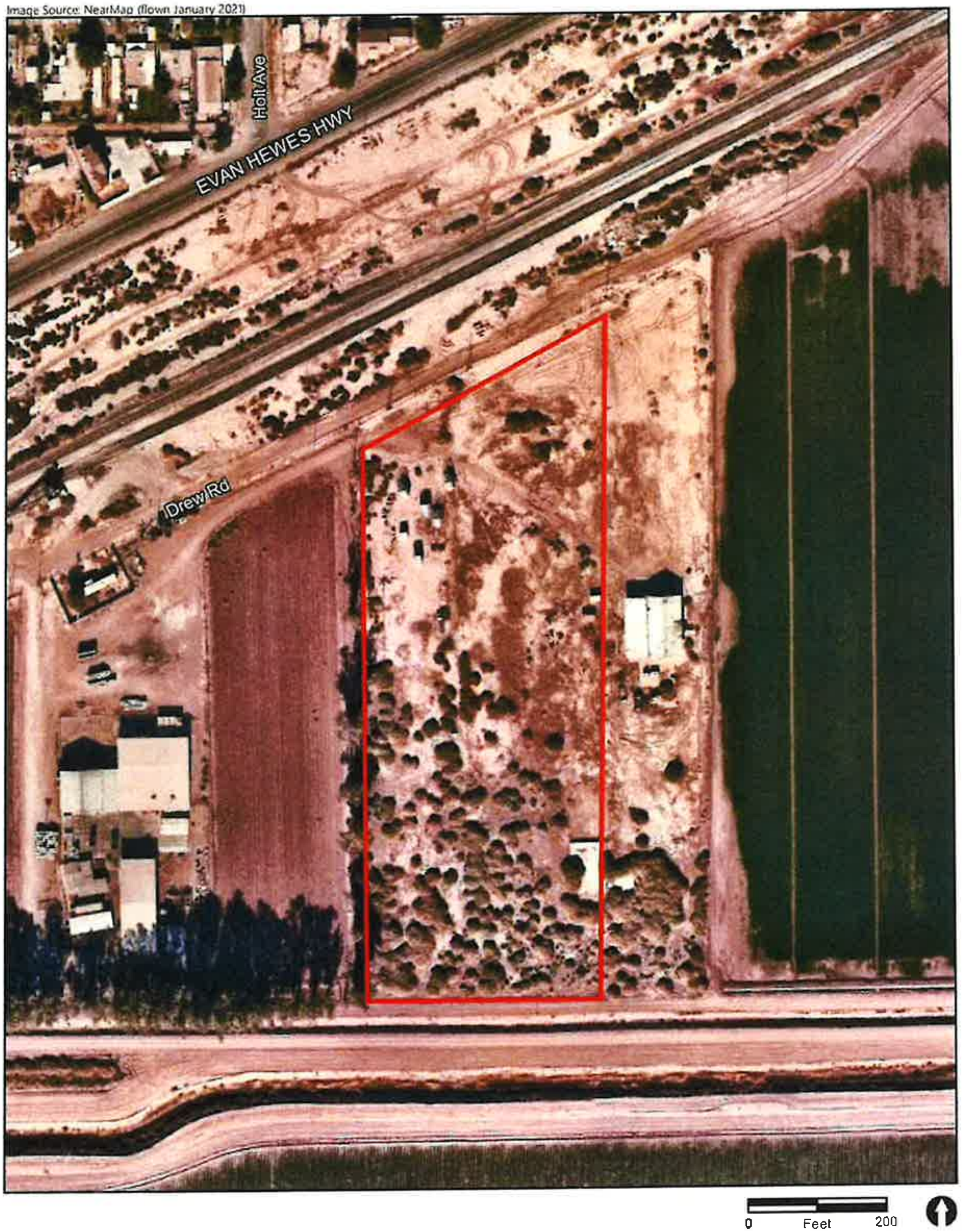
Project Location

FIGURE 1
Regional Location

RECON
M:\JOBS6\10324\common_gis\MXD\fig1.mxd 03/08/2023 bma

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)



Project Boundary

FIGURE 2
Project Location on Aerial Photograph

RECON
M:\JOBS6\10324\common_gis\MXD\fig2_air.mxd 6/5/2023 fmm

EEC ORIGINAL PKG

Map Source: ZGLOBAL

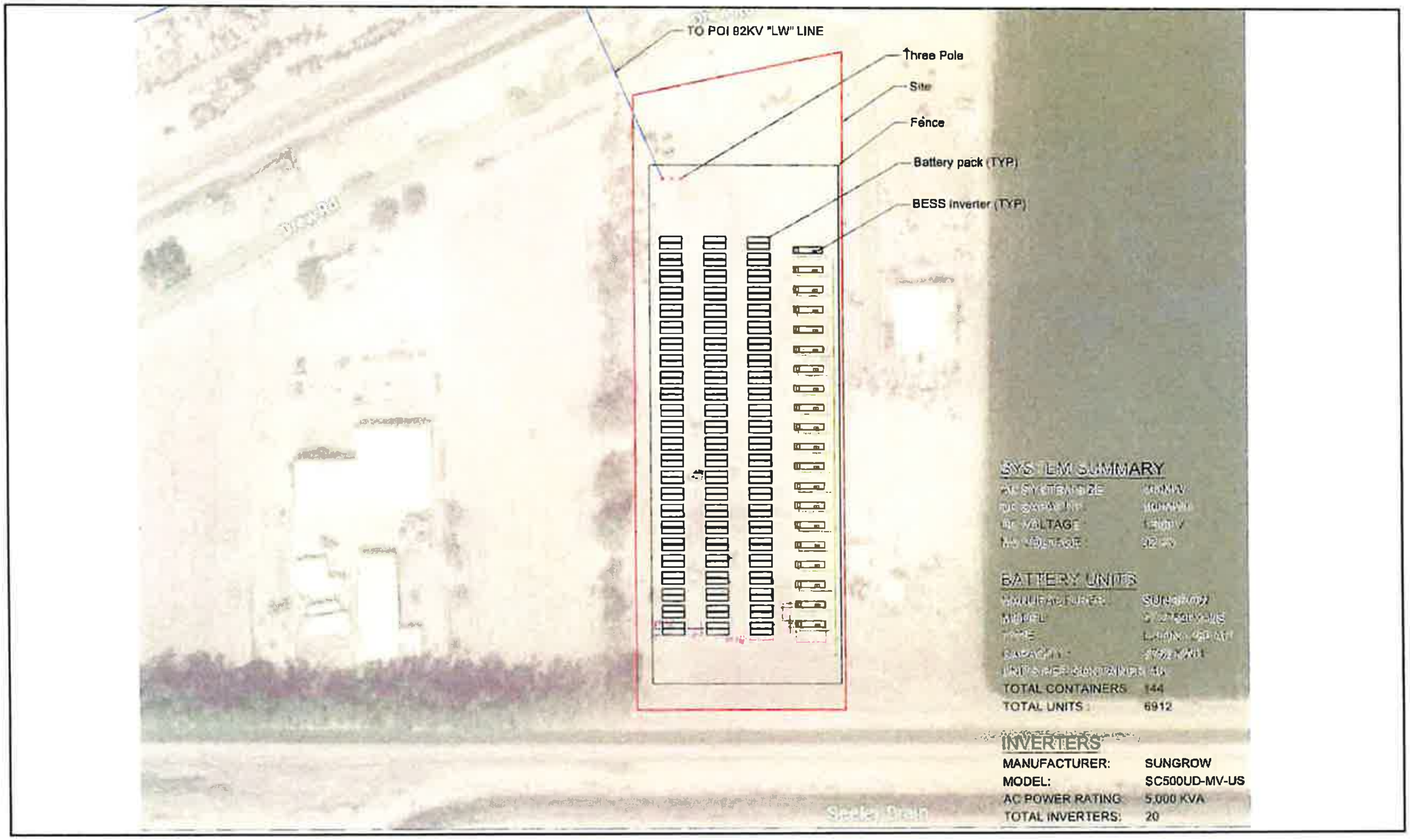


FIGURE 3
Site Plan

RECON

M:\JOBS6\10324\a\graphics\fig3.ai 06/05/23 fmm

EEC ORIGINAL PKG

ATTACHMENT 1

CalEEMod Output Files

EEC ORIGINAL PKG

Alba Peaker Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Alba Peaker
Construction Start Date	1/1/2024
Operational Year	2024
Lead Agency	Imeprial County
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	4.80
Location	32.791194308087086, -115.68507278016418
County	Imperial
City	Unincorporated
Air District	Imperial County APCD
Air Basin	Salton Sea
TAZ	5605
EDFZ	19
Electric Utility	Imperial Irrigation District
Gas Utility	Southern California Gas
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

General Light Industry	48.3	1000sqft	7.10	48,260	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.02	1.73	9.54	20.8	0.03	0.32	333	333	0.29	33.5	33.8	—	4,987	4,987	0.17	0.19	8.77	5,057
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.58	2.98	20.2	28.7	0.05	0.74	333	333	0.68	33.5	34.2	—	6,165	6,165	0.24	0.20	0.23	6,232
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.57	0.49	3.14	5.15	0.01	0.11	69.6	69.7	0.10	7.00	7.10	—	1,143	1,143	0.04	0.04	0.77	1,156
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.09	0.57	0.94	< 0.005	0.02	12.7	12.7	0.02	1.28	1.30	—	189	189	0.01	0.01	0.13	191
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	—	—	—	150	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	—	—	—	Yes	—	—	—	—	—	—	—	—	—	—

Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	100	550	—	—	—	150	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	No	—	—	—	No	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.02	1.73	9.54	20.8	0.03	0.32	333	333	0.29	33.5	33.8	—	4,987	4,987	0.17	0.19	8.77	5,057
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.58	2.98	20.2	28.7	0.05	0.74	333	333	0.68	33.5	34.2	—	6,165	6,165	0.24	0.20	0.23	6,232
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.57	0.49	3.14	5.15	0.01	0.11	69.6	69.7	0.10	7.00	7.10	—	1,143	1,143	0.04	0.04	0.77	1,156
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.09	0.57	0.94	< 0.005	0.02	12.7	12.7	0.02	1.28	1.30	—	189	189	0.01	0.01	0.13	191

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.43	1.60	0.45	2.63	< 0.005	0.04	0.58	0.61	0.04	0.09	0.12	0.00	2,381	2,381	0.18	0.02	12.7	2,403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	1.25	0.44	0.47	< 0.005	0.03	0.58	0.61	0.03	0.09	0.12	0.00	2,368	2,368	0.18	0.02	12.6	2,390
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.24	1.42	0.44	1.48	< 0.005	0.03	0.41	0.44	0.03	0.06	0.10	0.00	2,364	2,364	0.18	0.02	12.6	2,387
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.26	0.08	0.27	< 0.005	0.01	0.08	0.08	0.01	0.01	0.02	0.00	391	391	0.03	< 0.005	2.09	395
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	137	137	550	150	—	—	150	—	—	551	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	137	137	550	150	—	—	150	—	—	551	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7

Area	0.37	1.56	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.43	1.60	0.45	2.63	< 0.005	0.04	0.58	0.61	0.04	0.09	0.12	0.00	2,381	2,381	0.18	0.02	12.7	2,403
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Area	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.06	1.25	0.44	0.47	< 0.005	0.03	0.58	0.61	0.03	0.09	0.12	0.00	2,368	2,368	0.18	0.02	12.6	2,390
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.10	< 0.005	< 0.005	0.41	0.41	< 0.005	0.06	0.06	—	23.9	23.9	< 0.005	< 0.005	0.04	24.3
Area	0.18	1.39	0.01	1.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.26	4.26	< 0.005	< 0.005	—	4.27
Energy	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	2,336	2,336	0.18	0.02	—	2,345
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	0.24	1.42	0.44	1.48	< 0.005	0.03	0.41	0.44	0.03	0.06	0.10	0.00	2,364	2,364	0.18	0.02	12.6	2,387
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Area	0.03	0.25	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71
Energy	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	387	387	0.03	< 0.005	—	388

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08
Total	0.04	0.26	0.08	0.27	< 0.005	0.01	0.08	0.08	0.01	0.01	0.02	0.00	391	391	0.03	< 0.005	2.09	395

3. Construction Emissions Details

3.1. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.42	13.2	12.1	0.03	0.53	—	0.53	0.49	—	0.49	—	2,948	2,948	0.12	0.02	—	2,958
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.51	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	113	113	< 0.005	< 0.005	—	113

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.38	0.00	0.00	11.2	11.2	0.00	1.13	1.13	—	59.2	59.2	< 0.005	< 0.005	0.11	60.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	2.04	2.04	0.00	0.21	0.21	—	9.80	9.80	< 0.005	< 0.005	0.02	9.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.12	9.58	12.4	0.03	0.35	—	0.35	0.32	—	0.32	—	2,786	2,786	0.11	0.02	—	2,796
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.39	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	115	115	< 0.005	< 0.005	—	115
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.0	19.0	< 0.005	< 0.005	—	19.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.40	0.00	0.00	12.0	12.0	0.00	1.21	1.21	—	63.4	63.4	< 0.005	< 0.005	0.11	64.3
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.68	1.68	< 0.005	0.17	0.17	—	35.5	35.5	< 0.005	< 0.005	0.04	37.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	2.19	2.19	0.00	0.22	0.22	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.31	0.31	< 0.005	0.03	0.03	—	5.87	5.87	< 0.005	< 0.005	0.01	6.12
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.84	5.92	5.59	0.02	0.22	—	0.22	0.20	—	0.20	—	1,716	1,716	0.07	0.01	—	1,722
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	4.00	4.00	0.00	0.40	0.40	—	21.1	21.1	< 0.005	< 0.005	0.04	21.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.56	0.56	< 0.005	0.06	0.06	—	11.8	11.8	< 0.005	< 0.005	0.01	12.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.73	0.73	0.00	0.07	0.07	—	3.50	3.50	< 0.005	< 0.005	0.01	3.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.10	0.10	< 0.005	0.01	0.01	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.41	18.4	20.6	0.04	0.73	—	0.73	0.67	—	0.67	—	3,867	3,867	0.16	0.03	—	3,880
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.51	1.69	< 0.005	0.06	—	0.06	0.05	—	0.05	—	318	318	0.01	< 0.005	—	319
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.28	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.6	52.6	< 0.005	< 0.005	—	52.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

EEC ORIGINAL PKG

Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.80	0.00	0.00	24.0	24.0	0.00	2.41	2.41	—	127	127	0.01	< 0.005	0.23	129
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	3.36	3.36	< 0.005	0.34	0.34	—	70.9	70.9	< 0.005	0.01	0.08	74.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	4.38	4.38	0.00	0.44	0.44	—	21.0	21.0	< 0.005	< 0.005	0.04	21.3
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.61	0.61	< 0.005	0.06	0.06	—	11.7	11.7	< 0.005	< 0.005	0.01	12.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	7.91	6.69	0.02	0.31	—	0.31	0.28	—	0.28	—	2,424	2,424	0.10	0.02	—	2,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14	0.96	7.91	6.69	0.02	0.31	—	0.31	0.28	—	0.28	—	2,424	2,424	0.10	0.02	—	2,432

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	93.0	93.0	< 0.005	< 0.005	—	93.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.84	0.75	0.75	13.7	0.00	0.00	292	292	0.00	29.4	29.4	—	1,700	1,700	0.06	0.05	6.37	1,724
Vendor	0.04	0.03	0.88	0.37	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	2.40	901
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.55	0.88	7.73	0.00	0.00	292	292	0.00	29.4	29.4	—	1,435	1,435	0.07	0.05	0.17	1,453
Vendor	0.04	0.02	0.96	0.36	0.01	0.01	40.9	40.9	0.01	4.13	4.14	—	863	863	0.01	0.12	0.06	899
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.38	0.00	0.00	11.2	11.2	0.00	1.13	1.13	—	59.2	59.2	< 0.005	< 0.005	0.11	60.0
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	1.57	1.57	< 0.005	0.16	0.16	—	33.1	33.1	< 0.005	< 0.005	0.04	34.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	2.04	2.04	0.00	0.21	0.21	—	9.80	9.80	< 0.005	< 0.005	0.02	9.93
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.29	0.29	< 0.005	0.03	0.03	—	5.48	5.48	< 0.005	< 0.005	0.01	5.72
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7
Total	0.01	0.01	0.02	0.18	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	36.1	36.1	< 0.005	< 0.005	0.14	36.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.58	0.58	< 0.005	0.09	0.09	—	31.6	31.6	< 0.005	< 0.005	< 0.005	32.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02
Total	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	3.96	3.96	< 0.005	< 0.005	0.01	4.02

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,834	1,834	0.13	0.02	—	1,842
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305
Total	—	—	—	—	—	—	—	—	—	—	—	—	304	304	0.02	< 0.005	—	305

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Total	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Total	0.05	0.02	0.42	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	—	502	502	0.04	< 0.005	—	504
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.2	83.2	0.01	< 0.005	—	83.4
Total	0.01	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	83.2	83.2	0.01	< 0.005	—	83.4

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.37	0.34	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Total	0.37	1.56	0.02	2.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.63	8.63	< 0.005	< 0.005	—	8.66
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	1.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71
Total	0.03	0.25	< 0.005	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.70	0.70	< 0.005	< 0.005	—	0.71

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.6	12.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.08	2.08

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	1/1/2024	1/18/2024	5.00	14.0	—
Pile Installation	Building Construction	1/19/2024	2/8/2024	5.00	15.0	—
Fence Installation	Building Construction	2/9/2024	2/15/2024	5.00	5.00	—
Electrical Installation	Building Construction	2/16/2024	3/28/2024	5.00	30.0	—
Container Installation	Building Construction	3/29/2024	4/17/2024	5.00	14.0	—

5.2. Off-Road Equipment

EEC ORIGINAL PKG

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Dumpers/Tenders	Diesel	Average	1.00	8.00	16.0	0.38
Grading	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Grading	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	1.00	376	0.38

Grading	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Pile Installation	Bore/Drill Rigs	Diesel	Average	3.00	8.00	83.0	0.50
Pile Installation	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Pile Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Pile Installation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Fence Installation	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Fence Installation	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Fence Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Electrical Installation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Electrical Installation	Generator Sets	Diesel	Average	6.00	8.00	14.0	0.74
Electrical Installation	Air Compressors	Diesel	Average	5.00	8.00	37.0	0.48
Electrical Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Electrical Installation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Container Installation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Container Installation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Container Installation	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	100	20.0	LDA,LDT1,LDT2
Grading	Vendor	—	20.0	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Pile Installation	—	—	—	—

Pile Installation	Worker	100	20.0	LDA,LDT1,LDT2
Pile Installation	Vendor	14.0	20.0	HHDT,MHDT
Pile Installation	Hauling	0.00	20.0	HHDT
Pile Installation	Onsite truck	—	—	HHDT
Fence Installation	—	—	—	—
Fence Installation	Worker	100	20.0	LDA,LDT1,LDT2
Fence Installation	Vendor	14.0	20.0	HHDT,MHDT
Fence Installation	Hauling	0.00	20.0	HHDT
Fence Installation	Onsite truck	—	—	HHDT
Electrical Installation	—	—	—	—
Electrical Installation	Worker	100	20.0	LDA,LDT1,LDT2
Electrical Installation	Vendor	14.0	20.0	HHDT,MHDT
Electrical Installation	Hauling	0.00	20.0	HHDT
Electrical Installation	Onsite truck	—	—	HHDT
Container Installation	—	—	—	—
Container Installation	Worker	100	20.0	LDA,LDT1,LDT2
Container Installation	Vendor	14.0	20.0	HHDT,MHDT
Container Installation	Hauling	0.00	20.0	HHDT
Container Installation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	—	14.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	Other	50%	50%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO_2	CH_4	N_2O
2024	0.00	457	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	1.98	0.00	0.00	516	39.6	0.00	0.00	10,317

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	72,390	24,130	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	1,465,870	457	0.0330	0.0040	1,567,707

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	27.6	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	58.3
AQ-PM	38.1
AQ-DPM	5.72
Drinking Water	68.6
Lead Risk Housing	41.2

Pesticides	86.9
Toxic Releases	14.4
Traffic	2.20
Effect Indicators	—
CleanUp Sites	78.0
Groundwater	95.2
Haz Waste Facilities/Generators	7.35
Impaired Water Bodies	99.5
Solid Waste	80.0
Sensitive Population	—
Asthma	90.6
Cardio-vascular	83.9
Low Birth Weights	5.49
Socioeconomic Factor Indicators	—
Education	64.5
Housing	51.4
Linguistic	90.5
Poverty	81.2
Unemployment	96.6

7.2 Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	20.96753497
Employed	1.93763634
Median HI	22.3662261

Education	—
Bachelor's or higher	24.38085461
High school enrollment	100
Preschool enrollment	39.0606955
Transportation	—
Auto Access	40.90850764
Active commuting	78.6603362
Social	—
2-parent households	59.96407032
Voting	36.99473887
Neighborhood	—
Alcohol availability	72.73193892
Park access	8.533299115
Retail density	3.785448479
Supermarket access	12.52406005
Tree canopy	1.860644168
Housing	—
Homeownership	48.19709996
Housing habitability	56.46092647
Low-inc homeowner severe housing cost burden	79.66123444
Low-inc renter severe housing cost burden	47.27319389
Uncrowded housing	38.58591043
Health Outcomes	—
Insured adults	40.25407417
Arthritis	0.0
Asthma ER Admissions	6.4
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	22.5
Cognitively Disabled	41.3
Physically Disabled	20.3
Heart Attack ER Admissions	5.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	59.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	26.6
Elderly	44.5
English Speaking	14.8
Foreign-born	55.7
Outdoor Workers	4.7

Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.7
Traffic Density	18.5
Traffic Access	23.0
Other Indices	—
Hardship	75.1
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	80.0
Healthy Places Index Score for Project Location (b)	20.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

EEC ORIGINAL PKG

Screen	Justification
Land Use	Approximately 48,260 square feet inverters and BESS containers 7.1 acre project site
Construction: Construction Phases	Construction equipment and schedule provided by construction team
Construction: Off-Road Equipment	Construction equipment provided by construction team Bobcat modeled as tractor/loader/backhoe Water truck (off-highway truck) and generator (construction office) added to each phase Forklift added to electrical phase for cables/conduit deliveries
Construction: Trips and VMT	50 workers per day (100 one-way trips) Maximum of 7 deliveries per day (14 one-way trips) All trip lengths increased to 20 miles
Construction: On-Road Fugitive Dust	All roads used to access project site are paved. ICAPCD recommends modeling 90 percent paved roads during construction activities.
Operations: Vehicle Data	Unmanned/remote facility. 1 round trip (0.041 trips/ksf) modeled to account for any routine maintenance. Trip length Increased to 20 miles.
Operations: Road Dust	Used same paved road % as construction workers
Operations: Water and Waste Water	Unmanned facility, no water use
Operations: Solid Waste	Unmanned facility, no solid waste

LINSCOTT LAW & GREENSPAN engineers

TECHNICAL APPENDICES

ALBA PEAKER

Imperial County, California
June 12, 2023

LLG Ref. 3-23-3740

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

APPENDIX A

INTERSECTION COUNT SHEETS

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road / Haskell Road
E/W: Evan Hewes Highway
Weather: Clear

File Name : 01_CIM_DREW_EVAN HEWES_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Haskell Road Southbound				Evan Hewes Highway Westbound				Drew Road Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	4	3	7	2	12	0	14	17	1	1	19	1	12	11	24	64
06:15 AM	1	3	2	6	4	18	0	22	25	4	4	33	0	9	17	26	87
06:30 AM	0	10	1	11	3	25	1	29	29	2	4	35	0	6	10	16	91
06:45 AM	0	7	0	7	3	11	0	14	17	1	3	21	0	8	12	20	62
Total	1	24	6	31	12	66	1	79	88	8	12	108	1	35	50	86	304
07:00 AM	3	3	4	10	2	8	2	12	15	5	4	24	4	8	9	21	67
07:15 AM	3	9	3	15	1	15	1	17	26	6	3	35	1	11	11	23	90
07:30 AM	0	23	2	25	5	31	2	38	49	15	5	69	3	9	7	19	151
07:45 AM	7	13	3	23	2	25	3	30	33	10	2	45	6	10	14	30	128
Total	13	48	12	73	10	79	8	97	123	36	14	173	14	38	41	93	436
Grand Total	14	72	18	104	22	145	9	176	211	44	26	281	15	73	91	179	740
Apprch %	13.5	69.2	17.3		12.5	82.4	5.1		75.1	15.7	9.3		8.4	40.8	50.8		
Total %	1.9	9.7	2.4	14.1	3	19.6	1.2	23.8	28.5	5.9	3.5	38	2	9.9	12.3	24.2	

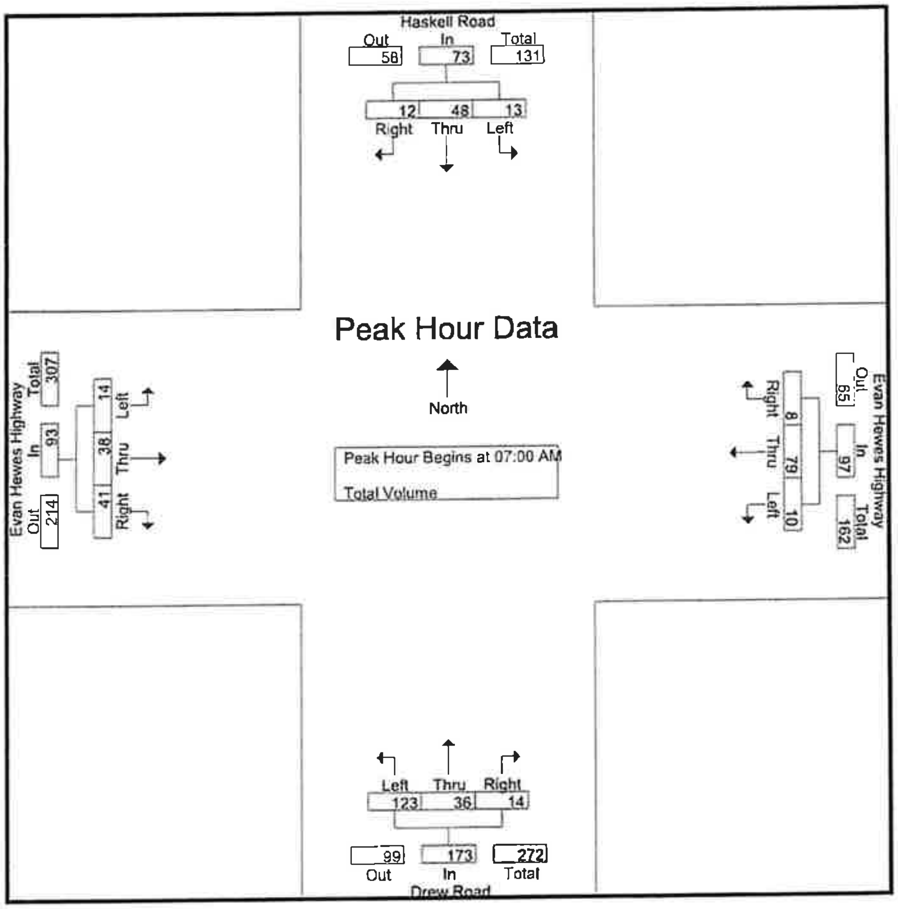
	Haskell Road Southbound				Evan Hewes Highway Westbound				Drew Road Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	3	**4**	10	2	8	2	12	15	5	4	24	4	8	9	21	67
07:15 AM	3	9	3	15	1	15	1	17	26	6	3	35	1	**11**	11	23	90
07:30 AM	0	**23**	2	**25**	**5**	**31**	2	**38**	**49**	**15**	**5**	**69**	3	9	7	19	**151**
07:45 AM	**7**	13	3	23	2	25	**3**	30	33	10	2	45	**6**	10	**14**	**30**	128
Total Volume	13	48	12	73	10	79	8	97	123	36	14	173	14	38	41	93	436
% App. Total	17.8	65.8	16.4		10.3	81.4	8.2		71.1	20.8	8.1		15.1	40.9	44.1		
PHF	.464	.522	.750	.730	.500	.637	.667	.638	.628	.600	.700	.627	.583	.864	.732	.775	.722

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road / Haskell Road
E/W: Evan Hewes Highway
Weather: Clear

File Name : 01_CIM_DREW_EVAN HEWES_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	3	3	**4**	10	2	8	2	12	15	5	4	24	4	8	9	21
+15 mins.	3	9	3	15	1	15	1	17	26	6	3	35	1	**11**	11	23
+30 mins.	0	**23**	2	**25**	**5**	**31**	2	**38**	**49**	**15**	**5**	**69**	3	9	7	19
+45 mins.	**7**	13	3	23	2	25	**3**	30	33	10	2	45	**6**	10	**14**	**30**
Total Volume	13	48	12	73	10	79	8	97	123	36	14	173	14	38	41	93
% App. Total	17.8	65.8	16.4		10.3	81.4	8.2		71.1	20.8	8.1		15.1	40.9	44.1	
PHF	.464	.522	.750	.730	.500	.637	.667	.638	.628	.600	.700	.627	.583	.864	.732	.775

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road / Haskell Road
E/W: Evan Hewes Highway
Weather: Clear

File Name : 01_CIM_DREW_EVAN HEWES_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Haskell Road Southbound				Evan Hewes Highway Westbound				Drew Road Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	1	4	2	7	3	11	1	15	11	6	3	20	5	22	27	54	96
03:15 PM	4	11	8	23	8	12	5	25	18	13	5	36	9	35	37	81	165
03:30 PM	3	3	4	10	2	2	1	5	7	7	2	16	1	10	6	17	48
03:45 PM	4	3	4	11	4	6	3	13	7	6	3	16	8	21	27	56	96
Total	12	21	18	51	17	31	10	58	43	32	13	88	23	88	97	208	405
04:00 PM	1	5	3	9	5	7	0	12	4	9	2	15	4	34	45	83	119
04:15 PM	2	5	3	10	7	10	1	18	6	6	2	14	4	36	33	73	115
04:30 PM	6	5	8	19	9	12	5	26	8	11	6	25	5	39	31	75	145
04:45 PM	4	4	3	11	3	11	1	15	4	4	1	9	1	12	4	17	52
Total	13	19	17	49	24	40	7	71	22	30	11	63	14	121	113	248	431
Grand Total	25	40	35	100	41	71	17	129	65	62	24	151	37	209	210	456	836
Apprch %	25	40	35		31.8	55	13.2		43	41.1	15.9		8.1	45.8	46.1		
Total %	3	4.8	4.2	12	4.9	8.5	2	15.4	7.8	7.4	2.9	18.1	4.4	25	25.1	54.5	

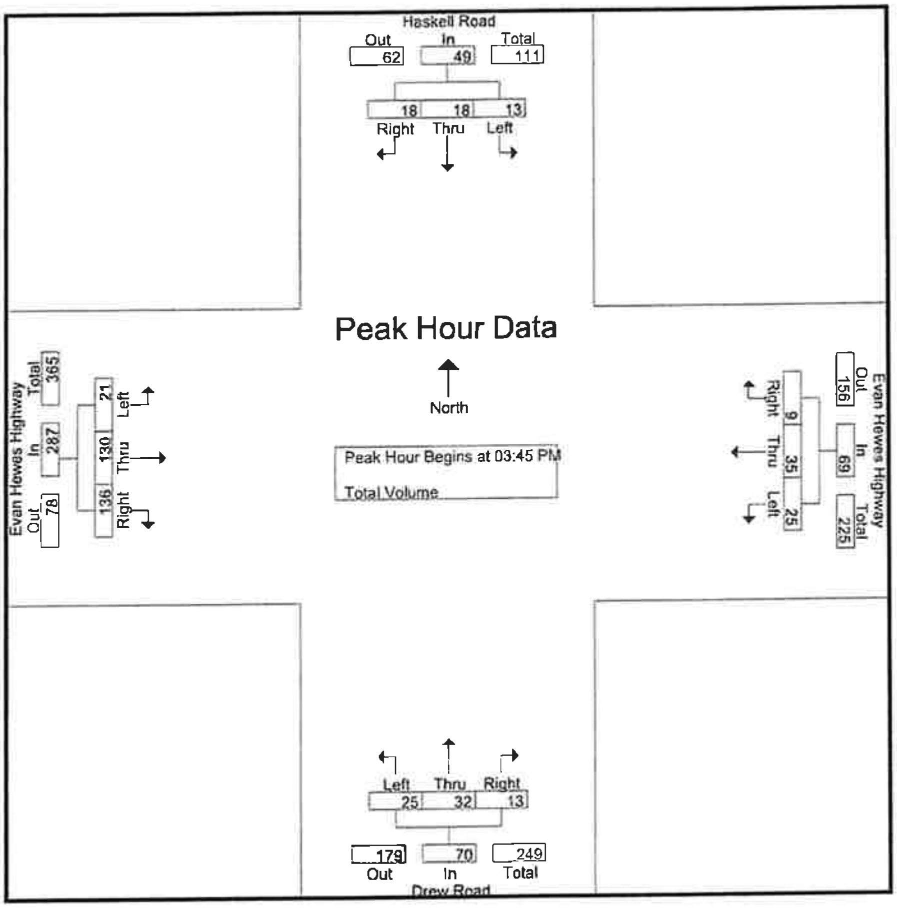
	Haskell Road Southbound				Evan Hewes Highway Westbound				Drew Road Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	4	3	4	11	4	6	3	13	7	6	3	16	8	21	27	56	96
04:00 PM	1	5	3	9	5	7	0	12	4	9	2	15	4	34	45	83	119
04:15 PM	2	5	3	10	7	10	1	18	6	6	2	14	4	36	33	73	115
04:30 PM	6	5	8	19	9	12	5	26	8	11	6	25	5	39	31	75	145
Total Volume	13	18	18	49	25	35	9	69	25	32	13	70	21	130	136	287	475
% App. Total	26.5	36.7	36.7		36.2	50.7	13		35.7	45.7	18.6		7.3	45.3	47.4		
PHF	.542	.900	.563	.645	.694	.729	.450	.663	.781	.727	.542	.700	.656	.833	.756	.864	.819

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road / Haskell Road
E/W: Evan Hewes Highway
Weather: Clear

File Name : 01_CIM_DREW_EVAN HEWES_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:15 PM				04:00 PM				03:00 PM				03:45 PM			
+0 mins.	**4**	**11**	**8**	**23**	5	7	0	12	**11**	6	3	20	**8**	21	27	56
+15 mins.	3	3	4	10	7	10	1	18	**18**	**13**	**5**	**36**	4	34	**45**	**83**
+30 mins.	4	3	4	11	**9**	**12**	**5**	**26**	7	7	2	16	4	36	33	73
+45 mins.	1	5	3	9	3	11	1	15	7	6	3	16	5	**39**	31	75
Total Volume	12	22	19	53	24	40	7	71	43	32	13	88	21	130	136	287
% App. Total	22.6	41.5	35.8		33.8	56.3	9.9		48.9	36.4	14.8		7.3	45.3	47.4	
PHF	.750	.500	.594	.576	.667	.833	.350	.683	.597	.615	.650	.611	.656	.833	.756	.864

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 02_CIM_DREW_8 WB_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Drew Road Southbound				I-8 WB Off Ramp Westbound				Drew Road Northbound				I-8 WB On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	0	20	1	21	20	0	13	33	1	9	0	10	0	0	0	0	64
06:15 AM	0	15	0	15	19	0	14	33	1	13	0	14	0	0	0	0	62
06:30 AM	0	25	1	26	21	0	25	46	0	10	0	10	0	0	0	0	82
06:45 AM	0	19	2	21	19	0	16	35	0	7	0	7	0	0	0	0	63
Total	0	79	4	83	79	0	68	147	2	39	0	41	0	0	0	0	271
07:00 AM	0	15	1	16	7	0	14	21	0	8	0	8	0	0	0	0	45
07:15 AM	0	21	1	22	6	0	20	26	0	7	0	7	0	0	0	0	55
07:30 AM	0	27	1	28	5	0	47	52	1	15	0	16	0	0	0	0	96
07:45 AM	0	24	0	24	6	0	36	42	0	7	0	7	0	0	0	0	73
Total	0	87	3	90	24	0	117	141	1	37	0	38	0	0	0	0	269
Grand Total	0	166	7	173	103	0	185	288	3	76	0	79	0	0	0	0	540
Apprch %	0	96	4		35.8	0	64.2		3.8	96.2	0		0	0	0		
Total %	0	30.7	1.3	32	19.1	0	34.3	53.3	0.6	14.1	0	14.6	0	0	0	0	

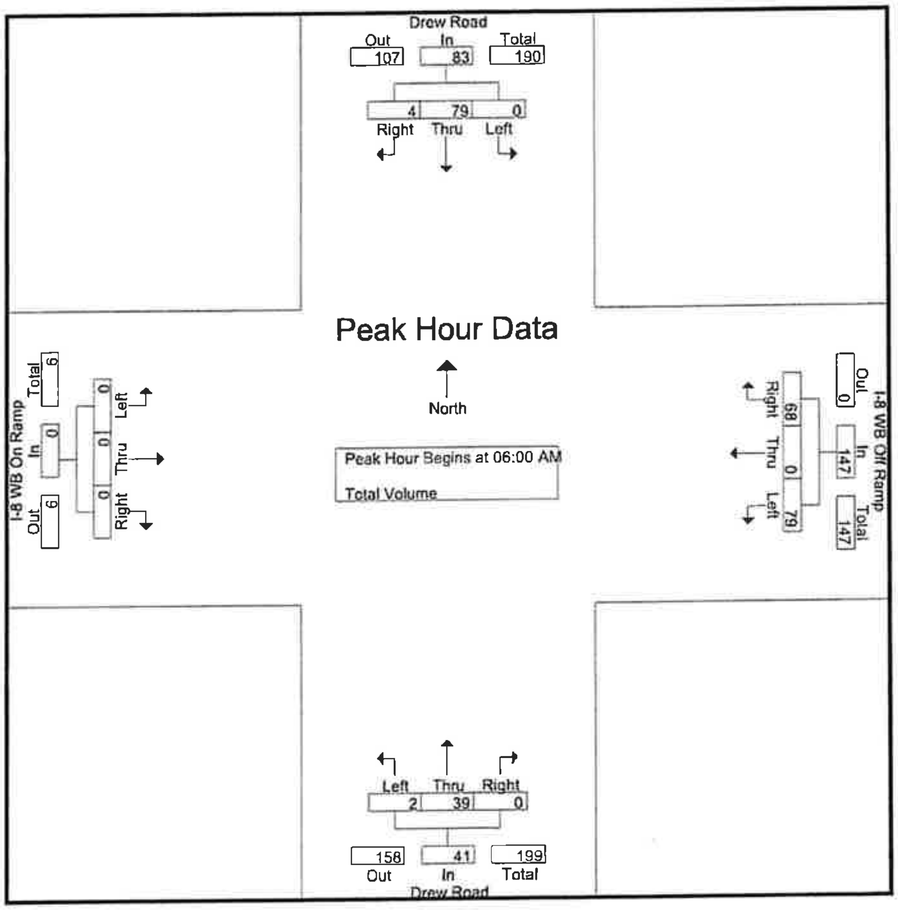
	Drew Road Southbound				I-8 WB Off Ramp Westbound				Drew Road Northbound				I-8 WB On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:00 AM																	
06:00 AM	0	20	1	21	20	0	13	33	**1**	9	0	10	0	0	0	0	64
06:15 AM	0	15	0	15	19	0	14	33	1	**13**	0	**14**	0	0	0	0	62
06:30 AM	0	**25**	1	**26**	**21**	0	**25**	**46**	0	10	0	10	0	0	0	0	**82**
06:45 AM	0	19	**2**	21	19	0	16	35	0	7	0	7	0	0	0	0	63
Total Volume	0	79	4	83	79	0	68	147	2	39	0	41	0	0	0	0	271
% App. Total	0	95.2	4.8		53.7	0	46.3		4.9	95.1	0		0	0	0		
PHF	.000	.790	.500	.798	.940	.000	.680	.799	.500	.750	.000	.732	.000	.000	.000	.000	.826

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 02_CIM_DREW_8 WB_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				06:00 AM				06:00 AM				06:00 AM			
+0 mins.	0	15	**1**	16	20	0	13	33	**1**	9	0	10	0	0	0	0
+15 mins.	0	21	1	22	19	0	14	33	1	**13**	0	**14**	0	0	0	0
+30 mins.	0	**27**	1	**28**	**21**	0	**25**	**46**	0	10	0	10	0	0	0	0
+45 mins.	0	24	0	24	19	0	16	35	0	7	0	7	0	0	0	0
Total Volume	0	87	3	90	79	0	68	147	2	39	0	41	0	0	0	0
% App. Total	0	96.7	3.3		53.7	0	46.3		4.9	95.1	0		0	0	0	
PHF	.000	.806	.750	.804	.940	.000	.680	.799	.500	.750	.000	.732	.000	.000	.000	.000

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 02_CIM_DREW_8 WB_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Drew Road Southbound				I-8 WB Off Ramp Westbound				Drew Road Northbound				I-8 WB On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
03:00 PM	0	34	5	39	9	1	10	20	0	8	0	8	0	0	0	0	67
03:15 PM	0	30	4	34	15	0	16	31	0	10	0	10	0	0	0	0	75
03:30 PM	0	29	6	35	9	1	12	22	0	7	0	7	0	0	0	0	64
03:45 PM	0	35	1	36	14	0	10	24	0	7	0	7	0	0	0	0	67
Total	0	128	16	144	47	2	48	97	0	32	0	32	0	0	0	0	273
04:00 PM	0	46	3	49	16	0	9	25	0	5	0	5	0	0	0	0	79
04:15 PM	0	48	2	50	14	0	9	23	1	7	0	8	0	0	0	0	81
04:30 PM	0	27	3	30	23	0	14	37	1	10	0	11	0	0	0	0	78
04:45 PM	0	26	3	29	15	0	9	24	0	10	0	10	0	0	0	0	63
Total	0	147	11	158	68	0	41	109	2	32	0	34	0	0	0	0	301
Grand Total	0	275	27	302	115	2	89	206	2	64	0	66	0	0	0	0	574
Apprch %	0	91.1	8.9		55.8	1	43.2		3	97	0		0	0	0		
Total %	0	47.9	4.7	52.6	20	0.3	15.5	35.9	0.3	11.1	0	11.5	0	0	0	0	

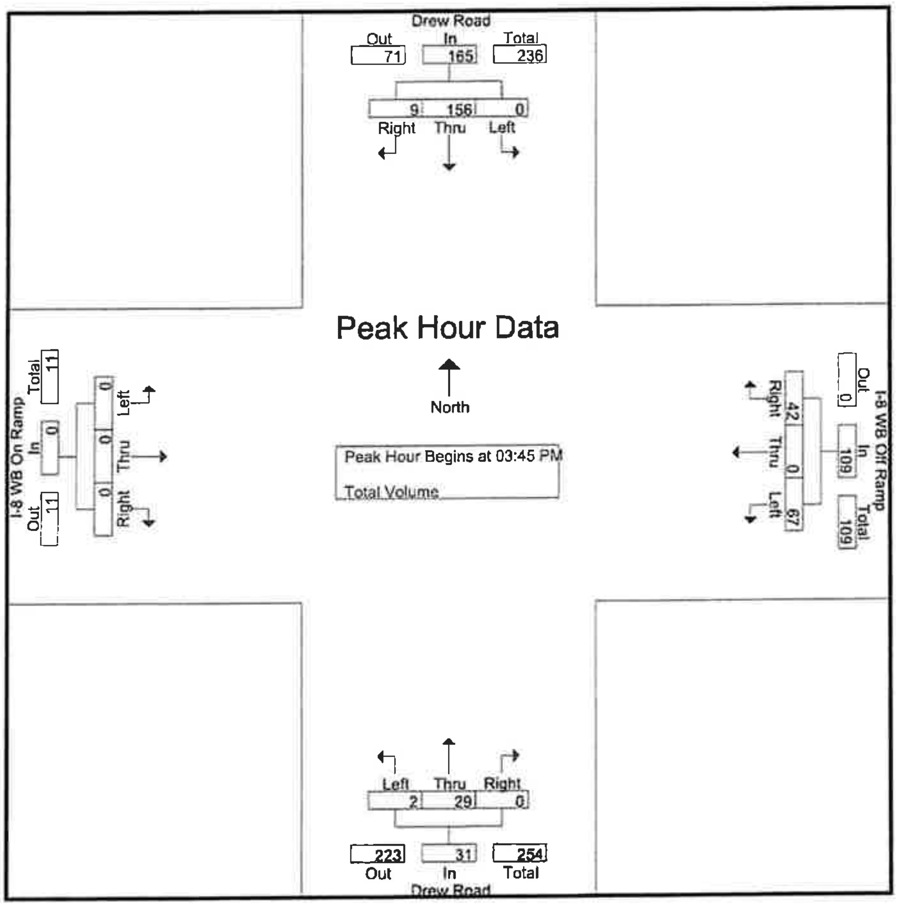
	Drew Road Southbound				I-8 WB Off Ramp Westbound				Drew Road Northbound				I-8 WB On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	0	35	1	36	14	0	10	24	0	7	0	7	0	0	0	0	67
04:00 PM	0	46	**3**	49	16	0	9	25	0	5	0	5	0	0	0	0	79
04:15 PM	0	**48**	2	**50**	14	0	9	23	**1**	7	0	**8**	0	0	0	0	**81**
04:30 PM	0	27	3	30	**23**	0	**14**	**37**	1	**10**	0	**11**	0	0	0	0	78
Total Volume	0	156	9	165	67	0	42	109	2	29	0	31	0	0	0	0	305
% App. Total	0	94.5	5.5		61.5	0	38.5		6.5	93.5	0		0	0	0		
PHF	.000	.813	.750	.825	.728	.000	.750	.736	.500	.725	.000	.705	.000	.000	.000	.000	.941

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 02_CIM_DREW_8 WB_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	03:30 PM				03:45 PM				04:00 PM				03:00 PM			
+0 mins.	0	29	**6**	35	14	0	10	24	0	5	0	5	0	0	0	0
+15 mins.	0	35	1	36	16	0	9	25	**1**	**7**	0	8	0	0	0	0
+30 mins.	0	46	3	49	14	0	9	23	1	**10**	0	**11**	0	0	0	0
+45 mins.	0	**48**	2	**50**	**23**	0	**14**	**37**	0	10	0	10	0	0	0	0
Total Volume	0	158	12	170	67	0	42	109	2	32	0	34	0	0	0	0
% App. Total	0	92.9	7.1		61.5	0	38.5		5.9	94.1	0		0	0	0	
PHF	.000	.823	.500	.850	.728	.000	.750	.736	.500	.800	.000	.773	.000	.000	.000	.000

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 03_CIM_DREW_8 EB_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Drew Road Southbound				I-8 EB On Ramp Westbound				Drew Road Northbound				I-8 EB Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:00 AM	15	27	0	42	0	0	0	0	0	10	6	16	0	0	0	0	58
06:15 AM	12	22	0	34	0	0	0	0	0	12	2	14	2	0	0	2	50
06:30 AM	16	31	0	47	0	0	0	0	0	10	7	17	1	0	1	2	66
06:45 AM	13	24	0	37	0	0	0	0	0	4	7	11	3	1	0	4	52
Total	56	104	0	160	0	0	0	0	0	36	22	58	6	1	1	8	226
07:00 AM	9	14	0	23	0	0	0	0	0	3	4	7	5	0	1	6	36
07:15 AM	22	5	0	27	0	0	0	0	0	5	6	11	2	0	1	3	41
07:30 AM	18	12	0	30	0	0	0	0	0	9	10	19	6	0	1	7	56
07:45 AM	19	13	0	32	0	0	0	0	0	7	6	13	2	0	0	2	47
Total	68	44	0	112	0	0	0	0	0	24	26	50	15	0	3	18	180
Grand Total	124	148	0	272	0	0	0	0	0	60	48	108	21	1	4	26	406
Apprch %	45.6	54.4	0		0	0	0		0	55.6	44.4		80.8	3.8	15.4		
Total %	30.5	36.5	0	67	0	0	0	0	0	14.8	11.8	26.6	5.2	0.2	1	6.4	

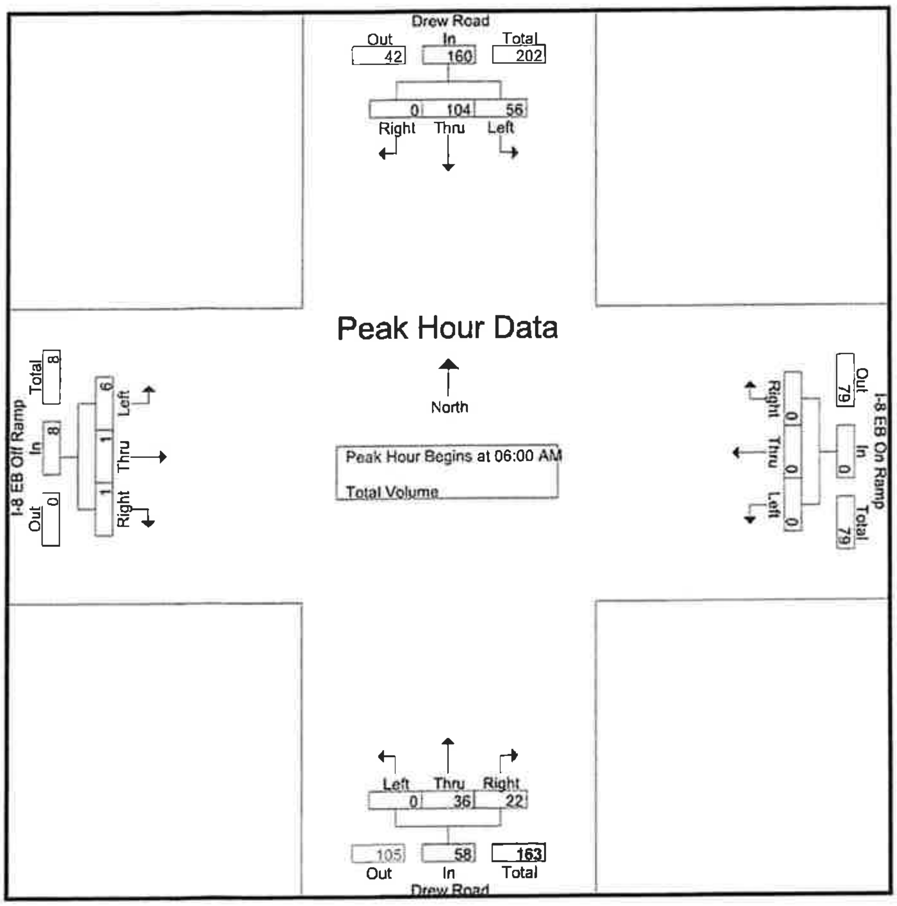
	Drew Road Southbound				I-8 EB On Ramp Westbound				Drew Road Northbound				I-8 EB Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:00 AM																	
06:00 AM	15	27	0	42	0	0	0	0	0	10	6	16	0	0	0	0	58
06:15 AM	12	22	0	34	0	0	0	0	0	**12**	2	14	2	0	0	2	50
06:30 AM	**16**	**31**	0	**47**	0	0	0	0	0	10	**7**	**17**	1	0	**1**	2	**66**
06:45 AM	13	24	0	37	0	0	0	0	0	4	**7**	11	**3**	**1**	0	**4**	52
Total Volume	56	104	0	160	0	0	0	0	0	36	22	58	6	1	1	8	226
% App. Total	35	65	0		0	0	0		0	62.1	37.9		75	12.5	12.5		
PHF	.875	.839	.000	.851	.000	.000	.000	.000	.000	.750	.786	.853	.500	.250	.250	.500	.856

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 03_CIM_DREW_8 EB_AM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	06:00 AM				06:00 AM				06:00 AM				06:45 AM			
+0 mins.	15	27	0	42	0	0	0	0	0	10	6	16	3	**1**	0	4
+15 mins.	12	22	0	34	0	0	0	0	0	**12**	2	14	5	0	**1**	6
+30 mins.	**16**	**31**	0	**47**	0	0	0	0	0	10	**7**	**17**	2	0	1	3
+45 mins.	13	24	0	37	0	0	0	0	0	4	7	11	**6**	0	1	**7**
Total Volume	56	104	0	160	0	0	0	0	0	36	22	58	16	1	3	20
% App. Total	35	65	0		0	0	0		0	62.1	37.9		80	5	15	
PHF	.875	.839	.000	.851	.000	.000	.000	.000	.000	.750	.786	.853	.667	.250	.750	.714

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 03_CIM_DREW_8 EB_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 1

Groups Printed- Total Volume

	Drew Road Southbound				I-8 EB On Ramp Westbound				Drew Road Northbound				I-8 EB Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
05:00 PM	33	11	0	44	0	0	0	0	0	7	15	22	1	0	1	2	68
05:15 PM	22	23	0	45	0	0	0	0	0	7	10	17	3	0	1	4	66
05:30 PM	20	16	0	36	0	0	0	0	0	5	11	16	2	0	0	2	54
05:45 PM	32	21	0	53	0	0	0	0	0	4	12	16	3	0	0	3	72
Total	107	71	0	178	0	0	0	0	0	23	48	71	9	0	2	11	260
06:00 PM	43	20	0	63	0	0	0	0	0	4	14	18	2	0	1	3	84
06:15 PM	39	24	0	63	0	0	0	0	0	2	5	7	5	1	0	6	76
06:30 PM	16	29	0	45	0	0	0	0	0	11	20	31	0	1	0	1	77
06:45 PM	18	24	0	42	0	0	0	0	0	9	9	18	3	0	1	4	64
Total	116	97	0	213	0	0	0	0	0	26	48	74	10	2	2	14	301
Grand Total	223	168	0	391	0	0	0	0	0	49	96	145	19	2	4	25	561
Apprch %	57	43	0		0	0	0		0	33.8	66.2		76	8	16		
Total %	39.8	29.9	0	69.7	0	0	0	0	0	8.7	17.1	25.8	3.4	0.4	0.7	4.5	

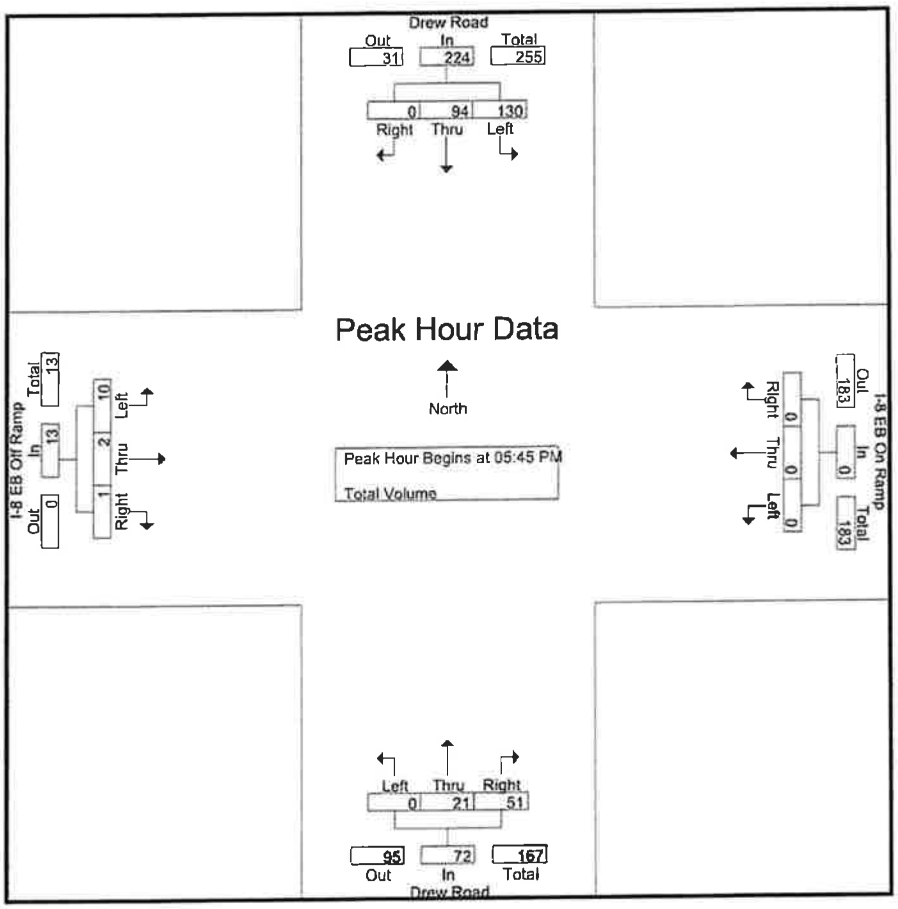
	Drew Road Southbound				I-8 EB On Ramp Westbound				Drew Road Northbound				I-8 EB Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:45 PM																	
05:45 PM	32	21	0	53	0	0	0	0	0	4	12	16	3	0	0	3	72
06:00 PM	**43**	20	**0**	**63**	0	**0**	0	0	0	4	14	18	2	0	**1**	3	**84**
06:15 PM	39	24	0	63	0	0	0	0	0	2	5	7	**5**	**1**	0	**6**	76
06:30 PM	16	**29**	0	45	0	0	0	0	0	**11**	**20**	**31**	0	1	0	1	77
Total Volume	130	94	0	224	0	0	0	0	0	21	51	72	10	2	1	13	309
% App. Total	58	42	0		0	0	0		0	29.2	70.8		76.9	15.4	7.7		
PHF	.756	.810	.000	.889	.000	.000	.000	.000	.000	.477	.638	.581	.500	.500	.250	.542	.920

EEC ORIGINAL PKG

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Drew Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 03_CIM_DREW_8 EB_PM
Site Code : 05723502
Start Date : 5/18/2023
Page No : 2



Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:45 PM				05:00 PM				06:00 PM				05:30 PM			
+0 mins.	32	21	0	53	0	0	0	0	0	4	14	18	2	0	0	2
+15 mins.	**43**	20	0	**63**	0	0	0	0	0	2	5	7	3	0	0	3
+30 mins.	39	24	0	63	0	0	0	0	0	**11**	**20**	**31**	2	0	**1**	3
+45 mins.	16	**29**	0	45	0	0	0	0	0	9	9	18	**5**	**1**	0	**6**
Total Volume	130	94	0	224	0	0	0	0	0	26	48	74	12	1	1	14
% App. Total	58	42	0		0	0	0		0	35.1	64.9		85.7	7.1	7.1	
PHF	.756	.810	.000	.889	.000	.000	.000	.000	.000	.591	.600	.597	.600	.250	.250	.583

EEC ORIGINAL PKG

APPENDIX B

INTERSECTION PEAK HOUR ANALYSIS WORKSHEETS

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑↱			↰↑↱			✥			✥	
Traffic Vol, veh/h	14	36	41	10	79	8	123	36	14	131	73	58
Future Vol, veh/h	14	36	41	10	79	8	123	36	14	131	73	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	39	45	11	86	9	134	39	15	142	79	63
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	8.8	9.1	9.7	10.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	71%	44%	0%	20%	0%	50%
Vol Thru, %	21%	56%	31%	80%	83%	28%
Vol Right, %	8%	0%	69%	0%	17%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	173	32	59	50	48	262
LT Vol	123	14	0	10	0	131
Through Vol	36	18	18	40	40	73
RT Vol	14	0	41	0	8	58
Lane Flow Rate	188	35	64	54	52	285
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.257	0.058	0.094	0.088	0.081	0.37
Departure Headway (Hd)	4.911	6.016	5.302	5.882	5.66	4.678
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	726	590	669	604	627	766
Service Time	2.973	3.803	3.088	3.667	3.445	2.733
HCM Lane V/C Ratio	0.259	0.059	0.096	0.089	0.083	0.372
HCM Control Delay	9.7	9.2	8.6	9.2	9	10.5
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	1	0.2	0.3	0.3	0.3	1.7

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	79	0	68	2	39	0	0	79	4
Future Vol, veh/h	0	0	0	79	0	68	2	39	0	0	79	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	86	0	74	2	42	0	0	86	4

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	134	136	42	90	0	-	-	-	0
Stage 1	46	46	-	-	-	-	-	-	-
Stage 2	88	90	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	860	755	1029	1505	-	0	0	-	-
Stage 1	976	857	-	-	-	0	0	-	-
Stage 2	935	820	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	859	0	1029	1505	-	-	-	-	-
Mov Cap-2 Maneuver	859	0	-	-	-	-	-	-	-
Stage 1	975	0	-	-	-	-	-	-	-
Stage 2	935	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1505	-	859	1029	-	-
HCM Lane V/C Ratio	0.001	-	0.1	0.072	-	-
HCM Control Delay (s)	7.4	0	9.7	8.8	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.2	-	-

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	1	0	0	0	0	38	22	56	104	0
Future Vol, veh/h	6	1	1	0	0	0	0	38	22	56	104	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	1	1	0	0	0	0	41	24	61	113	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	288	300	113	-	0	0	65	0	0
Stage 1	235	235	-	-	-	-	-	-	-
Stage 2	53	65	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	702	612	940	0	-	-	1537	-	0
Stage 1	804	710	-	0	-	-	-	-	0
Stage 2	970	841	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	673	0	940	-	-	-	1537	-	-
Mov Cap-2 Maneuver	673	0	-	-	-	-	-	-	-
Stage 1	804	0	-	-	-	-	-	-	-
Stage 2	929	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	673	940	1537	-
HCM Lane V/C Ratio	-	-	0.011	0.001	0.04	-
HCM Control Delay (s)	-	-	10.4	8.8	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	0.1	-

EEC ORIGINAL PKG

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	130	136	25	35	9	25	32	13	111	49	62
Future Vol, veh/h	21	130	136	25	35	9	25	32	13	111	49	62
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	141	148	27	38	10	27	35	14	121	53	67
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.6	9	8.9	10.3
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	36%	24%	0%	59%	0%	50%
Vol Thru, %	46%	76%	32%	41%	66%	22%
Vol Right, %	19%	0%	68%	0%	34%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	70	86	201	43	27	222
LT Vol	25	21	0	25	0	111
Through Vol	32	65	65	18	18	49
RT Vol	13	0	136	0	9	62
Lane Flow Rate	76	93	218	46	29	241
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.109	0.144	0.299	0.077	0.043	0.328
Departure Headway (Hd)	5.14	5.534	4.933	5.964	5.426	4.886
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	691	644	723	595	653	731
Service Time	3.219	3.303	2.702	3.753	3.214	2.947
HCM Lane V/C Ratio	0.11	0.144	0.302	0.077	0.044	0.33
HCM Control Delay	8.9	9.2	9.8	9.3	8.5	10.3
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0.4	0.5	1.3	0.2	0.1	1.4

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	67	0	42	2	29	0	0	156	9
Future Vol, veh/h	0	0	0	67	0	42	2	29	0	0	156	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	73	0	46	2	32	0	0	170	10

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	211	216	32	180	0	-	-	-	0
Stage 1	36	36	-	-	-	-	-	-	-
Stage 2	175	180	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	777	682	1042	1396	-	0	0	-	-
Stage 1	986	865	-	-	-	0	0	-	-
Stage 2	855	750	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	776	0	1042	1396	-	-	-	-	-
Mov Cap-2 Maneuver	776	0	-	-	-	-	-	-	-
Stage 1	985	0	-	-	-	-	-	-	-
Stage 2	855	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1396	-	776	1042	-	-
HCM Lane V/C Ratio	0.002	-	0.094	0.044	-	-
HCM Control Delay (s)	7.6	0	10.1	8.6	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	2	1	0	0	0	0	21	51	130	94	0
Future Vol, veh/h	10	2	1	0	0	0	0	21	51	130	94	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	1	0	0	0	0	23	55	141	102	0

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	435	462	102				-	0	0	78	0	0
Stage 1	384	384	-				-	-	-	-	-	-
Stage 2	51	78	-				-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22				-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-				-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318				-	-	-	2.218	-	-
Pot Cap-1 Maneuver	578	497	953				0	-	-	1520	-	0
Stage 1	688	611	-				0	-	-	-	-	0
Stage 2	971	830	-				0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	521	0	953				-	-	-	1520	-	-
Mov Cap-2 Maneuver	521	0	-				-	-	-	-	-	-
Stage 1	688	0	-				-	-	-	-	-	-
Stage 2	876	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.8	0	4.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	521	953	1520	-
HCM Lane V/C Ratio	-	-	0.025	0.001	0.093	-
HCM Control Delay (s)	-	-	12.1	8.8	7.6	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0.3	-

EEC ORIGINAL PKG

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	37	42	10	81	8	125	37	14	134	74	59
Future Vol, veh/h	14	37	42	10	81	8	125	37	14	134	74	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	40	46	11	88	9	136	40	15	146	80	64
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	8.9	9.2	9.8	10.6
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	71%	43%	0%	20%	0%	50%
Vol Thru, %	21%	57%	31%	80%	84%	28%
Vol Right, %	8%	0%	69%	0%	16%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	176	33	61	51	49	267
LT Vol	125	14	0	10	0	134
Through Vol	37	19	19	41	41	74
RT Vol	14	0	42	0	8	59
Lane Flow Rate	191	35	66	55	53	290
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.262	0.059	0.097	0.09	0.083	0.379
Departure Headway (Hd)	4.932	6.042	5.331	5.907	5.69	4.696
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	723	588	665	601	624	760
Service Time	2.998	3.83	3.119	3.696	3.478	2.753
HCM Lane V/C Ratio	0.264	0.06	0.099	0.092	0.085	0.382
HCM Control Delay	9.8	9.2	8.7	9.3	9	10.6
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	1	0.2	0.3	0.3	0.3	1.8

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	81	0	69	2	40	0	0	81	4
Future Vol, veh/h	0	0	0	81	0	69	2	40	0	0	81	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	88	0	75	2	43	0	0	88	4

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	137	139	43	92	0	-	-	-	0
Stage 1	47	47	-	-	-	-	-	-	-
Stage 2	90	92	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	856	752	1027	1503	-	0	0	-	-
Stage 1	975	856	-	-	-	0	0	-	-
Stage 2	934	819	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	855	0	1027	1503	-	-	-	-	-
Mov Cap-2 Maneuver	855	0	-	-	-	-	-	-	-
Stage 1	974	0	-	-	-	-	-	-	-
Stage 2	934	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1503	-	855	1027	-	-
HCM Lane V/C Ratio	0.001	-	0.103	0.073	-	-
HCM Control Delay (s)	7.4	0	9.7	8.8	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.2	-	-

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	1	1	0	0	0	0	39	22	57	106	0
Future Vol, veh/h	6	1	1	0	0	0	0	39	22	57	106	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	1	1	0	0	0	0	42	24	62	115	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	293	305	115	-	0	0	66	0	0
Stage 1	239	239	-	-	-	-	-	-	-
Stage 2	54	66	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	698	608	937	0	-	-	1536	-	0
Stage 1	801	708	-	0	-	-	-	-	0
Stage 2	969	840	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	668	0	937	-	-	-	1536	-	-
Mov Cap-2 Maneuver	668	0	-	-	-	-	-	-	-
Stage 1	801	0	-	-	-	-	-	-	-
Stage 2	927	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.3	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	668	937	1536	-
HCM Lane V/C Ratio	-	-	0.011	0.001	0.04	-
HCM Control Delay (s)	-	-	10.5	8.8	7.4	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	0.1	-

EEC ORIGINAL PKG

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	133	139	26	36	9	26	33	13	113	50	63
Future Vol, veh/h	21	133	139	26	36	9	26	33	13	113	50	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	145	151	28	39	10	28	36	14	123	54	68
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.7	9	8.9	10.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	36%	24%	0%	59%	0%	50%
Vol Thru, %	46%	76%	32%	41%	67%	22%
Vol Right, %	18%	0%	68%	0%	33%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	72	88	206	44	27	226
LT Vol	26	21	0	26	0	113
Through Vol	33	67	67	18	18	50
RT Vol	13	0	139	0	9	63
Lane Flow Rate	78	95	223	48	29	246
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.112	0.147	0.307	0.08	0.045	0.335
Departure Headway (Hd)	5.173	5.554	4.955	5.995	5.46	4.911
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	686	641	719	593	649	727
Service Time	3.258	3.325	2.725	3.785	3.249	2.975
HCM Lane V/C Ratio	0.114	0.148	0.31	0.081	0.045	0.338
HCM Control Delay	8.9	9.3	9.9	9.3	8.5	10.5
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0.4	0.5	1.3	0.3	0.1	1.5

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	68	0	43	2	30	0	0	159	9
Future Vol, veh/h	0	0	0	68	0	43	2	30	0	0	159	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	74	0	47	2	33	0	0	173	10

Major/Minor				Minor1			Major1			Major2		
Conflicting Flow All				215	220	33	183	0	-	-	-	0
Stage 1				37	37	-	-	-	-	-	-	-
Stage 2				178	183	-	-	-	-	-	-	-
Critical Hdwy				6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1				5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2				5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy				3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver				773	678	1041	1392	-	0	0	-	-
Stage 1				985	864	-	-	-	0	0	-	-
Stage 2				853	748	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver				772	0	1041	1392	-	-	-	-	-
Mov Cap-2 Maneuver				772	0	-	-	-	-	-	-	-
Stage 1				984	0	-	-	-	-	-	-	-
Stage 2				853	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1392	-	772	1041	-	-
HCM Lane V/C Ratio	0.002	-	0.096	0.045	-	-
HCM Control Delay (s)	7.6	0	10.2	8.6	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	2	1	0	0	0	0	21	52	133	96	0
Future Vol, veh/h	10	2	1	0	0	0	0	21	52	133	96	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	2	1	0	0	0	0	23	57	145	104	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	446	474	104	-	0	0	80	0	0
Stage 1	394	394	-	-	-	-	-	-	-
Stage 2	52	80	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	570	489	951	0	-	-	1518	-	0
Stage 1	681	605	-	0	-	-	-	-	0
Stage 2	970	828	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	512	0	951	-	-	-	1518	-	-
Mov Cap-2 Maneuver	512	0	-	-	-	-	-	-	-
Stage 1	681	0	-	-	-	-	-	-	-
Stage 2	872	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.9	0	4.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	512	951	1518	-
HCM Lane V/C Ratio	-	-	0.025	0.001	0.095	-
HCM Control Delay (s)	-	-	12.2	8.8	7.6	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0.3	-

EEC ORIGINAL PKG

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰↑↱			↰↑↱			✥			✥	
Traffic Vol, veh/h	14	37	42	12	81	10	125	37	15	134	74	59
Future Vol, veh/h	14	37	42	12	81	10	125	37	15	134	74	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	40	46	13	88	11	136	40	16	146	80	64
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	8.9	9.2	9.8	10.7
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	71%	43%	0%	23%	0%	50%
Vol Thru, %	21%	57%	31%	77%	80%	28%
Vol Right, %	8%	0%	69%	0%	20%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	177	33	61	53	51	267
LT Vol	125	14	0	12	0	134
Through Vol	37	19	19	41	41	74
RT Vol	15	0	42	0	10	59
Lane Flow Rate	192	35	66	57	55	290
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.264	0.059	0.098	0.094	0.086	0.38
Departure Headway (Hd)	4.943	6.05	5.339	5.926	5.669	4.711
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	721	586	664	599	626	760
Service Time	3.01	3.843	3.131	3.718	3.461	2.769
HCM Lane V/C Ratio	0.266	0.06	0.099	0.095	0.088	0.382
HCM Control Delay	9.8	9.2	8.7	9.3	9	10.7
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	1.1	0.2	0.3	0.3	0.3	1.8

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	81	0	113	2	45	0	0	91	4
Future Vol, veh/h	0	0	0	81	0	113	2	45	0	0	91	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	88	0	123	2	49	0	0	99	4

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	154	156	49	103	0	-	-	-	0
Stage 1	53	53	-	-	-	-	-	-	-
Stage 2	101	103	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	838	736	1020	1489	-	0	0	-	-
Stage 1	970	851	-	-	-	0	0	-	-
Stage 2	923	810	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	837	0	1020	1489	-	-	-	-	-
Mov Cap-2 Maneuver	837	0	-	-	-	-	-	-	-
Stage 1	969	0	-	-	-	-	-	-	-
Stage 2	923	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1489	-	837	1020	-	-
HCM Lane V/C Ratio	0.001	-	0.105	0.12	-	-
HCM Control Delay (s)	7.4	0	9.8	9	-	-
HCM Lane LOS	A	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.4	0.4	-	-

EEC ORIGINAL PKG

Intersection												
Int Delay, s/veh	2.6											
Movement	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
Lane Configurations												
Traffic Vol, veh/h	11	1	1	0	0	0	0	39	22	67	106	0
Future Vol, veh/h	11	1	1	0	0	0	0	39	22	67	106	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	1	1	0	0	0	0	42	24	73	115	0
Major/Minor	**Minor2**						**Major1**			**Major2**		
Conflicting Flow All	315	327	115				-	0	0	66	0	0
Stage 1	261	261	-				-	-	-	-	-	-
Stage 2	54	66	-				-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22				-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-				-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318				-	-	-	2.218	-	-
Pot Cap-1 Maneuver	678	591	937				0	-	-	1536	-	0
Stage 1	783	692	-				0	-	-	-	-	0
Stage 2	969	840	-				0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	643	0	937				-	-	-	1536	-	-
Mov Cap-2 Maneuver	643	0	-				-	-	-	-	-	-
Stage 1	783	0	-				-	-	-	-	-	-
Stage 2	920	0	-				-	-	-	-	-	-
Approach	**EB**						**NB**			**SB**		
HCM Control Delay, s	10.6						0			2.9		
HCM LOS	B											

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	643	937	1536	-
HCM Lane V/C Ratio	-	-	0.02	0.001	0.047	-
HCM Control Delay (s)	-	-	10.7	8.8	7.5	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0.1	-

EEC ORIGINAL PKG

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	133	139	26	36	9	26	33	15	113	50	63
Future Vol, veh/h	21	133	139	26	36	9	26	33	15	113	50	63
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	145	151	28	39	10	28	36	16	123	54	68
Number of Lanes	0	2	0	0	2	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	2	2
HCM Control Delay	9.8	9	8.9	10.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	35%	24%	0%	59%	0%	50%
Vol Thru, %	45%	76%	32%	41%	67%	22%
Vol Right, %	20%	0%	68%	0%	33%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	88	206	44	27	226
LT Vol	26	21	0	26	0	113
Through Vol	33	67	67	18	18	50
RT Vol	15	0	139	0	9	63
Lane Flow Rate	80	95	223	48	29	246
Geometry Grp	2	7	7	7	7	2
Degree of Util (X)	0.115	0.147	0.308	0.08	0.045	0.335
Departure Headway (Hd)	5.16	5.56	4.961	6.001	5.466	4.916
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	688	641	719	592	648	727
Service Time	3.245	3.33	2.731	3.792	3.256	2.98
HCM Lane V/C Ratio	0.116	0.148	0.31	0.081	0.045	0.338
HCM Control Delay	8.9	9.3	10	9.3	8.5	10.5
HCM Lane LOS	A	A	A	A	A	B
HCM 95th-tile Q	0.4	0.5	1.3	0.3	0.1	1.5

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	68	0	53	2	31	0	0	203	14
Future Vol, veh/h	0	0	0	68	0	53	2	31	0	0	203	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	-	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	74	0	58	2	34	0	0	221	15

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	267	274	34	236	0	-	-	-	0
Stage 1	38	38	-	-	-	-	-	-	-
Stage 2	229	236	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	722	633	1039	1331	-	0	0	-	-
Stage 1	984	863	-	-	-	0	0	-	-
Stage 2	809	710	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	721	0	1039	1331	-	-	-	-	-
Mov Cap-2 Maneuver	721	0	-	-	-	-	-	-	-
Stage 1	982	0	-	-	-	-	-	-	-
Stage 2	809	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	1331	-	721	1039	-	-
HCM Lane V/C Ratio	0.002	-	0.103	0.055	-	-
HCM Control Delay (s)	7.7	0	10.6	8.7	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.2	-	-

EEC ORIGINAL PKG

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	2	1	0	0	0	0	21	52	177	96	0
Future Vol, veh/h	11	2	1	0	0	0	0	21	52	177	96	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	2	1	0	0	0	0	23	57	192	104	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	540	568	104	-	0	0	80	0	0
Stage 1	488	488	-	-	-	-	-	-	-
Stage 2	52	80	-	-	-	-	-	-	-
Critical Hdwy	6.42	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	5.42	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	503	432	951	0	-	-	1518	-	0
Stage 1	617	550	-	0	-	-	-	-	0
Stage 2	970	828	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	436	0	951	-	-	-	1518	-	-
Mov Cap-2 Maneuver	436	0	-	-	-	-	-	-	-
Stage 1	617	0	-	-	-	-	-	-	-
Stage 2	840	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0	5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	436	951	1518	-
HCM Lane V/C Ratio	-	-	0.032	0.001	0.127	-
HCM Control Delay (s)	-	-	13.5	8.8	7.7	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	0.4	-

EEC ORIGINAL PKG

RECON

An Employee-Owned Company

June 7, 2023

Mr. Ramon Gonzalez
Senior Project Coordinator
Z Global
750 W. Main Street
El Centro, CA 92243

Reference: Noise Analysis for the Alba Peaker BESS Project, Seeley, California (RECON Number 10324)

Dear Mr. Gonzalez:

The purpose of this report is to assess potential noise impacts from construction and operation of the Alba Peaker Battery Energy Storage Site (BESS) Project (project). Noise impacts were evaluated using standards established by Imperial County (County).

1.0 Project Description

The project site is located within the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8 (Figure 1). The project site is comprised of Assessor Parcel Number 051-420-042, totaling approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain (Figure 2). Land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east.

The project would construct and operate a 100-megawatt BESS facility that would connect to an existing 92-kilovolt gen-tie line (Figure 3). The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

2.0 Environmental Setting

2.1 Noise Terminology

Sound levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease. Additionally, in technical terms, sound levels are described as either a "sound power level" or a "sound pressure level," which while commonly confused, are two distinct characteristics of sound.

Both share the same unit of measure, the dB. However, sound power, expressed as L_{pw}, is the energy converted into sound by the source. The L_{pw} is used to estimate how far a noise will travel and to predict the sound levels at various distances from the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers such as an eardrum or microphone and is the sound pressure level. Noise measurement instruments only measure sound pressure, and noise level limits used in standards are generally sound pressure levels.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dB(A).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study are the one-hour equivalent noise level (L_{eq}) and the maximum equivalent noise level (L_{max}). The L_{max} is the maximum generated noise level while the L_{eq} is the average noise level over a specified period of time, typically one-hour. Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dB(A) per doubling of distance. Thus, a point source over a soft site would attenuate at 7.5 dB(A) per doubling of distance.

Human perception of noise has no simple correlation with acoustical energy. A change in noise levels is generally perceived as follows: 3 dB(A) barely perceptible, 5 dB(A) readily perceptible, and 10 dB(A) perceived as a doubling or halving of noise (California Department of Transportation 2013).

2.2 Applicable Standards

The project site is designated as an Urban Area land use in the Imperial County General Plan. The Urban Area designation includes areas surrounding the following seven incorporated cities: Brawley, El Centro, Westmorland, Holtville, Calipatria, Imperial, and Calexico. It is anticipated that these areas will eventually be annexed or incorporated. The Seeley Urban Area, located west of the city of El Centro and south of the Naval Air Facility, is bounded on the west by the New River, on the north by El Centro Street, on the east by Bennett Road, and on the south by I-8. Noise generated by the project was evaluated using the standards established by the County.

2.2.1 Construction

County General Plan Noise Element Section IV.C.3 addresses noise generated by construction activities. It states:

- Construction noise, from a single piece of equipment or a combination of equipment, shall not exceed 75 dB L_{eq}, when averaged over an eight (8) hour period, and measured at the nearest sensitive receptor. This standard 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 L_{eq} when averaged over a one (1) hour period.
- Construction equipment operation shall be limited to the hours of 7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday. No commercial construction operations are permitted on Sunday or holidays. In cases of a person constructing or modifying a residence for himself/herself, and if the work is not being performed as a business, construction equipment operations may be performed on

> Sundays and holidays between the hours of 9 a.m. and 5 p.m. Such non-commercial construction activities may be further restricted where disturbing, excessive, or offensive noise causes discomfort or annoyance to reasonable persons of normal sensitivity residing in an area.

Based on these standards, the applicable limit for project construction activities is 75 dB(A) L_{eq} at the nearest sensitive receptor.

2.2.2 Operation

The County General Plan Noise Element (Imperial County 2015) identifies property line noise level limits that apply to noise generation from one property to an adjacent property (excluding construction noise). As stated in the Noise Element, the property line noise level limits imply the existence of a sensitive receptor on the adjacent, or receiving, property. In the absence of a sensitive receptor, an exception or variance to the standards may be appropriate.

County Code of Ordinances Title 9, Division 7: Noise Abatement and Control, specifies noise level limits. Noise level limits are summarized in Table 1. Noise level limits do not apply to construction equipment.

Table 1
Imperial County Property Line Noise Limits

Zone	Time	One-Hour Average Sound Level [dB(A) L_{eq}]
Low-Density Residential Zones	7:00 a.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
Medium to High-Density Residential Zones	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50
Commercial Zones	7:00 a.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	55
Manufacturing/Light Industrial/ Industrial Park Zones including agriculture	(anytime)	70
General Industrial Zones	(anytime)	75

SOURCE: Imperial County Noise Abatement and Control Ordinance, Tit. 9, Div. 7, § 90702.00(A).

The project site and properties to the north, south, east, and west are zoned M-2 (Medium Industrial), and the property south of the Seeley Drain is zoned R-1 (Low Density Residential). It should be noted that the R-1 designated parcel consists mostly of active agricultural land with the single-family residence located approximately 2,500 feet from the project site. Other residentially zoned parcels (R-1 and R-4) are located approximately 500 feet north of the project site, north of the railroad tracks and West Evan Hewes Highway.

3.0 Existing Conditions

Existing noise levels at the project site were measured on March 23, 2023, using one Larson-Davis LxT Sound Expert Sound Level Meter, serial number 3896. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period:	5 seconds

The meter was calibrated before and after the measurements. Noise measurements were taken to obtain typical ambient noise levels at the project site and in the vicinity. The weather was mild and partly cloudy with a slight breeze. The measurement was located near the center of the project site. The meter was set five feet above the ground level. Noise levels were typical of a rural agricultural environment. The main source of noise was agricultural equipment to the west. Noise levels were measured for approximately one hour. The average measured noise level was 50.1 dB(A) L_{eq}. The measurement location is shown on Figure 4, and detailed data is presented in Attachment 1.

4.0 Methodology

Noise level predictions and contour mapping for construction and on-site noise sources were developed using noise modeling software, SoundPlan Essential, version 4.1 (Navcon Engineering 2018). SoundPLAN calculates noise propagation based on the International Organization for Standardization method (ISO 9613-2 – Acoustics, Attenuation of Sound during Propagation Outdoors). The model calculates noise levels at selected receiver locations using input parameter estimates such as total noise generated by each noise source; distances between sources, barriers, and receivers; and shielding provided by intervening terrain, barriers, and structures. The model outputs can be developed as noise level contour maps or noise levels at specific receivers. In all cases, receivers were modeled at five feet above ground elevation, which represents the average height of the human ear.

4.1 Construction

Construction activities associated with the project would include grading and installation activity for the placement of the BESS storage containers and inverters. Project construction noise would be generated by diesel engine-driven construction equipment. Noise impacts from construction are a function of the noise generated by equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Table 2 presents a list of noise generation levels for various types of construction equipment. The duty cycle is the amount of time that equipment generates the reported noise level during typical, standard equipment operation. The noise levels and duty cycles summarized in Table 2 are based on measurements and studies conducted by Federal Highway Administration and the Federal Transit Authority.

Table 2 Typical Construction Equipment Noise Levels		
Equipment	Noise Level at 50 Feet [dB(A) L_{eq}]	Typical Duty Cycle
Auger Drill Rig	85	20%
Backhoe	80	40%
Blasting	94	1%
Chain Saw	85	20%
Clam Shovel	93	20%
Compactor (ground)	80	20%
Compressor (air)	80	40%
Concrete Mixer Truck	85	40%
Concrete Pump	82	20%
Concrete Saw	90	20%
Crane (mobile or stationary)	85	20%
Dozer	85	40%
Dump Truck	84	40%
Excavator	85	40%
Front End Loader	80	40%
Generator (25 kilovolt amps or less)	70	50%
Generator (more than 25 kilovolt amps)	82	50%
Grader	85	40%
Hydra Break Ram	90	10%
Impact Pile Driver (diesel or drop)	95	20%
In situ Soil Sampling Rig	84	20%
Jackhammer	85	20%
Mounted Impact Hammer (hoe ram)	90	20%
Paver	85	50%
Pneumatic Tools	85	50%
Pumps	77	50%
Rock Drill	85	20%
Roller	74	40%
Scraper	85	40%
Tractor	84	40%
Vacuum Excavator (vac-truck)	85	40%
Vibratory Concrete Mixer	80	20%
Vibratory Pile Driver	95	20%
SOURCE: Federal Highway Administration 2006 and 2008, Federal Transit Authority 2006. dB(A) L_{eq} = A-weighted decibels average noise level		

The loudest construction activities would be those associated with grading. Construction noise levels were calculated assuming the simultaneous use of the following three pieces of construction equipment: a grader, a loader, and a water truck. Water truck noise levels were assumed to be equivalent to a dump truck. Although more construction equipment would be present on-site, not all would be used at the same time. Simultaneous use of this equipment would generate an average hourly noise level of 84.3 dB(A) L_{eq} at 50 feet, which is equivalent to a sound power level of 115.9 dB(A) L_{pw}. This noise level was modeled as an area source distributed over the footprint of the development area.

EEC ORIGINAL PKG

4.2 Operation

Once construction is complete, the primary noise sources would be the inverters and the BESS containers. The project would include 20 Sungrow Model SC5000UD-MV-US inverters surrounded by 144 Sungrow Model ST2752UX-US BESS containers, each consisting of 48 battery units. It was assumed that noise levels generated by the inverters would be similar to Sungrow Model SG3600-UD-MV, which generate a sound power level of 92 dB(A) L_{pw} (TRC Companies, Inc. 2022). Manufacturer specifications for the BESS containers indicate that three facades of the containers generate a noise level of 54 dB(A) L_{eq} at five meters and one façade generates a noise level of 53 dB(A) L_{eq} at five meters (Assured Environmental 2022). The louder noise level, which equates to a sound power level of 76 dB(A) L_{pw}, was modeled. All inverters and BESS containers were modeled with a 100 percent usage factor.

5.0 Noise Impact Analysis

5.1 Construction

Noise associated with project construction would potentially result in short-term impacts to surrounding properties. As discussed in Section 1.0 above, land uses surrounding the project site consist of active agricultural uses to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east. The nearest sensitive receptors are the residential uses located approximately 500 feet north of the project site, north of the railroad tracks and West Evan Hewes Highway. Construction noise levels were calculated based on the simultaneously use of a grader, loader, and water truck.

Noise levels were modeled at a series of 10 receivers located at the adjacent properties and the nearest residential uses. The results are summarized in Table 3. Modeled receiver locations and construction noise contours are shown on Figure 5. SoundPLAN data is contained in Attachment 2.

Table 3
Construction Noise Levels

Receiver	Zoning	Construction Noise Level [dB(A) L_{eq}]
1	M-2 (Medium Industrial)	64
2	M-2 (Medium Industrial)	68
3	M-2 (Medium Industrial)	67
4	M-2 (Medium Industrial)	67
5	M-2 (Medium Industrial)	68
6	M-2 (Medium Industrial)	69
7	M-2 (Medium Industrial)	66
8	M-2 (Medium Industrial)	62
9	M-2 (Medium Industrial)	61
10	R-1 (Low Density Residential) R-4 (High Density Residential and Mobile Park/Subdivision)	54

dB(A) L_{eq} = A-weighted decibels equivalent noise level.

As shown in Table 3, construction noise levels are not anticipated to exceed the County's construction noise level limit of 75 dB(A) L_{eq} at the adjacent properties. Construction activities would only occur during the times allowable by the County Municipal Codes (7 a.m. to 7 p.m., Monday through Friday, and 9 a.m. to 5 p.m. Saturday). No construction activities that generate impulsive noise levels would be required. Although the existing nearby residences would be exposed to construction noise levels that could be heard above ambient conditions, the exposure would be temporary. Therefore, project construction would not exceed noise level limits established in the County's Municipal Code and would only occur during the daytime hours, and temporary increases in noise levels during construction would be less than significant.

5.2 Operation

The primary noise sources on-site would be the inverters and the BESS containers. Using the on-site noise source parameters discussed in Section 4.2, noise levels were modeled at a series of 10 receivers located at the adjacent properties and the nearest residential uses. Modeled receivers and operational noise contours are shown in Figure 6. Modeled data is included in Attachment 3. Future projected noise levels are summarized in Table 4.

Table 4
Operational Noise Levels

Receiver	Zoning	Applicable Limit Daytime/Nighttime [dB(A) L_{eq}]	Operational Noise Level [dB(A) L_{eq}]
1	M-2 (Medium Industrial)	70/70	50
2	M-2 (Medium Industrial)	70/70	58
3	M-2 (Medium Industrial)	70/70	55
4	M-2 (Medium Industrial)	70/70	52
5	M-2 (Medium Industrial)	70/70	52
6	M-2 (Medium Industrial)	70/70	54
7	M-2 (Medium Industrial)	70/70	49
8	M-2 (Medium Industrial)	70/70	47
9	M-2 (Medium Industrial)	70/70	47
10	R-1 (Low Density Residential) R-4 (High Density Residential and Mobile Park/Subdivision)	50/45 55/50	39

dB(A) L_{eq} = A-weighted decibels equivalent noise level.

As shown in Table 4, operational noise levels would not exceed the County's most restrictive noise level limits. Therefore, project operation would not result in noise levels that exceed City or County standards, and operational noise impacts would be less than significant.

6.0 Conclusions

Based on the preceding analysis, the project is not anticipated to generate construction or operational noise levels that exceed the applicable noise limits. Impacts associated with the project would be less than significant.

If you have any questions about the results of this analysis, please contact me at jfleming@reconenvironmental.com or (619) 308-9333 extension 177.

Sincerely,

Jessica Fleming

Jessica Fleming
Noise Specialist

JLF:sh

EEC ORIGINAL PKG

7.0 Certification

The following is a list of preparers, persons, and organizations involved with the noise assessment.

RECON Environmental, Inc.
Jessica Fleming, County-approved Noise Consultant
Stacey Higgins, Senior Production Specialist
Benjamin Arp, GIS Specialist

8.0 References Cited

Assured Environmental
2022 Aspley BESS: Noise & Vibration Impact Assessment. Prepared for ACEnergy Pty Ltd. Project ID: 13614. July 21, 2022.

California Department of Transportation
2013 Technical Noise Supplement. November.

Federal Highway Administration (FHWA)
2006 Roadway Construction Noise Model User's Guide. FHWA-HEP-05-054, SOT-VNTSC-FHWA-05-01. Final Report. January.

2008 Roadway Construction Noise Mode, V1.1. Washington, DC.

Federal Transit Administration
2006 Transit Noise and Vibration Impact Assessment. Washington, DC. May.

Imperial, County of
2015 Imperial County General Plan Noise Element. Approved October 6.

Navcon Engineering, Inc.
2018 SoundPLAN Essential version 4.1.

TRC Companies, Inc.
2022 Brookside Solar Project. Application for a Permit Pursuant to §94-c of the New York State Executive Law for Construction of a Major Solar Electrical Generating Facility. Exhibit 7 Noise and Vibration. Matter No. 21-00917. Prepared for AES Clean Energy. February 2022.

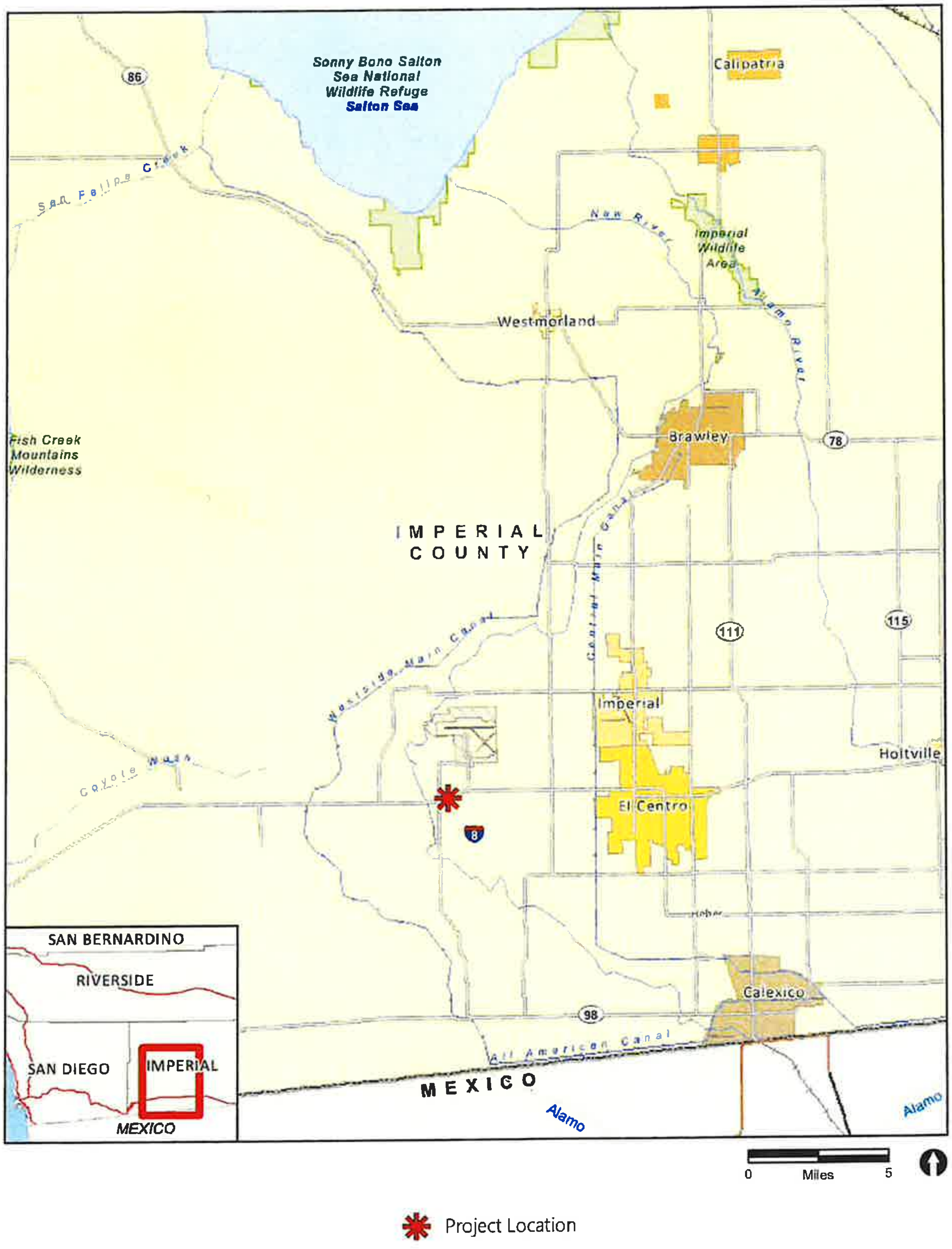


FIGURE 1
Regional Location

RECON
M:\JOBS6\10324\common_gis\MXD\fig1.mxd 03/08/2023 bma

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)

Project Boundary

FIGURE 2
Project Location on Aerial Photograph

RECON

M:\JOBS6\10324\common_gis\MXD\fig2_air.mxd 6/5/2023 fmm

EEC ORIGINAL PKG

Map Source: ZGLOBAL

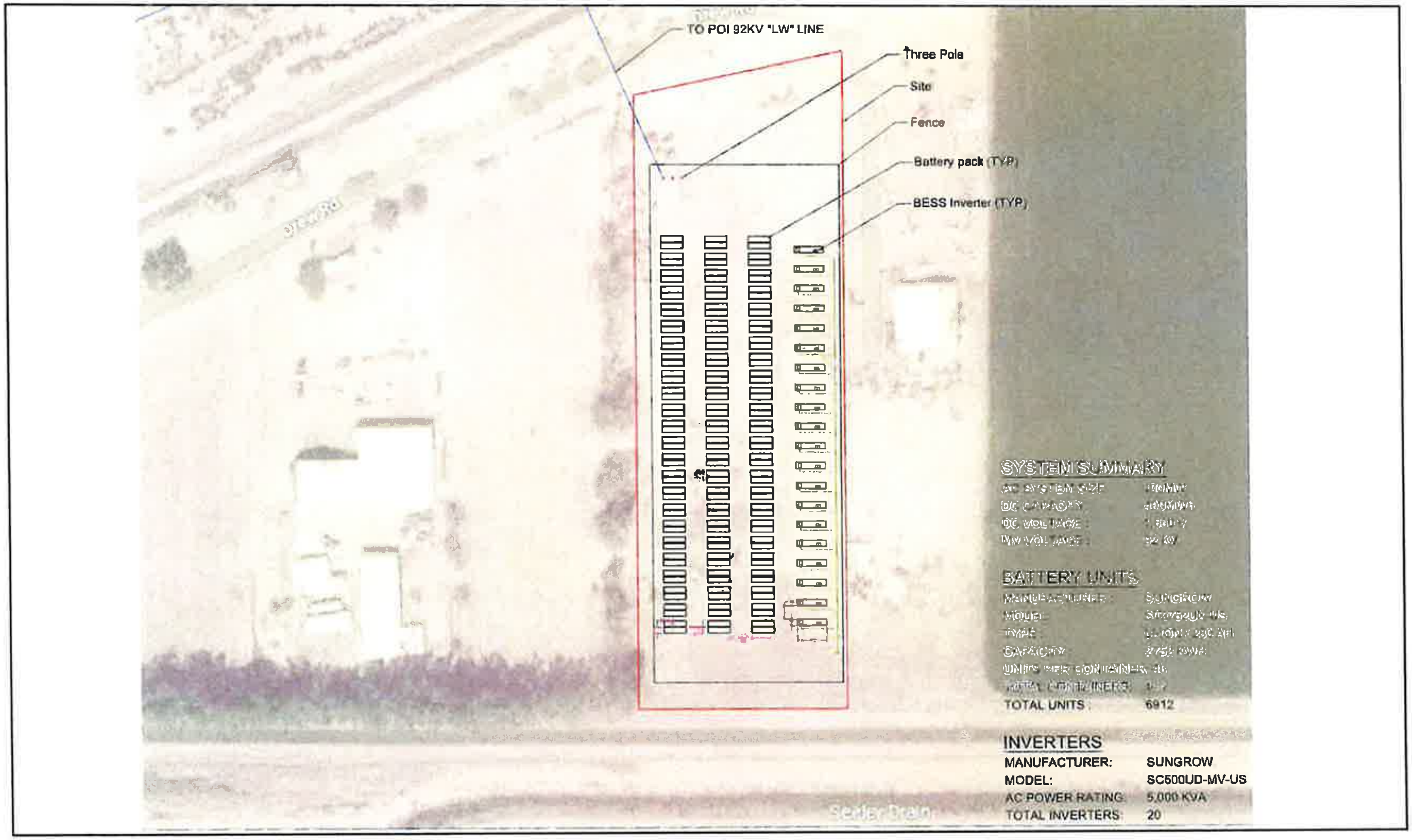


FIGURE 3
Site Plan

RECON

M:\JOBS6\10324\arcgraphics\fig3.ai 06/05/23 fmm

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)

Project Boundary

Noise Measurement Location

FIGURE 4

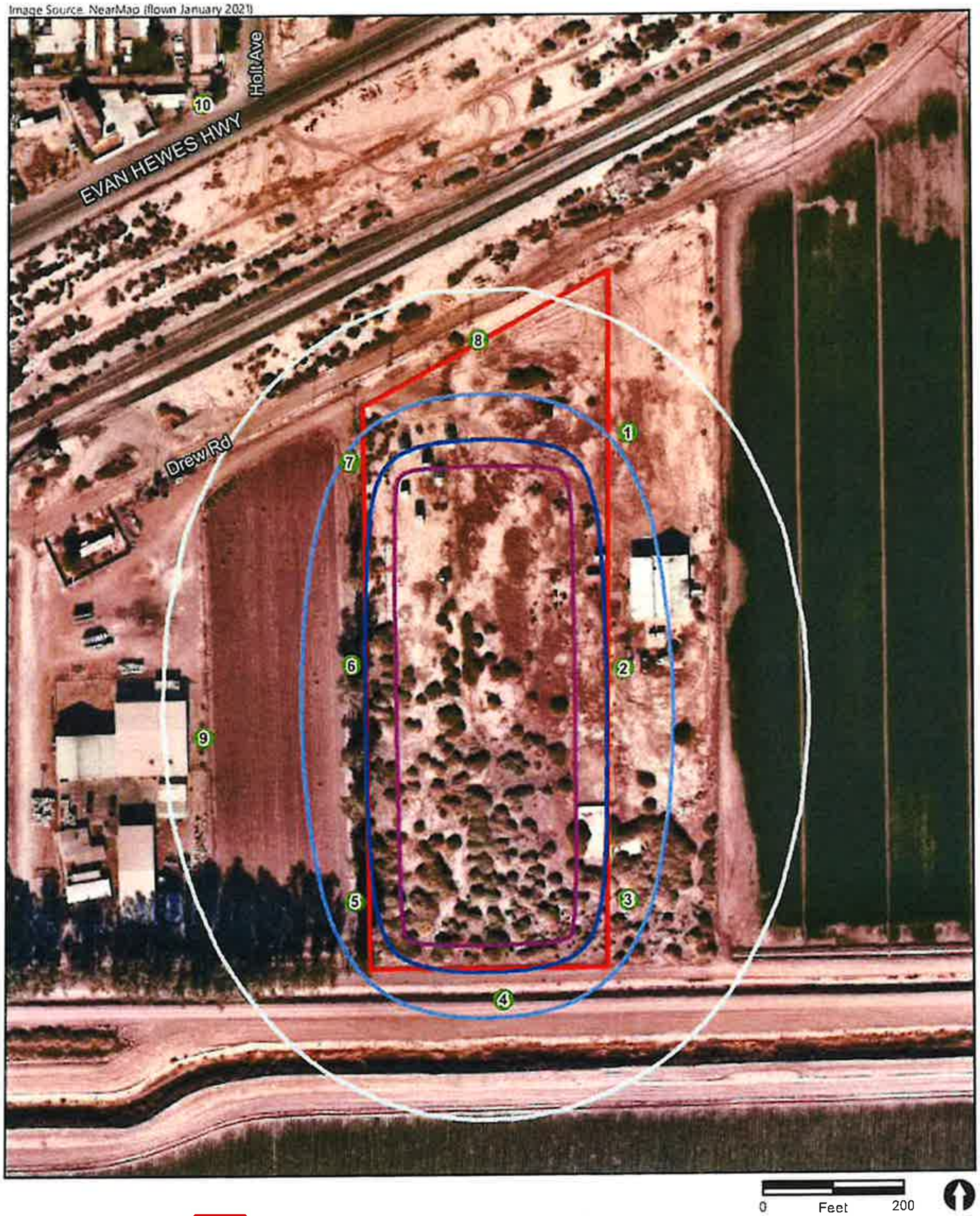
Noise Measurement Location

RECON

M:\JOBS6\10324\common_gis\MXD\nos\fig4.mxd 6/6/2023 fmm

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)



Project Boundary

Receivers

Construction Noise Contours

60 dB(A) L_{eq}

65 dB(A) L_{eq}

70 dB(A) L_{eq}

75 dB(A) L_{eq}

RECON

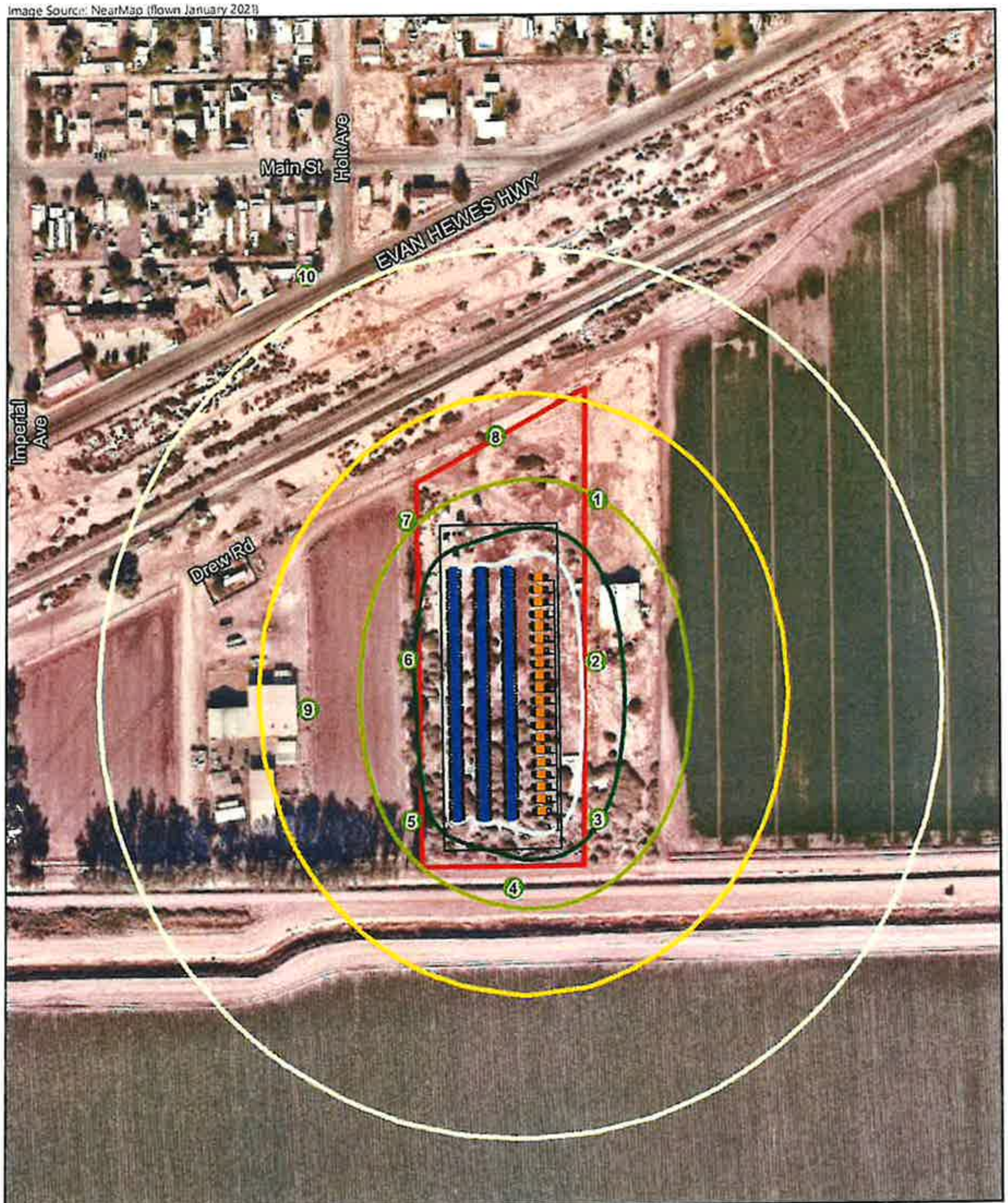
M:\JOBS6\10324\common_gis\MXD\nos\fig5.mxd 6/6/2023 fmm

FIGURE 5

Construction Noise Contours

EEC ORIGINAL PKG

Image Source: NearMap (flown January 2021)



Project Boundary
Battery Storage Facility
Receivers
Inverters
BESS

Operational Noise Contours

40 dB(A) L_{eq}
45 dB(A) L_{eq}
50 dB(A) L_{eq}
55 dB(A) L_{eq}
60 dB(A) L_{eq}

0 Feet 300

RECON

M:\JOBS6\10324\common_gis\MXD\nos\fig6 mxd 6/6/2023 fmm

FIGURE 6
Operational Noise Contours

EEC ORIGINAL PKG

ATTACHMENTS

EEC ORIGINAL PKG

ATTACHMENT 1

Noise Measurement Data

10324 Alba Peaker
Noise Measurement Summary

Summary

File Name on Meter	LxT_Data 216 s
File Name on PC	LxT_0003896-20230323 101754-LxT_Data 216 ldbin
Serial Number	0003896
Model	SoundTrack LxT®
Firmware Version	2 404
User	
Location	
Job Description	
Note	

Measurement

Description	
Start	2023-03-23 10 17:54
Stop	2023-03-23 11:21:25
Duration	01 03:31 8
Run Time	01 03 06 4
Pause	00:00:25 4
Pre-Calibration	2023-03-23 10:15 56
Post-Calibration	None
Calibration Deviation	---

Overall Settings

RMS Weight	A Weighting		
Peak Weight	A Weighting		
Detector	Slow		
Preamplifier	PRMLxT1		
Microphone Correction	Off		
Integration Method	Linear		
Overload	144 7 dB		
	A	C	Z
Under Range Peak	100.6	97.6	102 6 dB
Under Range Limit	37.8	37.5	44 6 dB
Noise Floor	28 7	28.4	35 4 dB

Results

LAeq	50 1	
LAE	85.9	
EA	43 323 µPa²h	
EA8	329 522 µPa²h	
EA40	1 648 mPa²h	
LApeak (max)	2023-03-23 10:18:22	97 5 dB
LASmax	2023-03-23 10 42:22	68 5 dB
LASmin	2023-03-23 10 30:52	41 2 dB
SEA	dB	
LAS > 60.0 dB (Exceedance Counts / Duration)	10	56 5 s
LAS > 70.0 dB (Exceedance Counts / Duration)	0	0 0 s
LApeak > 135.0 dB (Exceedance Counts / Duration)	0	0 0 s
LApeak > 137.0 dB (Exceedance Counts / Duration)	0	0 0 s
LApeak > 140.0 dB (Exceedance Counts / Duration)	0	0 0 s
LCeq	73 8 dB	
LAeq	50 1 dB	
LCeq - LAeq	23 7 dB	
LAIeq	53 0 dB	
LAeq	50 1 dB	
LAIeq - LAeq	2 8 dB	

	A		C		Z	
	dB	Time Stamp	dB	Time Stamp	dB	Time Stamp
Leq	50.1		73 8			
LS(max)	68 5	2023/03/23 10:42:22				
LS(min)	41 2	2023/03/23 10 30:52				
LPeak(max)	97.5	2023/03/23 10:18 22				

Overload Count	0
Overload Duration	0 0 s

Dose Settings

Dose Name	OSHA-1	OSHA-2
Exchange Rate	5	5 dB
Threshold	90	80 dB
Criterion Level	90	90 dB
Criterion Duration	8	8 h

Results

Dose		%
Projected Dose		%
TWA (Projected)		dB
TWA (t)		dB
Lep (t)	41 3	41 3 dB

Statistics

LA5.00	53.9 dB
LA10.00	51 7 dB
LA33 30	48 4 dB
LA50.00	47.1 dB
LA66.60	46 0 dB
LA90.00	44.3 dB

EEC ORIGINAL PKG

ATTACHMENT 2

SoundPLAN Data – Construction

10324 Alba Peaker

SoundPLAN Data - Construction

Source name	Reference	Noise Level dB(A)	Corrections Cwall dB(A)	CI dB(A)	CT dB(A)
Construction	Lw/unit	115.9	-	-	-

10324 Alba Peaker

SoundPLAN Data - Construction

No.	Coordinates X (meters)	Y	Noise Level dB(A)
1	623200.49	3628938.09	63.7
2	623198.91	3628835.69	68.1
3	623200.49	3628735.68	66.9
4	623146.52	3628692.82	66.6
5	623081.43	3628735.68	67.5
6	623079.84	3628838.08	68.5
7	623079.05	3628926.18	65.6
8	623135.41	3628978.57	61.9
9	623015.55	3628807.12	61.2
10	623014.75	3629080.96	54.1

Receivers

ATTACHMENT 3

SoundPLAN Data – Operation

Source name	Reference	Level Leq1 dB(A)
BESS1	Lw/unit	76
BESS2	Lw/unit	76
BESS3	Lw/unit	76
BESS4	Lw/unit	76
BESS5	Lw/unit	76
BESS6	Lw/unit	76
BESS7	Lw/unit	76
BESS8	Lw/unit	76
BESS9	Lw/unit	76
BESS10	Lw/unit	76
BESS11	Lw/unit	76
BESS12	Lw/unit	76
BESS13	Lw/unit	76
BESS14	Lw/unit	76
BESS15	Lw/unit	76
BESS16	Lw/unit	76
BESS17	Lw/unit	76
BESS18	Lw/unit	76
BESS19	Lw/unit	76
BESS20	Lw/unit	76
BESS21	Lw/unit	76
BESS22	Lw/unit	76
BESS23	Lw/unit	76
BESS24	Lw/unit	76
BESS25	Lw/unit	76
BESS26	Lw/unit	76
BESS27	Lw/unit	76
BESS28	Lw/unit	76
BESS29	Lw/unit	76
BESS30	Lw/unit	76
BESS31	Lw/unit	76
BESS32	Lw/unit	76
BESS33	Lw/unit	76
BESS34	Lw/unit	76
BESS35	Lw/unit	76
BESS36	Lw/unit	76
BESS37	Lw/unit	76
BESS38	Lw/unit	76
BESS39	Lw/unit	76
BESS40	Lw/unit	76
BESS41	Lw/unit	76
BESS42	Lw/unit	76
BESS43	Lw/unit	76
BESS44	Lw/unit	76
BESS45	Lw/unit	76
BESS46	Lw/unit	76
BESS47	Lw/unit	76
BESS48	Lw/unit	76
BESS49	Lw/unit	76
BESS50	Lw/unit	76
BESS51	Lw/unit	76
BESS52	Lw/unit	76
BESS53	Lw/unit	76
BESS54	Lw/unit	76
BESS55	Lw/unit	76
BESS56	Lw/unit	76
BESS57	Lw/unit	76
BESS58	Lw/unit	76
BESS59	Lw/unit	76
BESS60	Lw/unit	76
BESS61	Lw/unit	76
BESS62	Lw/unit	76
BESS63	Lw/unit	76
BESS64	Lw/unit	76
BESS65	Lw/unit	76
BESS66	Lw/unit	76
BESS67	Lw/unit	76
BESS68	Lw/unit	76
BESS69	Lw/unit	76
BESS70	Lw/unit	76
BESS71	Lw/unit	76

BESS72	Lw/unit	76
BESS73	Lw/unit	76
BESS74	Lw/unit	76
BESS75	Lw/unit	76
BESS76	Lw/unit	76
BESS77	Lw/unit	76
BESS78	Lw/unit	76
BESS79	Lw/unit	76
BESS80	Lw/unit	76
BESS81	Lw/unit	76
BESS82	Lw/unit	76
BESS83	Lw/unit	76
BESS84	Lw/unit	76
BESS85	Lw/unit	76
BESS86	Lw/unit	76
BESS87	Lw/unit	76
BESS88	Lw/unit	76
BESS89	Lw/unit	76
BESS90	Lw/unit	76
BESS91	Lw/unit	76
BESS92	Lw/unit	76
BESS93	Lw/unit	76
BESS94	Lw/unit	76
BESS95	Lw/unit	76
BESS96	Lw/unit	76
BESS97	Lw/unit	76
BESS98	Lw/unit	76
BESS99	Lw/unit	76
BESS100	Lw/unit	76
BESS101	Lw/unit	76
BESS102	Lw/unit	76
BESS103	Lw/unit	76
BESS104	Lw/unit	76
BESS105	Lw/unit	76
BESS106	Lw/unit	76
BESS107	Lw/unit	76
BESS108	Lw/unit	76
BESS109	Lw/unit	76
BESS110	Lw/unit	76
BESS111	Lw/unit	76
BESS112	Lw/unit	76
BESS113	Lw/unit	76
BESS114	Lw/unit	76
BESS115	Lw/unit	76
BESS116	Lw/unit	76
BESS117	Lw/unit	76
BESS118	Lw/unit	76
BESS119	Lw/unit	76
BESS120	Lw/unit	76
BESS121	Lw/unit	76
BESS122	Lw/unit	76
BESS123	Lw/unit	76
BESS124	Lw/unit	76
BESS125	Lw/unit	76
BESS126	Lw/unit	76
BESS127	Lw/unit	76
BESS128	Lw/unit	76
BESS129	Lw/unit	76
BESS130	Lw/unit	76
BESS131	Lw/unit	76
BESS132	Lw/unit	76
BESS133	Lw/unit	76
BESS134	Lw/unit	76
BESS135	Lw/unit	76
BESS136	Lw/unit	76
BESS137	Lw/unit	76
BESS138	Lw/unit	76
BESS139	Lw/unit	76
BESS140	Lw/unit	76
BESS141	Lw/unit	76
BESS142	Lw/unit	76
BESS143	Lw/unit	76
BESS144	Lw/unit	76

EEC ORIGINAL PKG

10324 Alba Peaker
SoundPLAN Data - Operation

No.	Coordinates X (meters)	Coordinates Y (meters)	Noise Level dB(A)
1	623200.49	3628938.09	50.2
2	623198.91	3628835.69	58.0
3	623200.49	3628735.68	55.3
4	623146.52	3628692.82	51.6
5	623081.43	3628735.68	52.0
6	623079.84	3628838.08	54.0
7	623079.05	3628926.18	49.2
8	623135.41	3628978.57	47.0
9	623015.55	3628807.12	47.1
10	623014.75	3629080.96	39.2

Source name	Noise Level dB(A)
1 1 Fl 50 2 0 0	
BESS1	23 5
BESS2	23 4
BESS3	25 1
BESS4	24.9
BESS5	26 9
BESS6	26 7
BESS7	26 3
BESS8	26.1
BESS9	24 7
BESS10	24.5
BESS11	23 2
BESS12	23 1
BESS13	22 9
BESS14	22 8
BESS15	24 3
BESS16	24.1
BESS17	25 8
BESS18	25 5
BESS19	25 2
BESS20	25 0
BESS21	23 9
BESS22	23.7
BESS23	22 6
BESS24	22 5
BESS25	22 3
BESS26	22.1
BESS27	23 4
BESS28	23 3
BESS29	24 6
BESS30	24 4
BESS31	24 1
BESS32	23 9
BESS33	23 0
BESS34	22 9
BESS35	21 9
BESS36	21 8
BESS37	21 6
BESS38	21 5
BESS39	22 6
BESS40	22.4
BESS41	23 6
BESS42	23 4
BESS43	21 3
BESS44	21.1
BESS45	22.2
BESS46	22 0
BESS47	23 0
BESS48	22 9
BESS49	20.9
BESS50	21 8
BESS51	22.5
BESS52	22 4
BESS53	21 6
BESS54	20 8
BESS55	20 6
BESS56	21.4
BESS57	22.1
BESS58	21 9
BESS59	21 2
BESS60	20.4
BESS61	20 2
BESS62	20.9
BESS63	21.6
BESS64	21.4
BESS65	20.8
BESS66	20.1
BESS67	19 9
BESS68	20.6
BESS69	21.2
BESS70	21.0
BESS71	20.4
BESS72	19 8
BESS73	19.6
BESS74	20 2
BESS75	20.7
BESS76	20.6
BESS77	20 0
BESS78	19.5
BESS79	19.3

BESS80	19.8
BESS81	20.3
BESS82	20.2
BESS83	19.7
BESS84	19.1
BESS85	18.9
BESS86	19.5
BESS87	19.9
BESS88	19.8
BESS89	19.3
BESS90	18.8
BESS91	18.6
BESS92	19.1
BESS93	19.6
BESS94	19.4
BESS95	19.0
BESS96	18.5
BESS97	18.3
BESS98	18.8
BESS99	19.2
BESS100	19.0
BESS101	18.6
BESS102	18.2
BESS103	18.0
BESS104	18.4
BESS105	18.8
BESS106	18.7
BESS107	18.3
BESS108	17.9
BESS109	17.7
BESS110	18.1
BESS111	18.5
BESS112	18.3
BESS113	18.0
BESS114	17.6
BESS115	17.4
BESS116	17.8
BESS117	18.1
BESS118	18.0
BESS119	17.7
BESS120	17.3
BESS121	17.2
BESS122	17.5
BESS123	17.8
BESS124	17.7
BESS125	17.4
BESS126	17.1
BESS127	16.9
BESS128	17.2
BESS129	17.5
BESS130	17.4
BESS131	17.1
BESS132	16.8
BESS133	16.6
BESS134	16.9
BESS135	17.2
BESS136	17.1
BESS137	16.8
BESS138	16.5
BESS139	16.3
BESS140	16.6
BESS141	16.9
BESS142	16.8
BESS143	16.5
BESS144	16.2
Inverter1	42.1
Inverter2	41.0
Inverter3	40.0
Inverter4	39.0
Inverter5	38.0
Inverter6	37.2
Inverter7	36.3
Inverter8	35.5
Inverter9	34.7
Inverter10	34.0
Inverter11	33.3
Inverter12	32.7
Inverter13	32.0
Inverter14	31.4
Inverter15	30.9
Inverter16	30.3
Inverter17	29.8
Inverter18	29.3

Inverter19				28.8
Inverter20				28.4
2	1 Fl	58.0	0.0	
BESS1				23.1
BESS2				23.2
BESS3				24.4
BESS4				24.6
BESS5				25.9
BESS6				26.1
BESS7				26.5
BESS8				26.7
BESS9				24.9
BESS10				25.0
BESS11				23.4
BESS12				23.5
BESS13				23.7
BESS14				23.8
BESS15				25.3
BESS16				25.4
BESS17				27.1
BESS18				27.3
BESS19				27.7
BESS20				27.9
BESS21				25.7
BESS22				25.8
BESS23				24.0
BESS24				24.1
BESS25				24.2
BESS26				24.3
BESS27				26.0
BESS28				26.2
BESS29				28.3
BESS30				28.5
BESS31				28.8
BESS32				28.9
BESS33				26.4
BESS34				26.5
BESS35				24.4
BESS36				24.5
BESS37				24.6
BESS38				24.7
BESS39				26.6
BESS40				26.7
BESS41				29.2
BESS42				29.3
BESS43				24.7
BESS44				24.8
BESS45				26.8
BESS46				26.9
BESS47				29.5
BESS48				29.6
BESS49				24.8
BESS50				26.9
BESS51				29.7
BESS52				29.8
BESS53				26.9
BESS54				24.8
BESS55				24.8
BESS56				26.9
BESS57				29.8
BESS58				29.8
BESS59				26.9
BESS60				24.8
BESS61				24.8
BESS62				26.9
BESS63				29.7
BESS64				29.6
BESS65				26.8
BESS66				24.7
BESS67				24.7
BESS68				26.7
BESS69				29.4
BESS70				29.3
BESS71				26.7
BESS72				24.6
BESS73				24.5
BESS74				26.5
BESS75				29.0
BESS76				28.9
BESS77				26.4
BESS78				24.5
BESS79				24.3
BESS80				26.2

EEC ORIGINAL PKG

BESS81	28.6
BESS82	28.4
BESS83	26.1
BESS84	24.3
BESS85	24.1
BESS86	25.9
BESS87	28.0
BESS88	27.8
BESS89	25.8
BESS90	24.0
BESS91	23.9
BESS92	25.5
BESS93	27.5
BESS94	27.2
BESS95	25.4
BESS96	23.8
BESS97	23.6
BESS98	25.1
BESS99	26.9
BESS100	26.6
BESS101	25.0
BESS102	23.5
BESS103	23.3
BESS104	24.7
BESS105	26.2
BESS106	26.0
BESS107	24.5
BESS108	23.1
BESS109	22.9
BESS110	24.3
BESS111	25.7
BESS112	25.4
BESS113	24.1
BESS114	22.8
BESS115	22.6
BESS116	23.8
BESS117	25.1
BESS118	24.8
BESS119	23.7
BESS120	22.5
BESS121	22.3
BESS122	23.4
BESS123	24.5
BESS124	24.3
BESS125	23.2
BESS126	22.1
BESS127	21.9
BESS128	22.9
BESS129	23.9
BESS130	23.7
BESS131	22.8
BESS132	21.8
BESS133	21.6
BESS134	22.5
BESS135	23.4
BESS136	23.2
BESS137	22.3
BESS138	21.4
BESS139	21.2
BESS140	22.1
BESS141	22.9
BESS142	22.7
BESS143	21.9
BESS144	21.1
Inverter1	41.5
Inverter2	42.6
Inverter3	43.8
Inverter4	45.0
Inverter5	46.1
Inverter6	47.1
Inverter7	47.8
Inverter8	48.0
Inverter9	47.7
Inverter10	47.0
Inverter11	46.1
Inverter12	44.9
Inverter13	43.7
Inverter14	42.5
Inverter15	41.4
Inverter16	40.3
Inverter17	39.3
Inverter18	38.3
Inverter19	37.4

Inverter20				36.5
3	1 FI	55 3	0 0	
BESS1				18.0
BESS2				18.1
BESS3				18.4
BESS4				18.6
BESS5				18.8
BESS6				18.9
BESS7				19.1
BESS8				19.3
BESS9				18.8
BESS10				18.9
BESS11				18.3
BESS12				18.4
BESS13				18.6
BESS14				18.7
BESS15				19.1
BESS16				19.2
BESS17				19.5
BESS18				19.7
BESS19				19.9
BESS20				20.1
BESS21				19.5
BESS22				19.6
BESS23				18.9
BESS24				19.1
BESS25				19.3
BESS26				19.4
BESS27				19.8
BESS28				20.0
BESS29				20.3
BESS30				20.5
BESS31				20.7
BESS32				20.9
BESS33				20.2
BESS34				20.3
BESS35				19.6
BESS36				19.7
BESS37				19.9
BESS38				20.1
BESS39				20.6
BESS40				20.7
BESS41				21.2
BESS42				21.3
BESS43				20.3
BESS44				20.4
BESS45				21.0
BESS46				21.1
BESS47				21.6
BESS48				21.8
BESS49				20.6
BESS50				21.4
BESS51				22.1
BESS52				22.2
BESS53				21.5
BESS54				20.7
BESS55				21.0
BESS56				21.8
BESS57				22.5
BESS58				22.7
BESS59				22.0
BESS60				21.1
BESS61				21.3
BESS62				22.2
BESS63				23.1
BESS64				23.2
BESS65				22.4
BESS66				21.5
BESS67				21.7
BESS68				22.6
BESS69				23.6
BESS70				23.8
BESS71				22.8
BESS72				21.8
BESS73				22.0
BESS74				23.1
BESS75				24.1
BESS76				24.3
BESS77				23.3
BESS78				22.2
BESS79				22.4
BESS80				23.5
BESS81				24.7

BESS82	24.9
BESS83	23.7
BESS84	22.5
BESS85	22.7
BESS86	24.0
BESS87	25.3
BESS88	25.5
BESS89	24.1
BESS90	22.8
BESS91	23.1
BESS92	24.4
BESS93	25.9
BESS94	26.1
BESS95	24.6
BESS96	23.2
BESS97	23.4
BESS98	24.9
BESS99	26.5
BESS100	26.7
BESS101	25.0
BESS102	23.5
BESS103	23.7
BESS104	25.3
BESS105	27.1
BESS106	27.3
BESS107	25.4
BESS108	23.8
BESS109	24.0
BESS110	25.7
BESS111	27.6
BESS112	27.9
BESS113	25.8
BESS114	24.1
BESS115	24.2
BESS116	26.0
BESS117	28.2
BESS118	28.4
BESS119	26.1
BESS120	24.3
BESS121	24.4
BESS122	26.3
BESS123	28.7
BESS124	28.9
BESS125	26.4
BESS126	24.5
BESS127	24.6
BESS128	26.6
BESS129	29.2
BESS130	29.3
BESS131	26.7
BESS132	24.6
BESS133	24.7
BESS134	26.8
BESS135	29.5
BESS136	29.6
BESS137	26.8
BESS138	24.7
BESS139	24.8
BESS140	26.9
BESS141	29.7
BESS142	29.7
BESS143	26.9
BESS144	24.8
Inverter1	31.1
Inverter2	31.7
Inverter3	32.3
Inverter4	33.0
Inverter5	33.6
Inverter5	34.4
Inverter7	35.1
Inverter8	35.9
Inverter9	36.7
Inverter10	37.6
Inverter11	38.5
Inverter12	39.5
Inverter13	40.6
Inverter14	41.7
Inverter15	42.8
Inverter16	44.0
Inverter17	45.2
Inverter18	46.3
Inverter19	47.2
Inverter20	47.8

4 1 FI 51 6 0 0

BESS1	17.0
BESS2	17.1
BESS3	17.1
BESS4	17.2
BESS5	17.1
BESS6	17.2
BESS7	17.4
BESS8	17.5
BESS9	17.4
BESS10	17.5
BESS11	17.3
BESS12	17.4
BESS13	17.6
BESS14	17.7
BESS15	17.7
BESS16	17.8
BESS17	17.7
BESS18	17.9
BESS19	18.1
BESS20	18.2
BESS21	18.0
BESS22	18.2
BESS23	17.9
BESS24	18.0
BESS25	18.3
BESS26	18.4
BESS27	18.4
BESS28	18.5
BESS29	18.4
BESS30	18.6
BESS31	18.8
BESS32	19.0
BESS33	18.8
BESS34	18.9
BESS35	18.6
BESS36	18.7
BESS37	19.0
BESS38	19.1
BESS39	19.1
BESS40	19.3
BESS41	19.2
BESS42	19.3
BESS43	19.4
BESS44	19.5
BESS45	19.5
BESS46	19.7
BESS47	19.6
BESS48	19.8
BESS49	19.8
BESS50	19.9
BESS51	20.0
BESS52	20.2
BESS53	20.1
BESS54	19.9
BESS55	20.2
BESS56	20.4
BESS57	20.4
BESS58	20.6
BESS59	20.5
BESS60	20.3
BESS61	20.6
BESS62	20.8
BESS63	20.9
BESS64	21.1
BESS65	21.0
BESS66	20.8
BESS67	21.0
BESS68	21.3
BESS69	21.4
BESS70	21.6
BESS71	21.5
BESS72	21.2
BESS73	21.5
BESS74	21.8
BESS75	21.9
BESS76	22.1
BESS77	22.0
BESS78	21.7
BESS79	22.0
BESS80	22.3
BESS81	22.4
BESS82	22.7

BESS83	22.5
BESS84	22.2
BESS85	22.5
BESS86	22.9
BESS87	23.0
BESS88	23.3
BESS89	23.1
BESS90	22.7
BESS91	23.1
BESS92	23.5
BESS93	23.6
BESS94	23.9
BESS95	23.7
BESS96	23.3
BESS97	23.7
BESS98	24.1
BESS99	24.3
BESS100	24.6
BESS101	24.4
BESS102	23.9
BESS103	24.3
BESS104	24.8
BESS105	25.0
BESS106	25.3
BESS107	25.1
BESS108	24.5
BESS109	25.0
BESS110	25.6
BESS111	25.8
BESS112	26.1
BESS113	25.9
BESS114	25.2
BESS115	25.6
BESS116	26.4
BESS117	26.6
BESS118	27.0
BESS119	26.7
BESS120	25.9
BESS121	26.4
BESS122	27.3
BESS123	27.6
BESS124	28.0
BESS125	27.6
BESS126	26.7
BESS127	27.2
BESS128	28.2
BESS129	28.7
BESS130	29.1
BESS131	28.6
BESS132	27.5
BESS133	28.0
BESS134	29.3
BESS135	29.9
BESS136	30.4
BESS137	29.8
BESS138	28.4
BESS139	29.0
BESS140	30.6
BESS141	31.3
BESS142	31.9
BESS143	31.1
BESS144	29.3
Inverter1	28.5
Inverter2	29.0
Inverter3	29.5
Inverter4	30.0
Inverter5	30.5
Inverter6	31.1
Inverter7	31.7
Inverter8	32.3
Inverter9	33.0
Inverter10	33.7
Inverter11	34.4
Inverter12	35.2
Inverter13	36.0
Inverter14	36.9
Inverter15	37.9
Inverter16	38.9
Inverter17	40.0
Inverter18	41.2
Inverter19	42.5
Inverter20	43.9

5 1 Fl 52.0 0.0

EEC ORIGINAL PKG

BESS1	19.3
BESS2	19.4
BESS3	19.0
BESS4	19.2
BESS5	18.7
BESS6	18.8
BESS7	19.0
BESS8	19.2
BESS9	19.4
BESS10	19.5
BESS11	19.7
BESS12	19.8
BESS13	20.1
BESS14	20.2
BESS15	19.8
BESS16	19.9
BESS17	19.4
BESS18	19.5
BESS19	19.8
BESS20	19.9
BESS21	20.2
BESS22	20.3
BESS23	20.5
BESS24	20.7
BESS25	20.9
BESS26	21.1
BESS27	20.6
BESS28	20.8
BESS29	20.2
BESS30	20.3
BESS31	20.5
BESS32	20.7
BESS33	21.0
BESS34	21.2
BESS35	21.4
BESS36	21.6
BESS37	21.9
BESS38	22.1
BESS39	21.5
BESS40	21.7
BESS41	21.0
BESS42	21.1
BESS43	22.4
BESS44	22.7
BESS45	22.0
BESS46	22.2
BESS47	21.4
BESS48	21.5
BESS49	23.0
BESS50	22.5
BESS51	21.8
BESS52	22.0
BESS53	22.7
BESS54	23.2
BESS55	23.6
BESS56	23.0
BESS57	22.3
BESS58	22.4
BESS59	23.2
BESS60	23.8
BESS61	24.2
BESS62	23.6
BESS63	22.7
BESS64	22.9
BESS65	23.8
BESS66	24.5
BESS67	24.9
BESS68	24.1
BESS69	23.2
BESS70	23.4
BESS71	24.4
BESS72	25.2
BESS73	25.6
BESS74	24.7
BESS75	23.7
BESS76	23.9
BESS77	25.0
BESS78	25.9
BESS79	26.4
BESS80	25.4
BESS81	24.2
BESS82	24.4
BESS83	25.6

BESS84	26.7
BESS85	27.2
BESS86	26.0
BESS87	24.7
BESS88	24.9
BESS89	26.3
BESS90	27.5
BESS91	28.1
BESS92	26.7
BESS93	25.2
BESS94	25.4
BESS95	27.0
BESS96	28.5
BESS97	29.1
BESS98	27.4
BESS99	25.7
BESS100	25.9
BESS101	27.7
BESS102	29.5
BESS103	30.2
BESS104	28.1
BESS105	26.2
BESS106	26.4
BESS107	28.4
BESS108	30.6
BESS109	31.3
BESS110	28.9
BESS111	26.7
BESS112	26.8
BESS113	29.1
BESS114	31.8
BESS115	32.6
BESS116	29.6
BESS117	27.1
BESS118	27.2
BESS119	29.8
BESS120	33.0
BESS121	33.9
BESS122	30.2
BESS123	27.5
BESS124	27.6
BESS125	30.4
BESS126	34.3
BESS127	35.1
BESS128	30.8
BESS129	27.8
BESS130	27.9
BESS131	30.9
BESS132	35.6
BESS133	36.2
BESS134	31.2
BESS135	28.0
BESS136	28.0
BESS137	31.3
BESS138	36.5
BESS139	36.8
BESS140	31.4
BESS141	28.1
BESS142	28.1
BESS143	31.5
BESS144	36.9
Inverter1	30.0
Inverter2	30.5
Inverter3	31.0
Inverter4	31.5
Inverter5	32.0
Inverter6	32.5
Inverter7	33.0
Inverter8	33.6
Inverter9	34.1
Inverter10	34.7
Inverter11	35.2
Inverter12	35.8
Inverter13	36.3
Inverter14	36.8
Inverter15	37.2
Inverter16	37.6
Inverter17	38.0
Inverter18	38.3
Inverter19	38.5
Inverter20	38.6
6 1 Fl 54.0 0.0	
BESS1	28.5

EEC ORIGINAL PKG

BESS2	28.9
BESS3	27.0
BESS4	27.2
BESS5	25.4
BESS6	25.6
BESS7	25.9
BESS8	26.1
BESS9	27.7
BESS10	28.0
BESS11	29.5
BESS12	29.9
BESS13	30.6
BESS14	31.0
BESS15	28.4
BESS16	28.7
BESS17	26.4
BESS18	26.5
BESS19	26.8
BESS20	27.0
BESS21	29.1
BESS22	29.4
BESS23	31.8
BESS24	32.3
BESS25	33.0
BESS26	33.5
BESS27	29.8
BESS28	30.0
BESS29	27.2
BESS30	27.4
BESS31	27.6
BESS32	27.7
BESS33	30.4
BESS34	30.6
BESS35	34.3
BESS36	34.8
BESS37	35.5
BESS38	35.9
BESS39	30.9
BESS40	31.1
BESS41	27.8
BESS42	27.9
BESS43	36.5
BESS44	36.7
BESS45	31.3
BESS46	31.4
BESS47	28.0
BESS48	28.1
BESS49	36.9
BESS50	31.4
BESS51	28.1
BESS52	28.1
BESS53	31.4
BESS54	36.9
BESS55	36.7
BESS56	31.4
BESS57	28.1
BESS58	28.0
BESS59	31.3
BESS60	36.5
BESS61	36.0
BESS62	31.1
BESS63	27.9
BESS64	27.9
BESS65	30.9
BESS66	35.5
BESS67	34.8
BESS68	30.6
BESS69	27.7
BESS70	27.6
BESS71	30.4
BESS72	34.3
BESS73	33.5
BESS74	30.0
BESS75	27.4
BESS76	27.2
BESS77	29.8
BESS78	33.0
BESS79	32.3
BESS80	29.4
BESS81	27.0
BESS82	26.8
BESS83	29.1
BESS84	31.8

BESS85	31 0
BESS86	28 7
BESS87	26 5
BESS88	26 4
BESS89	28 4
BESS90	30 6
BESS91	29 9
BESS92	27.9
BESS93	26.1
BESS94	25 9
BESS95	27.7
BESS96	29.5
BESS97	28 9
BESS98	27 2
BESS99	25 6
BESS100	25 4
BESS101	27 0
BESS102	28.5
BESS103	27 9
BESS104	26 5
BESS105	25 1
BESS106	24 9
BESS107	26 3
BESS108	27 6
BESS109	27 0
BESS110	25 9
BESS111	24 6
BESS112	24.4
BESS113	25 6
BESS114	26 7
BESS115	26 2
BESS116	25 2
BESS117	24.1
BESS118	23 9
BESS119	25 0
BESS120	25 9
BESS121	25 4
BESS122	24 6
BESS123	23 6
BESS124	23 4
BESS125	24.3
BESS126	25 2
BESS127	24.7
BESS128	24.0
BESS129	23 1
BESS130	22 9
BESS131	23 8
BESS132	24 5
BESS133	24 1
BESS134	23 4
BESS135	22 6
BESS136	22 4
BESS137	23 2
BESS138	23 8
BESS139	23 4
BESS140	22 9
BESS141	22 2
BESS142	22 0
BESS143	22 7
BESS144	23 2
Inverter1	36 8
Inverter2	37 3
Inverter3	37.7
Inverter4	38 0
Inverter5	38 3
Inverter6	38 5
Inverter7	38 6
Inverter8	38 6
Inverter9	38 5
Inverter10	38 3
Inverter11	38 0
Inverter12	37.6
Inverter13	37 2
Inverter14	36 8
Inverter15	36 3
Inverter16	35.7
Inverter17	35 2
Inverter18	34 7
Inverter19	34.1
Inverter20	33.6
7 1 Fl 49 2 0 0	
BESS1	32.0
BESS2	31 6

BESS3	29.3
BESS4	29.0
BESS5	26.9
BESS6	26.8
BESS7	26.5
BESS8	26.3
BESS9	28.6
BESS10	28.3
BESS11	30.8
BESS12	30.4
BESS13	29.7
BESS14	29.3
BESS15	27.8
BESS16	27.6
BESS17	26.0
BESS18	25.8
BESS19	25.5
BESS20	25.3
BESS21	27.1
BESS22	26.8
BESS23	28.6
BESS24	28.3
BESS25	27.7
BESS26	27.4
BESS27	26.4
BESS28	26.1
BESS29	25.0
BESS30	24.8
BESS31	24.5
BESS32	24.3
BESS33	25.7
BESS34	25.5
BESS35	26.8
BESS36	26.5
BESS37	26.0
BESS38	25.7
BESS39	25.1
BESS40	24.8
BESS41	24.0
BESS42	23.8
BESS43	25.3
BESS44	25.0
BESS45	24.5
BESS46	24.2
BESS47	23.5
BESS48	23.3
BESS49	24.6
BESS50	23.9
BESS51	23.0
BESS52	22.8
BESS53	23.7
BESS54	24.3
BESS55	23.9
BESS56	23.3
BESS57	22.5
BESS58	22.3
BESS59	23.1
BESS60	23.7
BESS61	23.3
BESS62	22.8
BESS63	22.1
BESS64	21.9
BESS65	22.6
BESS66	23.1
BESS67	22.7
BESS68	22.3
BESS69	21.6
BESS70	21.5
BESS71	22.1
BESS72	22.5
BESS73	22.2
BESS74	21.8
BESS75	21.2
BESS76	21.0
BESS77	21.6
BESS78	22.0
BESS79	21.7
BESS80	21.3
BESS81	20.8
BESS82	20.6
BESS83	21.1
BESS84	21.5
BESS85	21.2

BESS86				20.8
BESS87				20.4
BESS88				20.2
BESS89				20.7
BESS90				21.0
BESS91				20.7
BESS92				20.4
BESS93				20.0
BESS94				19.8
BESS95				20.3
BESS96				20.6
BESS97				20.3
BESS98				20.0
BESS99				19.6
BESS100				19.5
BESS101				19.8
BESS102				20.1
BESS103				19.9
BESS104				19.6
BESS105				19.2
BESS106				19.1
BESS107				19.5
BESS108				19.7
BESS109				19.5
BESS110				19.2
BESS111				18.9
BESS112				18.8
BESS113				19.1
BESS114				19.3
BESS115				19.1
BESS116				18.9
BESS117				18.5
BESS118				18.4
BESS119				18.7
BESS120				18.9
BESS121				18.7
BESS122				18.5
BESS123				18.2
BESS124				18.1
BESS125				18.4
BESS126				18.6
BESS127				18.4
BESS128				18.2
BESS129				17.9
BESS130				17.8
BESS131				18.0
BESS132				18.2
BESS133				18.0
BESS134				17.8
BESS135				17.6
BESS136				17.5
BESS137				17.7
BESS138				17.9
BESS139				17.7
BESS140				17.5
BESS141				17.3
BESS142				17.2
BESS143				17.4
BESS144				17.5
Inverter1				37.6
Inverter2				37.1
Inverter3				36.7
Inverter4				36.2
Inverter5				35.6
Inverter6				35.1
Inverter7				34.5
Inverter8				34.0
Inverter9				33.4
Inverter10				32.9
Inverter11				32.4
Inverter12				31.9
Inverter13				31.3
Inverter14				30.8
Inverter15				30.4
Inverter16				29.9
Inverter17				29.4
Inverter18				29.0
Inverter19				28.5
Inverter20				28.1
8	1 Fl	47.0	0.0	
BESS1				24.8
BESS2				24.5
BESS3				25.2

BESS4	24.9
BESS5	25.3
BESS6	25.0
BESS7	24.5
BESS8	24.3
BESS9	24.5
BESS10	24.2
BESS11	24.1
BESS12	23.9
BESS13	23.5
BESS14	23.3
BESS15	23.8
BESS16	23.6
BESS17	23.8
BESS18	23.6
BESS19	23.2
BESS20	23.0
BESS21	23.2
BESS22	23.0
BESS23	22.9
BESS24	22.7
BESS25	22.4
BESS26	22.2
BESS27	22.6
BESS28	22.4
BESS29	22.6
BESS30	22.4
BESS31	22.1
BESS32	21.9
BESS33	22.1
BESS34	21.9
BESS35	21.8
BESS36	21.6
BESS37	21.3
BESS38	21.2
BESS39	21.5
BESS40	21.3
BESS41	21.6
BESS42	21.4
BESS43	20.9
BESS44	20.7
BESS45	21.0
BESS46	20.9
BESS47	21.1
BESS48	20.9
BESS49	20.4
BESS50	20.6
BESS51	20.6
BESS52	20.4
BESS53	20.4
BESS54	20.3
BESS55	20.0
BESS56	20.1
BESS57	20.2
BESS58	20.0
BESS59	20.0
BESS60	19.8
BESS61	19.6
BESS62	19.7
BESS63	19.7
BESS64	19.6
BESS65	19.6
BESS66	19.4
BESS67	19.2
BESS68	19.3
BESS69	19.3
BESS70	19.2
BESS71	19.2
BESS72	19.0
BESS73	18.8
BESS74	18.9
BESS75	18.9
BESS76	18.8
BESS77	18.8
BESS78	18.7
BESS79	18.4
BESS80	18.6
BESS81	18.6
BESS82	18.4
BESS83	18.4
BESS84	18.3
BESS85	18.1
BESS86	18.2

BESS87			18.2
BESS88			18.1
BESS89			18.1
BESS90			18.0
BESS91			17.8
BESS92			17.9
BESS93			17.9
BESS94			17.7
BESS95			17.7
BESS96			17.6
BESS97			17.4
BESS98			17.5
BESS99			17.5
BESS100			17.4
BESS101			17.4
BESS102			17.3
BESS103			17.1
BESS104			17.2
BESS105			17.2
BESS106			17.1
BESS107			17.1
BESS108			17.0
BESS109			16.8
BESS110			16.9
BESS111			16.9
BESS112			16.8
BESS113			16.8
BESS114			16.7
BESS115			16.5
BESS116			16.6
BESS117			16.6
BESS118			16.5
BESS119			16.5
BESS120			16.4
BESS121			16.2
BESS122			16.3
BESS123			16.3
BESS124			16.2
BESS125			16.2
BESS126			16.1
BESS127			16.0
BESS128			16.0
BESS129			16.0
BESS130			15.9
BESS131			15.9
BESS132			15.8
BESS133			15.7
BESS134			15.7
BESS135			15.8
BESS136			15.6
BESS137			15.6
BESS138			15.6
BESS139			15.4
BESS140			15.5
BESS141			15.5
BESS142			15.4
BESS143			15.4
BESS144			15.3
Inverter1			37.4
Inverter2			36.5
Inverter3			35.6
Inverter4			34.8
Inverter5			34.1
Inverter6			33.4
Inverter7			32.7
Inverter8			32.1
Inverter9			31.5
Inverter10			30.9
Inverter11			30.3
Inverter12			29.8
Inverter13			29.3
Inverter14			28.8
Inverter15			28.3
Inverter16			27.9
Inverter17			27.4
Inverter18			27.0
Inverter19			26.6
Inverter20			26.2
9 1.Fl	47.1	0.0	
BESS1			21.5
BESS2			21.6
BESS3			20.5
BESS4			20.6

EEC ORIGINAL PKG

BESS5	19.6
BESS6	19.7
BESS7	19.8
BESS8	19.9
BESS9	20.8
BESS10	20.9
BESS11	21.8
BESS12	21.9
BESS13	22.1
BESS14	22.2
BESS15	21.0
BESS16	21.1
BESS17	20.0
BESS18	20.1
BESS19	20.2
BESS20	20.3
BESS21	21.3
BESS22	21.4
BESS23	22.4
BESS24	22.6
BESS25	22.7
BESS26	22.9
BESS27	21.5
BESS28	21.6
BESS29	20.4
BESS30	20.5
BESS31	20.6
BESS32	20.6
BESS33	21.7
BESS34	21.8
BESS35	23.0
BESS36	23.1
BESS37	23.3
BESS38	23.4
BESS39	22.0
BESS40	22.0
BESS41	20.7
BESS42	20.8
BESS43	23.6
BESS44	23.7
BESS45	22.1
BESS46	22.2
BESS47	20.9
BESS48	20.9
BESS49	23.8
BESS50	22.3
BESS51	21.0
BESS52	21.0
BESS53	22.4
BESS54	23.9
BESS55	24.0
BESS56	22.4
BESS57	21.1
BESS58	21.1
BESS59	22.5
BESS60	24.0
BESS61	24.1
BESS62	22.5
BESS63	21.2
BESS64	21.2
BESS65	22.6
BESS66	24.2
BESS67	24.2
BESS68	22.6
BESS69	21.2
BESS70	21.3
BESS71	22.6
BESS72	24.3
BESS73	24.3
BESS74	22.7
BESS75	21.3
BESS76	21.3
BESS77	22.7
BESS78	24.3
BESS79	24.3
BESS80	22.7
BESS81	21.3
BESS82	21.3
BESS83	22.7
BESS84	24.3
BESS85	24.3
BESS86	22.6
BESS87	21.3

BESS88				21.2
BESS89				22.6
BESS90				24.2
BESS91				24.2
BESS92				22.6
BESS93				21.2
BESS94				21.2
BESS95				22.5
BESS96				24.1
BESS97				24.0
BESS98				22.5
BESS99				21.1
BESS100				21.1
BESS101				22.4
BESS102				24.0
BESS103				23.9
BESS104				22.4
BESS105				21.1
BESS106				21.0
BESS107				22.3
BESS108				23.8
BESS109				23.7
BESS110				22.2
BESS111				20.9
BESS112				20.9
BESS113				22.1
BESS114				23.6
BESS115				23.4
BESS116				22.0
BESS117				20.8
BESS118				20.7
BESS119				22.0
BESS120				23.3
BESS121				23.2
BESS122				21.8
BESS123				20.7
BESS124				20.6
BESS125				21.7
BESS126				23.1
BESS127				22.9
BESS128				21.6
BESS129				20.5
BESS130				20.4
BESS131				21.5
BESS132				22.8
BESS133				22.6
BESS134				21.4
BESS135				20.3
BESS136				20.2
BESS137				21.3
BESS138				22.4
BESS139				22.2
BESS140				21.1
BESS141				20.1
BESS142				20.0
BESS143				21.0
BESS144				22.1
Inverter1				30.4
Inverter2				30.6
Inverter3				30.9
Inverter4				31.1
Inverter5				31.3
Inverter6				31.4
Inverter7				31.6
Inverter8				31.7
Inverter9				31.8
Inverter10				31.9
Inverter11				31.9
Inverter12				31.9
Inverter13				31.8
Inverter14				31.8
Inverter15				31.7
Inverter16				31.5
Inverter17				31.4
Inverter18				31.2
Inverter19				31.0
Inverter20				30.8
10	1.Fl	39.2	0.0	
BESS1				16.7
BESS2				16.6
BESS3				16.3
BESS4				16.2
BESS5				15.9

BESS6	15.8
BESS7	15.7
BESS8	15.6
BESS9	16.1
BESS10	16.0
BESS11	16.4
BESS12	16.3
BESS13	16.1
BESS14	16.0
BESS15	15.8
BESS16	15.7
BESS17	15.5
BESS18	15.4
BESS19	15.3
BESS20	15.2
BESS21	15.6
BESS22	15.5
BESS23	15.9
BESS24	15.8
BESS25	15.6
BESS26	15.5
BESS27	15.4
BESS28	15.3
BESS29	15.0
BESS30	15.0
BESS31	14.8
BESS32	14.7
BESS33	15.1
BESS34	15.0
BESS35	15.4
BESS36	15.3
BESS37	15.2
BESS38	15.1
BESS39	14.9
BESS40	14.8
BESS41	14.6
BESS42	14.5
BESS43	14.9
BESS44	14.8
BESS45	14.7
BESS46	14.6
BESS47	14.4
BESS48	14.3
BESS49	14.7
BESS50	14.5
BESS51	14.2
BESS52	14.1
BESS53	14.4
BESS54	14.6
BESS55	14.5
BESS56	14.2
BESS57	14.0
BESS58	13.9
BESS59	14.2
BESS60	14.4
BESS61	14.2
BESS62	14.0
BESS63	13.8
BESS64	13.7
BESS65	14.0
BESS66	14.2
BESS67	14.0
BESS68	13.8
BESS69	13.6
BESS70	13.5
BESS71	13.7
BESS72	13.9
BESS73	13.8
BESS74	13.6
BESS75	13.4
BESS76	13.3
BESS77	13.5
BESS78	13.7
BESS79	13.6
BESS80	13.4
BESS81	13.2
BESS82	13.1
BESS83	13.3
BESS84	13.5
BESS85	13.4
BESS86	13.2
BESS87	13.0
BESS88	12.9

BESS89	13.1
BESS90	13.3
BESS91	13.2
BESS92	13.0
BESS93	12.8
BESS94	12.8
BESS95	13.0
BESS96	13.1
BESS97	13.0
BESS98	12.8
BESS99	12.7
BESS100	12.6
BESS101	12.8
BESS102	12.9
BESS103	12.8
BESS104	12.7
BESS105	12.5
BESS106	12.4
BESS107	12.6
BESS108	12.7
BESS109	12.6
BESS110	12.5
BESS111	12.3
BESS112	12.2
BESS113	12.4
BESS114	12.6
BESS115	12.4
BESS116	12.3
BESS117	12.1
BESS118	12.1
BESS119	12.2
BESS120	12.4
BESS121	12.3
BESS122	12.1
BESS123	11.9
BESS124	11.9
BESS125	12.0
BESS126	12.2
BESS127	12.1
BESS128	11.9
BESS129	11.8
BESS130	11.7
BESS131	11.9
BESS132	12.0
BESS133	11.9
BESS134	11.8
BESS135	11.6
BESS136	11.5
BESS137	11.7
BESS138	11.8
BESS139	11.7
BESS140	11.6
BESS141	11.4
BESS142	11.4
BESS143	11.5
BESS144	11.7
Inverter1	26.1
Inverter2	25.8
Inverter3	25.5
Inverter4	25.2
Inverter5	24.9
Inverter6	24.6
Inverter7	24.4
Inverter8	24.1
Inverter9	23.8
Inverter10	23.5
Inverter11	23.3
Inverter12	23.0
Inverter13	22.8
Inverter14	22.5
Inverter15	22.3
Inverter16	22.1
Inverter17	21.8
Inverter18	21.6
Inverter19	21.4
Inverter20	21.1

LINSCOTT LAW & GREENSPAN engineers

TRANSPORTATION ANALYSIS
ALBA PEAKER
Imperial County, California
June 12, 2023

LLG Ref. 3-23-3740

Prepared by:
Jose Nunez
Transportation Planner II

Under the Supervision of:
John Boarman, PE
Principal

Linscott, Law & Greenspan, Engineers
4542 Ruffner Street
Suite 100
San Diego, CA 92111
858.300.8800 T
858.300.8810 F
www.llgengineers.com

EEC ORIGINAL PKG

TABLE OF CONTENTS

APPENDICES

APPENDIX	
A.	Intersection Manual Count Sheets
B.	Synchro Analysis Worksheets

LIST OF FIGURES

LIST OF TABLES

TRANSPORTATION ANALYSIS
ALBA PEAKER
Imperial County, California
June 12, 2023

1.0 PROJECT AND STUDY DESCRIPTION

Linscott, Law and Greenspan, Engineers (LLG) has prepared this Transportation Analysis report to assess the impacts as a result of the Alba Peaker project (Project), located in Imperial County.

The traffic analysis presented in this report includes the following:

Section 1. Project and Study Description.
Section 2. Vehicle Miles Traveled Assessment
Section 3. Local Mobility Analysis
Section 4. Existing Conditions
Section 5. Project Traffic
Section 6. Cumulative Traffic Volumes
Section 7. Capacity Analysis
Section 8. Conclusions

1.1 Project Location and Vicinity Map

The approximately 8-acre site is located in the area north of Interstate 8 (I-8), and east of Drew Road in the unincorporated County of Imperial.

Figure 1–1 is the Vicinity Map depicting the Project location. ***Figure 1–2*** depicts a more detailed Project Area Map.

1.2 Project Size and Description

The Alba Peaker Battery Energy Storage System (BESS) Project (project) would construct and operate a 100-megawatt BESS that would connect to an existing 92-kilovolt gen-tie line. The BESS facility would include battery containers and storage sites, a control room, and associated facilities surrounded by fencing. The BESS would store energy generation from the electrical grid, and optimally discharge that energy back into the grid as firm, reliable generation and/or grid services.

The project site is in the unincorporated community of Seeley in Imperial County, approximately 7.5 miles west of the city of El Centro and approximately one mile north of Interstate 8. The project site totals approximately 7.1 acres. The project is located to the east of Drew Road, south of West Evan Hewes Highway, and north of the Seeley Drain. Land uses surrounding the project site consist of active agriculture to the west and south, disturbed land and railroad tracks to the north, and an agricultural facility and fields to the east.

Project Access

Access to the site will be provided via one driveway onto Drew Road. It should be noted that based on discussions with the client, all trucks would be coming from the east.

As a Project feature, the Project will require inbound and outbound equipment deliveries via trucks to adhere to the following designated truck routes. The designated truck routes are intended to restrict heavy vehicles from turning across multiple lanes of oncoming traffic at unsignalized intersections on Drew Road. The truck route requirements will be included as a Condition of Approval and will be enforced through on-site signage, off-site signage as appropriate, and in contracts with outside trucking agencies.

- When leaving the site, trucks heading towards I-8 will utilize Street 'A', turn right onto Drew Road and head south to reach the I-8 ramps.

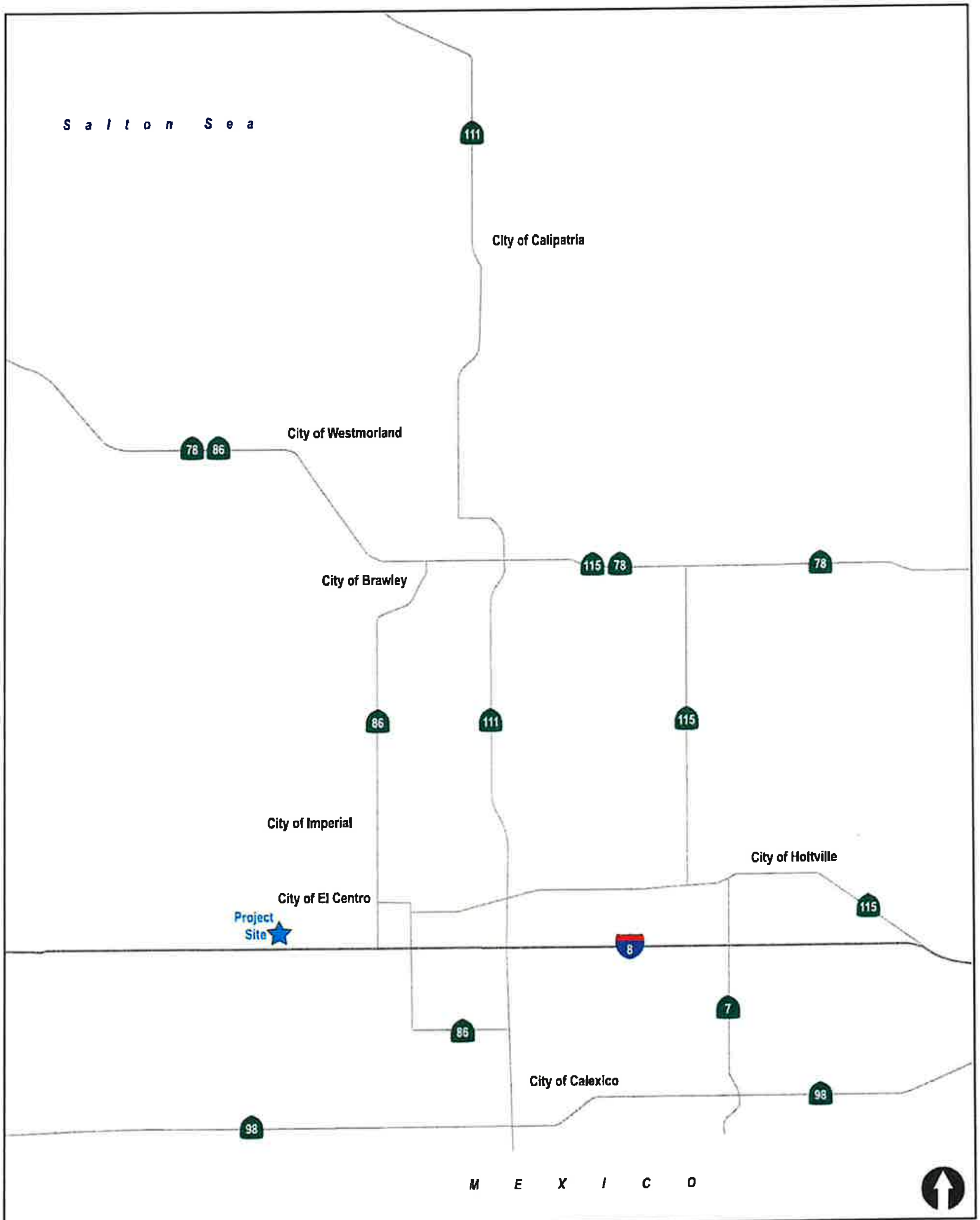
- Inbound trucks coming from the south will exit I-8 at Drew Road. Trucks will drive north along Drew Road before making a right-turn onto Street 'A'.

Figure 1-3 shows the Project Site Plan.

1.3 Proposed Construction Year and Analysis Scenarios

The Project's construction year is projected to be 2024. The following analysis scenarios are analyzed in this study.

- Existing
- Construction Year (Existing + Cumulative Growth) without Project
- Construction Year + Project



LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 05/16/23

Figure 1-1

Vicinity Map

ALBA PEAKER

EEC ORIGINAL PKG

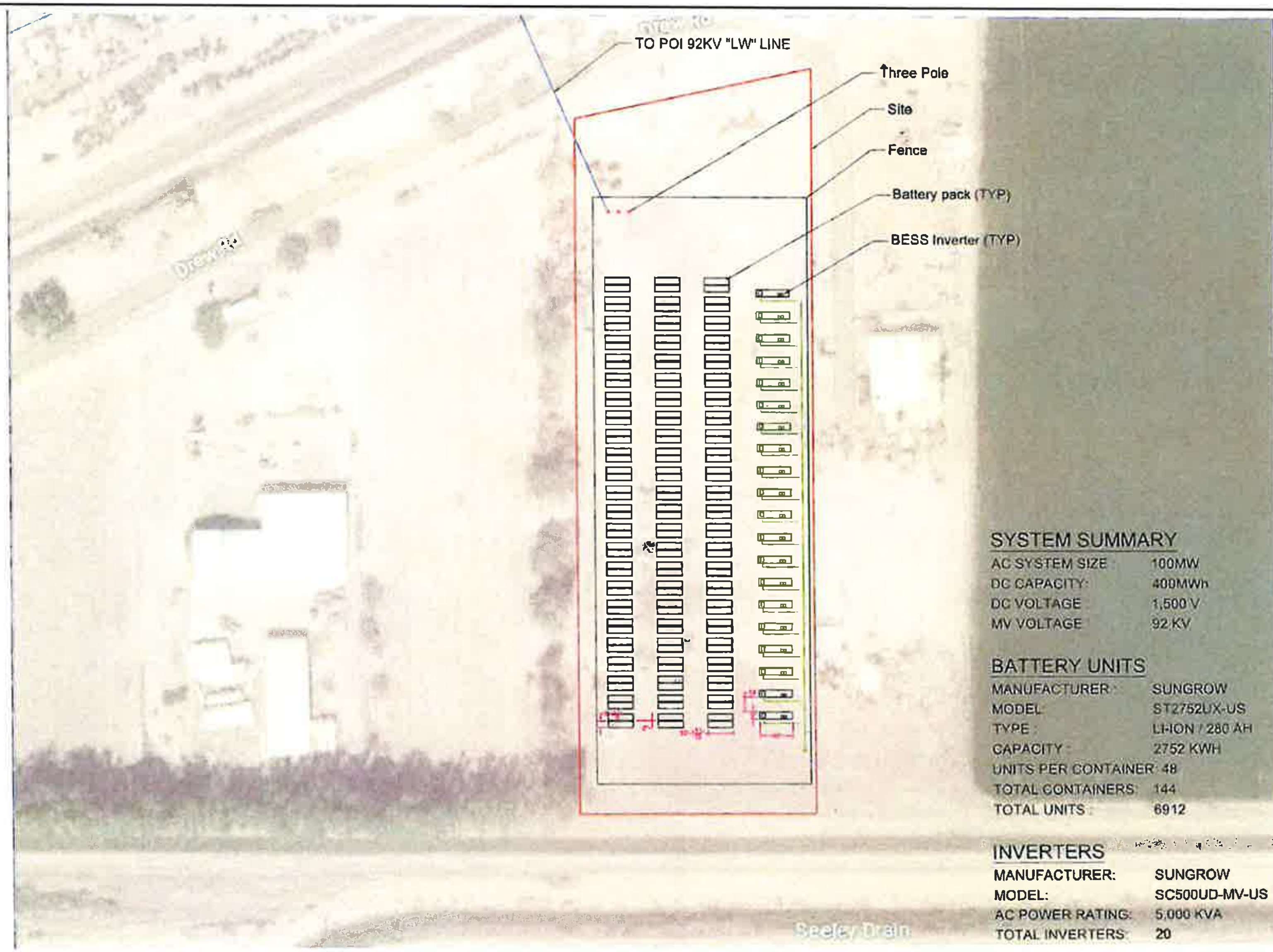
LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 05/16/23

Figure 1-2

Project Area Map

ALBA PEAKER



LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 05/16/23

Figure 1-3
Site Plan

ALBA PEAKER

EEC ORIGINAL PKG

2.0 VEHICLE MILES TRAVELED ASSESSMENT

2.1 Background

In September 2013, the Governor's Office signed SB 743 into law, starting a process that fundamentally changes the way transportation impact analysis is conducted under CEQA. These changes include the elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The justification for this paradigm shift is that Auto Delay/LOS impacts lead to improvements that increase roadway capacity and therefore induce more traffic and greenhouse gas emissions. The VMT standard for evaluating transportation impacts under CEQA became mandatory statewide on July 1, 2020.

Vehicle Miles Traveled (VMT) is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. VMT is a measure of the use and efficiency of the transportation network. VMT's are calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round trip) travel and is typically estimated on a weekday for the purpose of measuring potential transportation impacts.

2.2 Methodology

Imperial County has not yet formally developed guidelines or adopted significance criteria or technical methodologies for VMT analysis. Therefore, LLG utilized the Governor's Office of Planning and Research (OPR) guidelines from the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018, to develop technical methodologies for this Project.

The Project will generate trips from two distinct types of vehicles: heavy vehicles, which consist of the Project's feedstock and compost trucks, and employee passenger vehicles. Heavy vehicles and passenger vehicles are classified as different vehicle types in the OPR guidelines and are considered differently in regards to VMT analysis.

2.2.1 *Equipment Delivery Vehicles*

Per OPR guidelines, "vehicle miles traveled" refers to the amount and distance of ***automobile*** travel attributable to a project. Here the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. VMT does not include trips from heavy-duty trucks. Therefore, the trips generated by the Project's truck deliveries are excluded from VMT analysis.

2.2.2 *Employee Passenger Vehicles*

Many agencies use "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact. OPR contains a screening threshold for small projects which states that, "absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 100 trips per day generally may be assumed to cause a less-than-significant transportation impact."

The Project's employee passenger vehicles are calculated to generate 107 ADT, as shown in ***Table 5-1***. Therefore, the employee component of the Project can be considered a "small project", assumed to cause a less-than significant transportation impact per OPR guidelines.

2.3 Reduction in Vehicle Miles Traveled

Under Existing conditions many commodities are currently transported via truck from the Ports of Los Angeles and Long Beach, through the Inland Empire and Palm Desert, to the Calexico East Port of Entry via SR 86 and SR 111, or otherwise to/from destinations/origins within Imperial County. Development of the Project site with loop tracks and ladder tracks that tie into the adjacent Union Pacific Railroad will accommodate in-bound and out-bound trains with commodities as well as transloading to and from trucks, thereby reducing the number of truck trips from Los Angeles and Long Beach. For example, a truckload of lumber or other commodities from Long Beach currently travels approximately 80-miles one-way within Imperial County. Post Project, the same lumber could be brought in via rail, and would only require an approximate 25-mile one-way trip by heavy vehicle to reach the same destination, thereby reducing the vehicle miles traveled by truck.

3.0 LOCAL MOBILITY ANALYSIS

3.1 Analysis Approach and Methodology

In addition to the VMT analysis presented above, a Local Mobility Analysis (LMA) was also prepared that focuses on automobile delay and Level of Service (LOS). The LOS analysis was conducted to identify Project effects on the roadway operations in the Project study area and recommend Project improvements to address noted deficiencies.

3.1.1 *Level of Service*

Level of service (LOS) is the term used to denote the different operating conditions which occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. Level of service provides an index to the operational qualities of a roadway segment or an intersection. Level of service designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. Level of service designation is reported differently for signalized and unsignalized intersections.

3.1.2 *Intersections*

Unsignalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapters 20 and 21 of the *HCM 6* with the assistance of the *Synchro* (version 11) computer software. ***Appendix B*** contains the analysis worksheets.

3.1.3 *Street Segments*

Street segments were analyzed based upon the comparison of ADT to the County of Imperial *Roadway Classifications, Levels of Service (LOS) and Average Daily Traffic (ADT)* table (see ***Table 3–2*** below).

3.2 Substantial Effect Criteria

Imperial County does not have published substantial effect criteria. However, the County General Plan does state that the level of service (LOS) goal for intersections is to operate at LOS C or better. Therefore, if a segment degrades from LOS C or better to LOS D or worse with the addition of project traffic, the Project has a substantial effect. If the location operates at LOS D or worse with and without project traffic, the project has a substantial effect if the project causes the intersection delta to increase by more than two (2) seconds, or the V/C ratio to increase by more than 0.02.

TABLE 3–1
TRAFFIC IMPACT SUBSTANTIAL EFFECT CRITERIA

Level of Service with Project [a]	Allowable Increase Due to Project Impacts [b]					
	Freeways		Roadway Segments		Intersections	Ramp Metering
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min)
D, E & F			0.02	1	2	

Footnotes:

a. All level of service measurements are based upon HCM procedures for peak-hour conditions. However, V/C ratios for Roadway Segments may be estimated on an ADT/24-hour traffic volume. The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped or not densely developed locations per jurisdiction definitions). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

b. If a proposed project's traffic causes the values shown in the table to be exceeded, the Project has a substantial effect. These impact changes may be measured from appropriate computer programs or expanded manual spreadsheets. The project applicant shall then identify feasible mitigations (within the Traffic Impact Study [TIS] report) that will maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note a above), or if the project adds a significant amount of peak hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating Project's substantial effect.

c. The allowable increase in delay at a ramp meter with more than 15 minutes of delay and freeway LOS E is 2 minutes and at LOS F is 1 minute.

General Notes:

1. V/C = Volume to Capacity Ratio
2. Speed = Arterial speed measured in miles per hour
3. Delay = Average stopped delay per vehicle measured in seconds for intersections, or minutes for ramp meters.
4. LOS = Level of Service

TABLE 3–2
IMPERIAL COUNTY STANDARD STREET CLASSIFICATION AVERAGE DAILY VEHICLE TRIPS

Road		Level of Service W/ADT*				
Class	X-Section	A	B	C	D	E
Expressway (6-lane)	128 / 210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106 / 136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82 / 102	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	64 / 84	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	40 / 70	1,900	4,100	7,100	10,900	16,200
Residential Street	40 / 60	*	*	< 1,500	*	*
Residential Cul-de-Sac / Loop Street	40/60	*	*	< 1,500	*	*
Industrial Collector	76 / 96	5,000	10,000	14,000	17,000	20,000
Industrial Local Street	44 / 64	2,500	5,000	7,000	8,500	10,000

* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

4.0 EXISTING CONDITIONS

Effective evaluation of the traffic impacts associated with the proposed project requires an understanding of the existing transportation system within the project area. ***Figure 4–1*** shows an existing conditions diagram, including signalized/unsignalized intersections and lane configurations.

4.1 Study Area

The study area includes the following intersections and street segments based on the anticipated distribution of the Project traffic and areas of potential effect:

Intersections:

1. Drew Road / West Evan Hewes Highway
2. Drew Road / I-8 Westbound Ramps
3. Drew Road / I-8 Eastbound Ramps

Street Segments:

1. Drew Road: West Evan Hewes Highway to I-8 Westbound Ramps

The facilities analyzed in this report fall under the jurisdiction of the Imperial County. The following is a brief description of the streets in the project area:

Drew Road is classified as a two-lane undivided Local Collector on the Imperial County Circulation Element. It is currently built as an north-south two-lane undivided roadway. The posted speed limit is 55 mph. There are no bus stops provided and on-street parking is prohibited.

West Evan Hewes Highway is classified as a two-lane undivided Local Collector west of Drew Road and a Major Collector east of Drew Road on the Imperial County Circulation Element. It is currently built as an east-west two-lane undivided roadway. The posted speed limit is 40 mph. There are no bike lanes or bus stops provided and on-street parking is prohibited.

Street 'A' is an unclassified unpaved roadway which serves as the access point tot site.

4.2 Existing Traffic Volumes

Peak hour (6AM to 8AM and 3PM to 5PM) intersection turning movement counts were conducted at the study area intersections in May 2023.

In addition, average daily traffic (ADT) volumes are analyzed as part of this traffic report. A segment along Drew Road between West Evan Hewes Highway and I-8 Westbound Ramps was identified based on the projects trip distribution and discussions with the client. The ADT was estimated based on relationship that the ADT is 10% of the PM peak hour.

Figure 4–2 shows the Existing Traffic Volumes. ***Appendix A*** contains the manual count sheets.

4.3 Peak Hour Intersection Operations

Table 4–1 summarizes the Existing intersection level of service. As seen in *Table 4–1*, the study intersections are calculated to currently operate acceptably at LOS B or better.

4.4 Street Segment Operations

Table 4–2 summarizes the Existing, street segment operations under along the study area roadways. As shown in *Table 4-2*, the Drew Road street segment is calculated to currently operate acceptably at LOS B on a daily basis.

TABLE 4–1
EXISTING INTERSECTION OPERATIONS

Intersection	Control Type	Movement / Approach	Peak Hour	Delay[a]	LOS[b]
1. West Evan Hewes Hwy / Drew Road	AWSC[c]	Overall	AM	9.8	A
			PM	9.7	A
2. Drew Road / I-8 Westbound Ramps	OWSC[d]	MSSC[e]	AM	9.3	A
			PM	9.5	A
3. Drew Road / I-8 Eastbound Ramps	OWSC	MSSC	AM	10.2	B
			PM	11.8	B

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. AWSC – All-Way Stop Controlled intersection. Overall, LOS and delay reported.
d. OWSC – One Way Stop controlled intersection. Minor street delay reported.
e. MSSC – Minor Street Stop Controlled intersection. Worst-case LOS and delay reported.
f. Intersection does not exist under Existing conditions.

UNSIGNALIZED

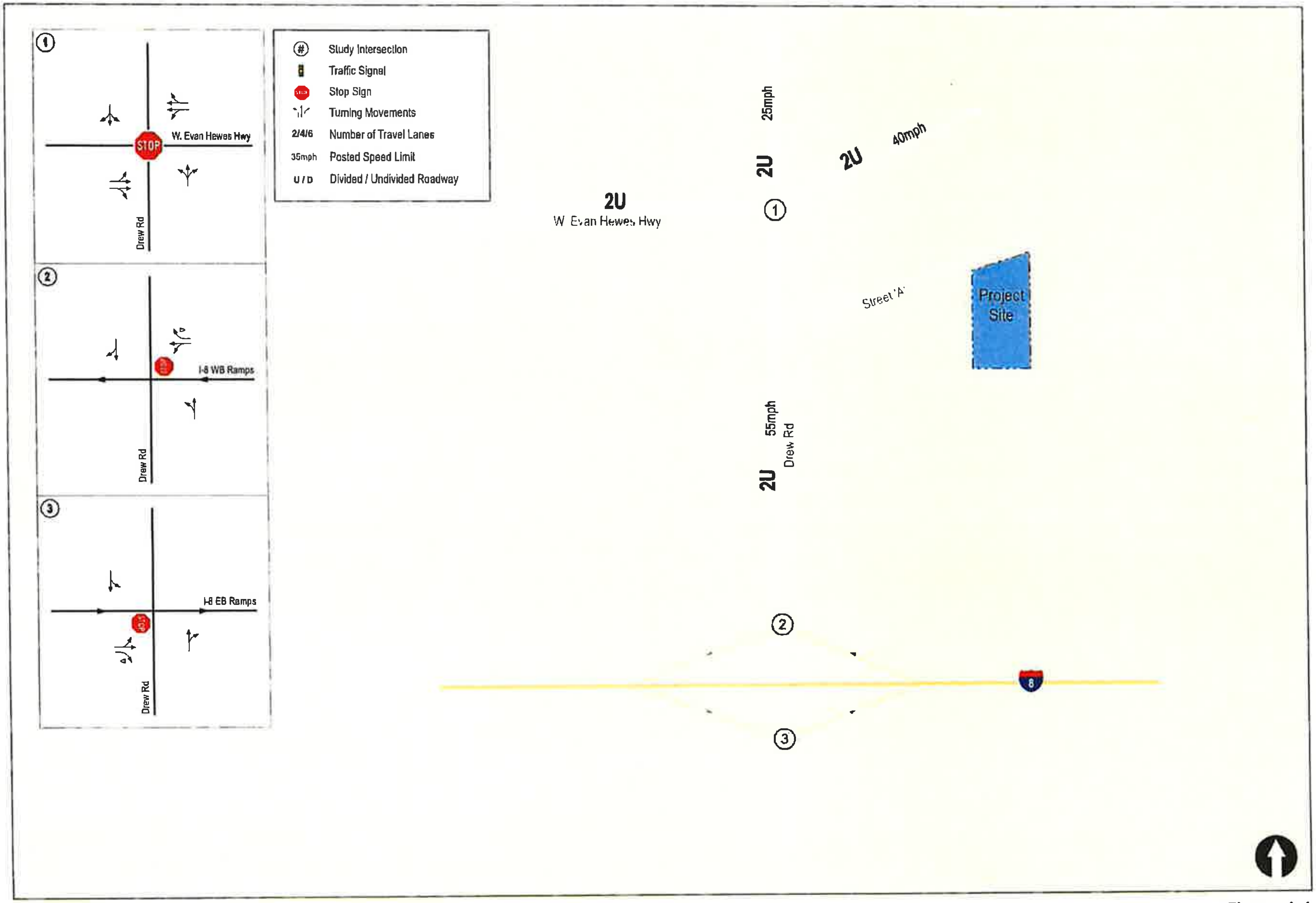
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

Table 4–2
Existing Street Segment Operations

Street Segment	Functional Capacity	Capacity (LOS E) [a]	ADT [b]	LOS [c]	V/C [d]
Drew Road					
West Evan Hewes Highway to I-8 Westbound Ramps	Local Collector	16,200	2,800	B	0.17

Footnotes:

a. Capacity at which the roadway currently functions and based on County of Imperial Roadway Classification Tables.
b. Average Daily Traffic Volumes.
c. Level of Service
d. Volume to Capacity ratio.



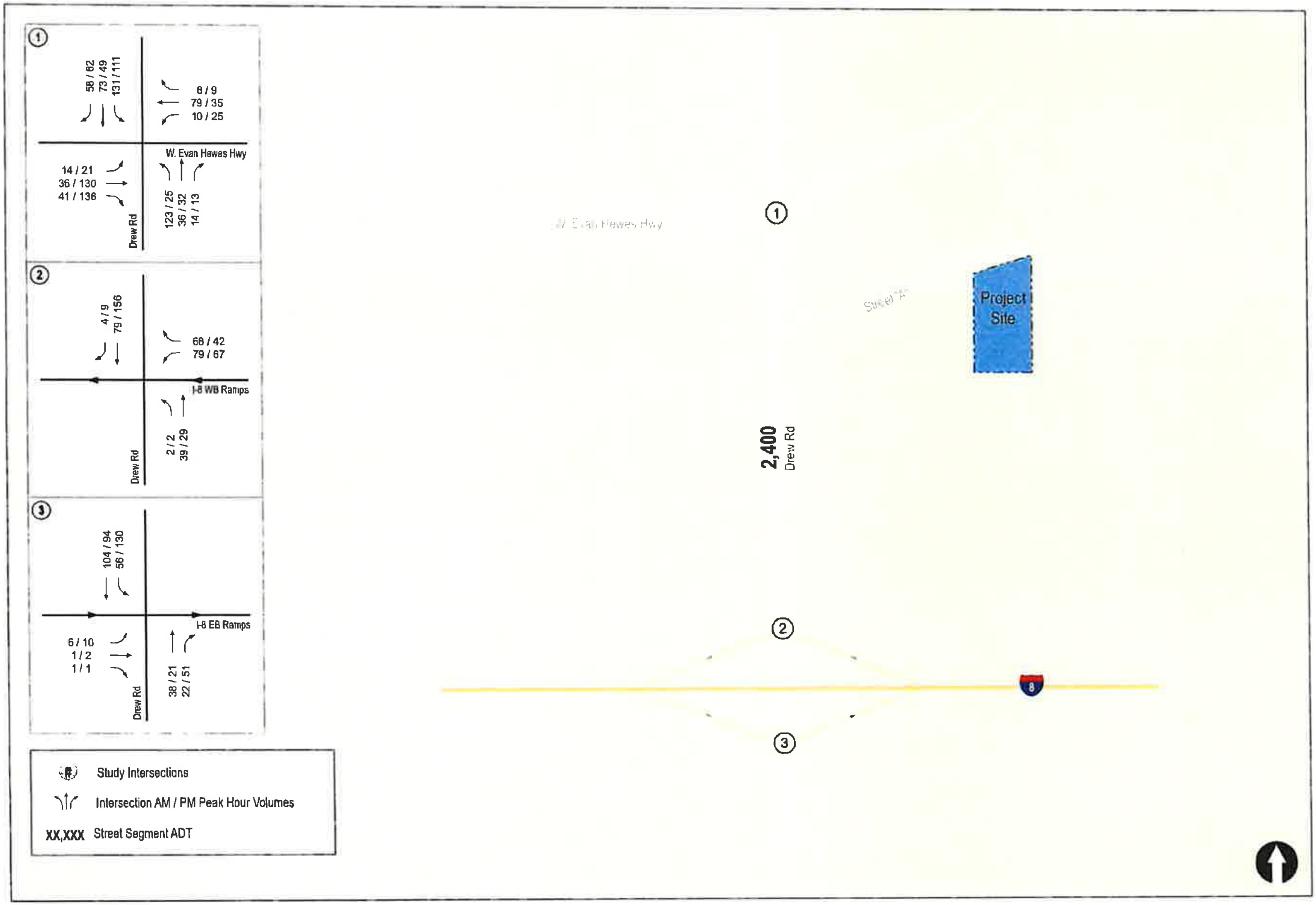
LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 6/12/2023
Time: 9:15 AM

Figure 4-1
Project Traffic Volumes

ALBA PEAKER

EEC ORIGINAL PKG



LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 5/12/2023
Time: 9:09 AM

Figure 4-2
Existing Traffic Volumes

ALBA PEAKER

EEC ORIGINAL PKG

5.0 PROJECT TRAFFIC

5.1 Trip Generation

Trip generation estimates for the Project are based on information provided by the applicant. Based on these discussions, it was determined that the construction phase of the project would generate more trips than when the project is built and operational. The operational trips will be nominal.

The construction traffic generated by the Project will consist of several unique trip types as described below. Project traffic generation was calculated for each trip type as shown in ***Table 5-1.*** As seen in *Table 5–1,* the construction phase which includes employee trips, equipment delivery trips, and general delivery trips are calculated to generate a total of 138 ADT, with 51 inbound / 11 outbound trips during the AM peak hour, and 11 inbound / 51 outbound trips during the PM peak hour. The volumes include a passenger car equivalence factor (PCE), as discussed below.

5.2 Trip Distribution and Assignment

Access to the site will be provided to Drew Road and to Street 'A'. Project trip distribution was developed based on existing traffic patterns, the regional roadway network, and Project specific origin / destination considerations.

As a Project feature, the Project will require inbound and outbound heavy trucks to adhere to the following designated truck routes. Trucks will be oriented to / from the east on I-8.

- When leaving the site, trucks heading towards I-8 will utilize Street 'A', turn right onto Drew Road and head south to reach the I-8 ramps.
- Inbound trucks coming from the south will exit I-8 at Drew Road. Trucks will drive north along Drew Road before making a right-turn onto Street 'A'.

Because of these heavy truck route restrictions, two separate Project trip distribution figures were developed: one for on-site employees and one for heavy vehicles.

Figure 5-1a depicts the Project trip distribution for Employees, and ***Figure 5-1b*** depicts the Project trip distribution for heavy trucks. ***Figure 5-2a*** depicts the Project trip assignment for Employees and ***Figure 5-2b*** depicts the Project trip assignment for the equipment delivery trucks. ***Figure 5-3*** depicts the total Project trip assignment.

TABLE 5-1
PROJECT CONSTRUCTION TRIP GENERATION

Number and Type of Trips	Daily Trips			AM Peak Hour (w/PCE)			PM Peak Hour (w/PCE)[d]		
	ADT[a]	PCE[b]	PCE Adjusted ADT	In	Out	Total	In	Out	Total
Construction Phase									
50 Worker Vehicles [c]	100	1.0	100	45	5	50	5	45	50
Equipment Truck Deliveries[d] (6)	12	2.0	24	4	4	8	4	4	8
General Delivery Truck Trips (7)	14	1.0	14	2	2	4	2	2	4
Total Trips:	**126**	-	**138**	**51**	**11**	**62**	**11**	**51**	**62**

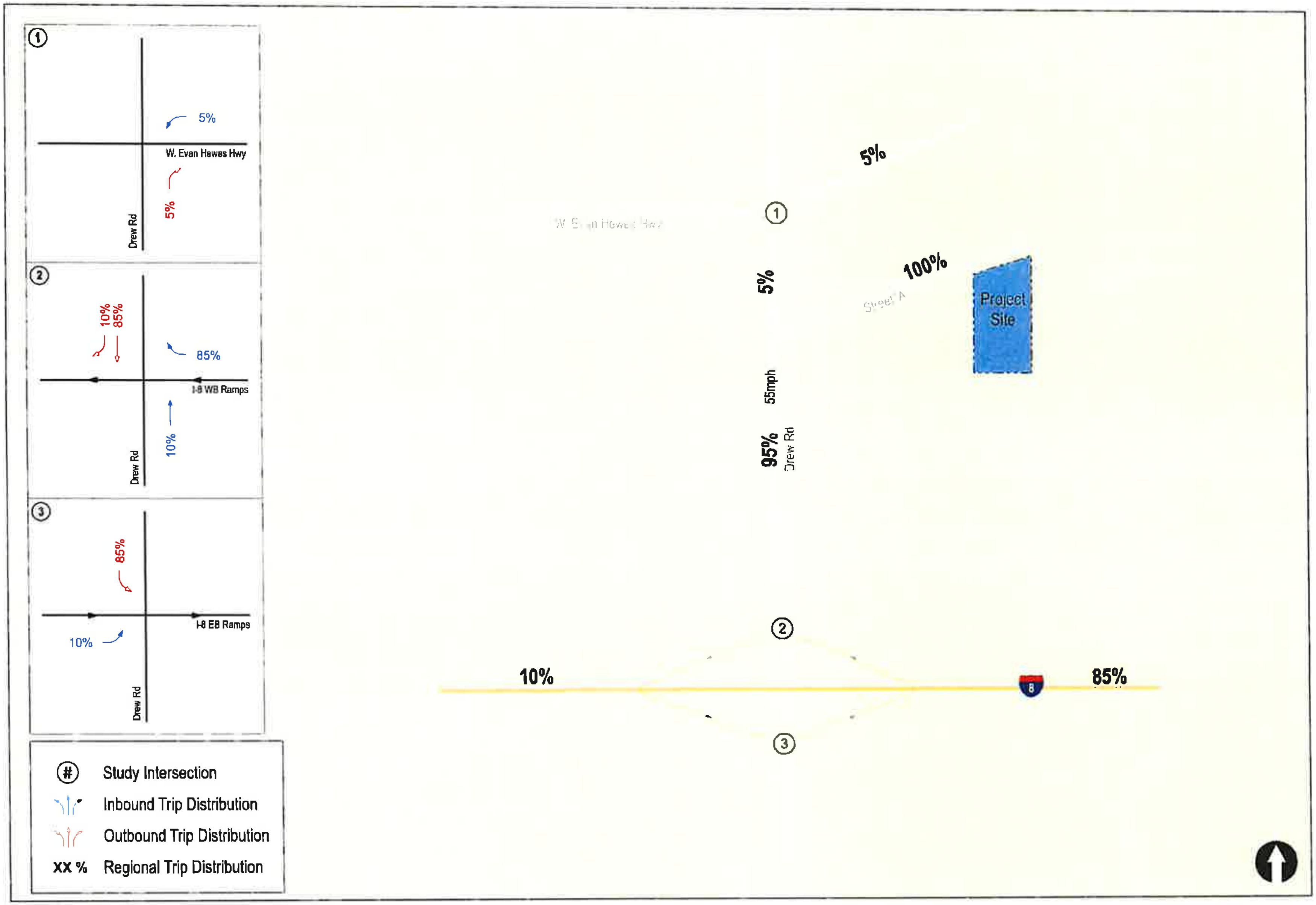
Footnotes:

a. Average Daily Trips

b. Passenger Car Equivalents. Based on the *Highway Capacity Manual*, a Passenger Car Equivalent (PCE) factor of 2.0 was applied to the Project's heavy-truck trips.

c. A total of 50 on-site employees are expected each day during the construction phase. Based on data provided in the *Imperial County Transportation Commission Regional Active Transportation Plan*, February 2022, 9% of the on-site employees (5 people total) were assumed to carpool with other employees.

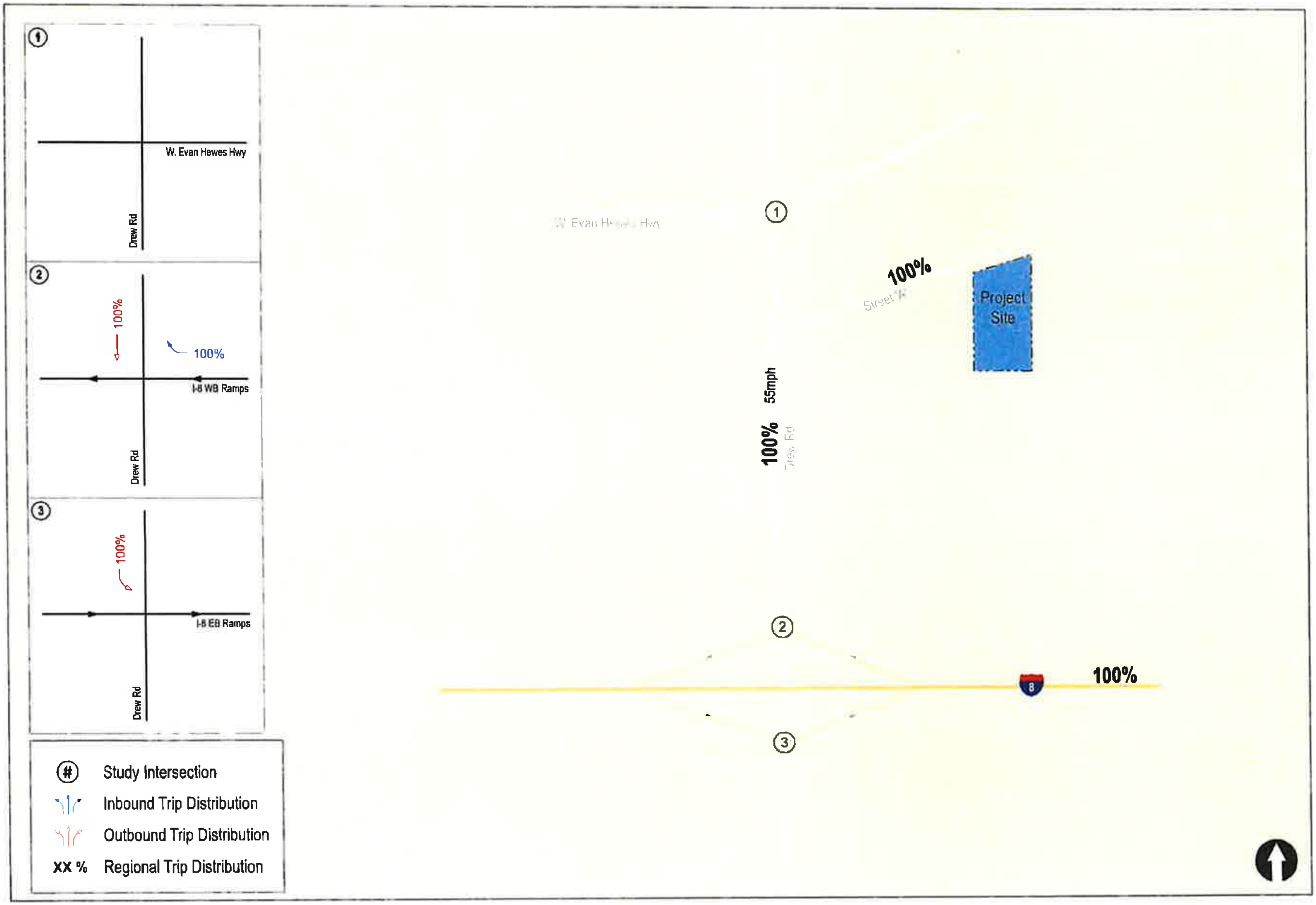
d. 25% of trucks trips were assumed to access the site during the peak periods.



N:\3740\Figures
Date: 5/30/2023
Time: 8:28 AM

LINSCOTT LAW & GREENSPAN engineers

Figure 5-1a
Project Trip Distribution
(Employee Trips)
ALBA PEAKER



LINSCOTT LAW & GREENSPAN engineers

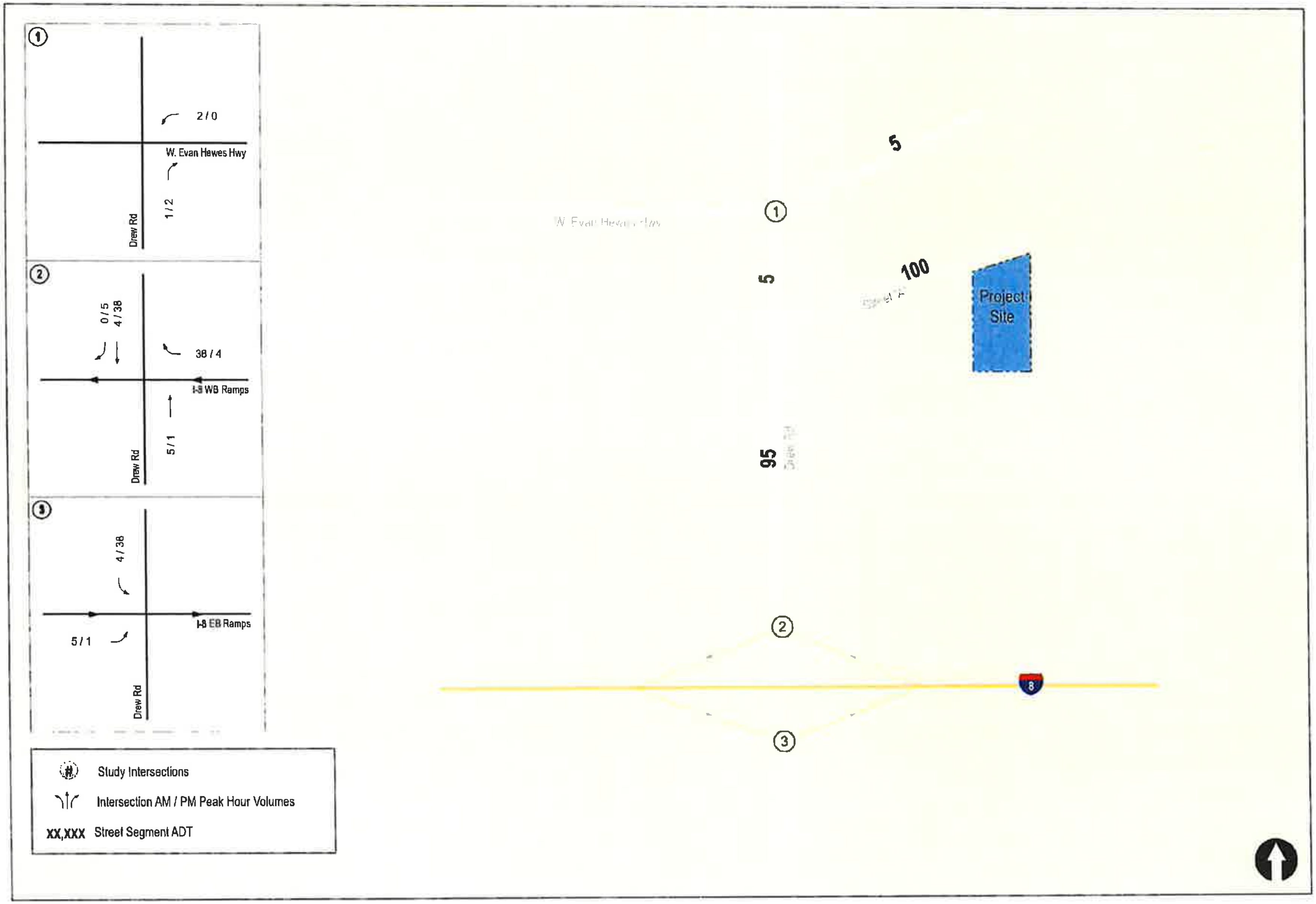
N:\3740\Figures
Date: 5/31/2023
Time: 9:52 AM

Figure 5-1b

Project Trip Generation

(Equipment Delivery Trips)

ALBA PEAKER



LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 6/12/2023
Time: 7:47 AM

Figure 5-2a
Project Traffic Volumes
(Employee Trips)
ALBA PEAKER

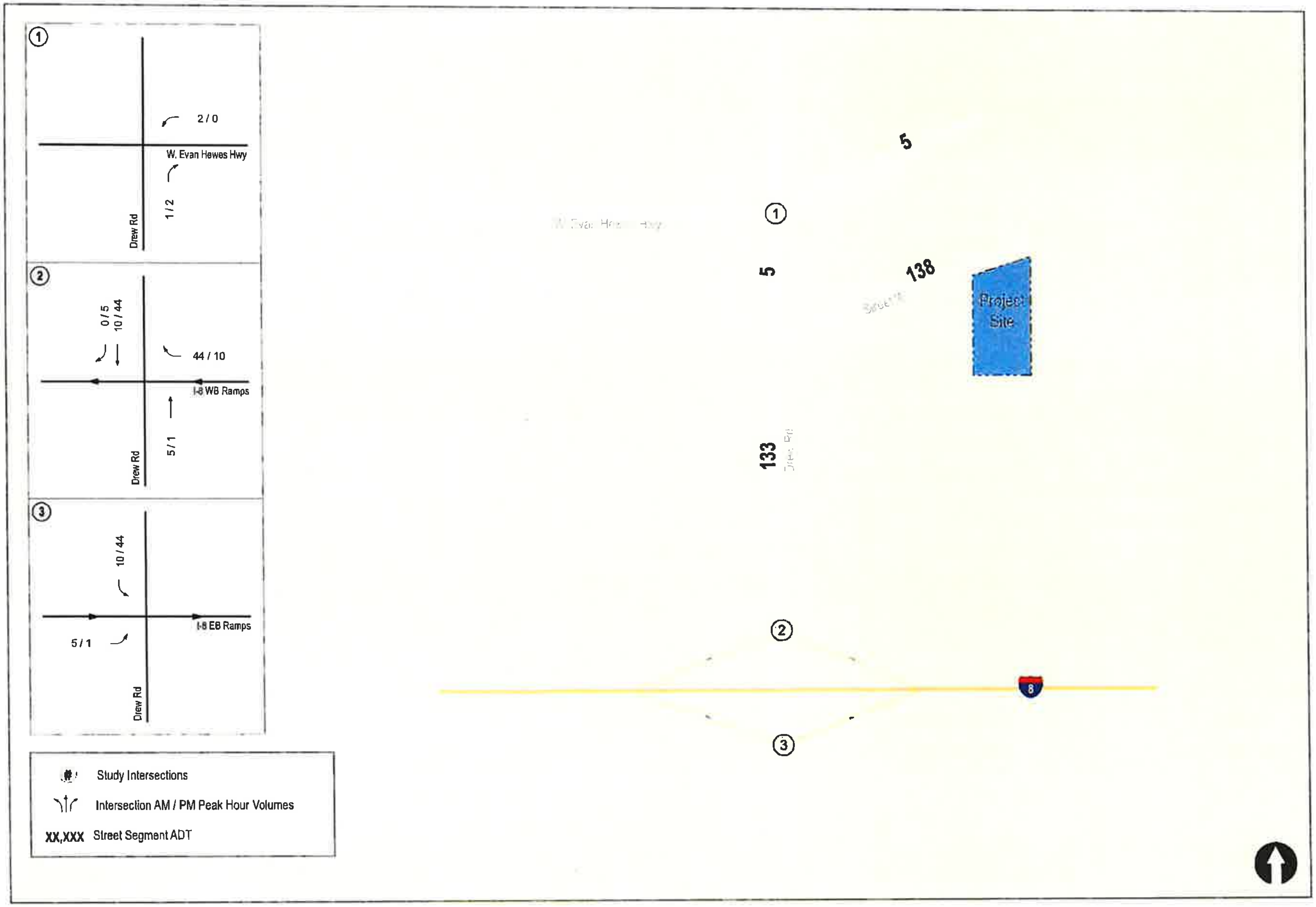
EEC ORIGINAL PKG

N:\3740\Figures
Date: 6/12/2023
Time: 7:47 AM

LINSCOTT LAW & GREENSPAN engineers

Figure 5-2b
Project Traffic Volumes
(Equipment Delivery Trips)
ALBA PEAKER

EEC ORIGINAL PKG



LINSCOTT LAW & GREENSPAN engineers

N:\3740\Figures
Date: 6/12/2023
Time: 7:48 AM

Figure 5-3

Project Traffic Volumes

(Total Trips)

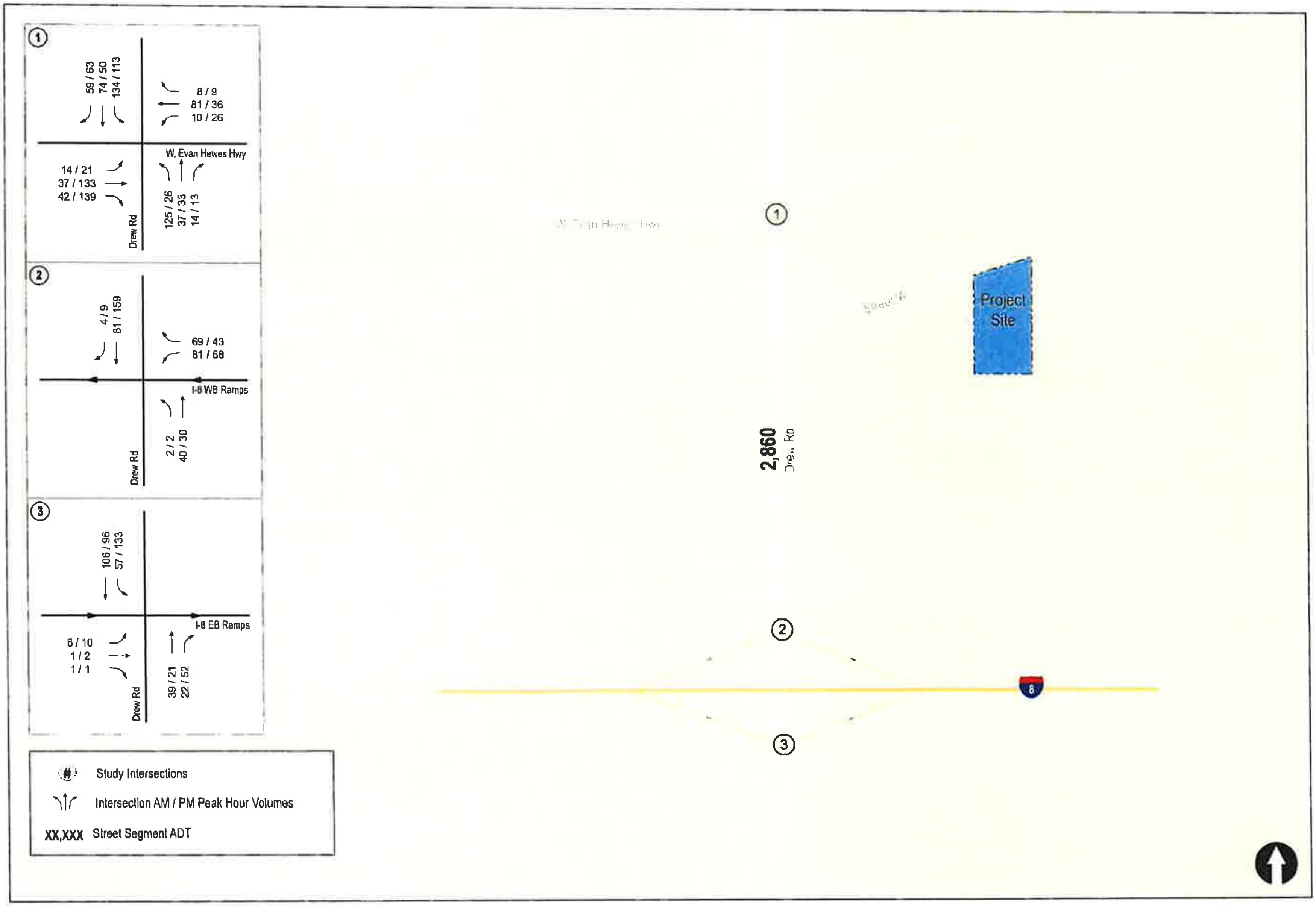
ALBA PEAKER

EEC ORIGINAL PKG

6.0 Construction Year without Project Traffic Volumes

With the construction phase anticipated to be completed within a year, no cumulative projects were identified for inclusion in the analysis. Therefore, a 2% growth factor was applied to existing traffic volumes to account for cumulative projects.

Figure 6-1 depicts the Construction Year (Existing + Cumulative Projects) without Project traffic volumes, ***Figure 6-2*** depicts the Construction Year + Project traffic volumes.



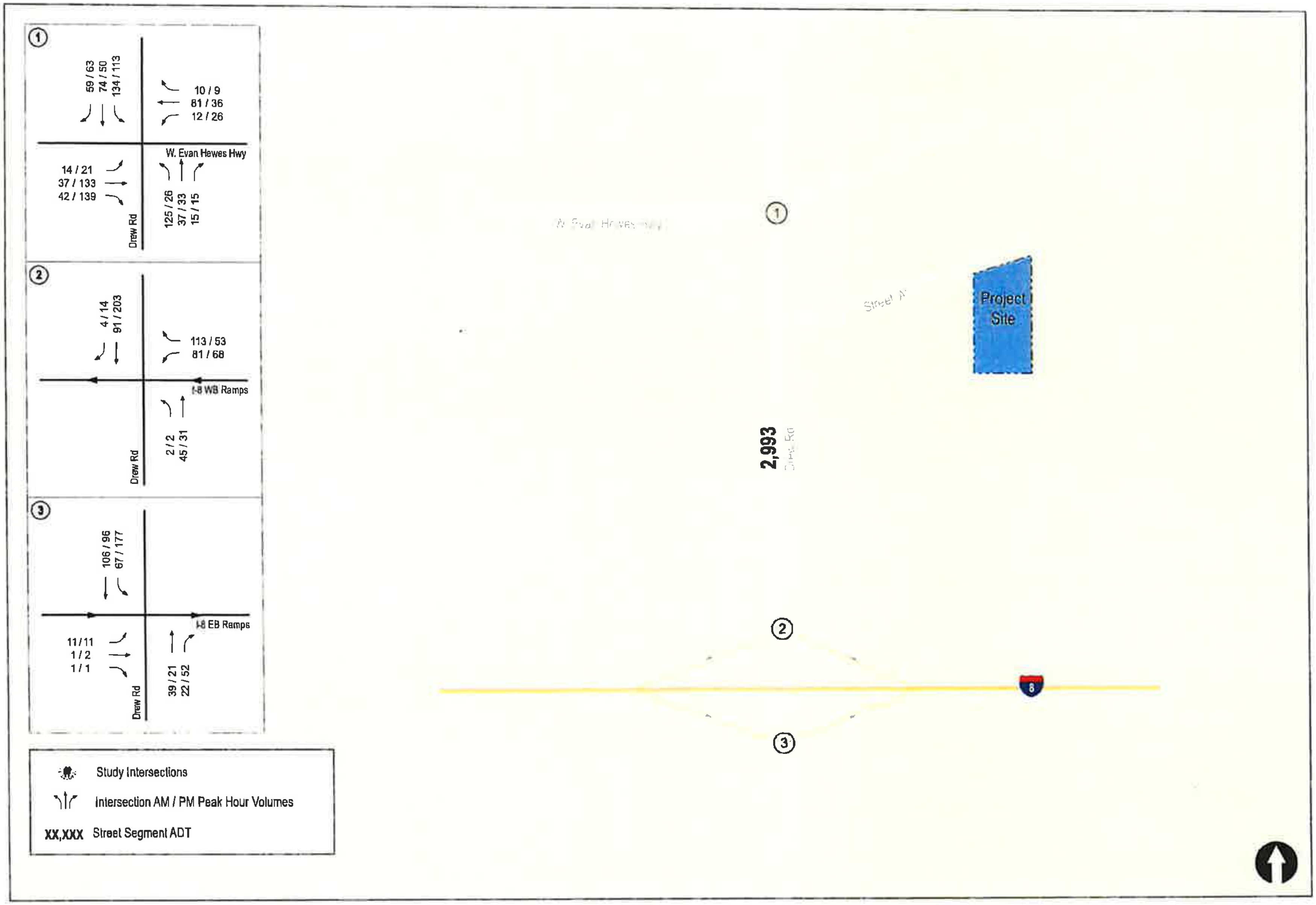
N:\3740\Figures
Date: 6/12/2023
Time: 7:50 AM

LINSCOTT LAW & GREENSPAN engineers

Figure 6-1
Construction Year without Project Traffic Volumes

ALBA PEAKER

EEC ORIGINAL PKG



N:\3740\Figures
Date: 6/12/2023
Time: 7:51 AM

LINSCOTT LAW & GREENSPAN engineers

Figure 6-2
Construction Year + Project Traffic Volumes

ALBA PEAKER

EEC ORIGINAL PKG

7.0 CAPACITY ANALYSIS

The following section presents the analysis of the study area intersections under Construction Year conditions.

7.1 Construction Year without Project Conditions

7.1.1 *Peak Hour Intersection Operations*

***Table** 7–1* summarizes the Opening Year without Project intersection operations. As shown in *Table 7–1,* the study intersections are calculated to operate acceptably at LOS B or better.

7.1.2 *Street Segment Operations*

***Table** 7–2* summarizes the Construction Year without Project street segment operations. As shown in *Table 7-2*, the Drew Road street segment is calculated to operate acceptably at LOS B on a daily basis.

7.2 Construction Year + Project Conditions

7.2.1 *Peak Hour Intersection Operations*

Table 7–1 summarizes the Construction Year + Project intersection operations. As shown in *Table 7–1,* the study intersections are calculated to continue to operate acceptably at LOS B or better.

7.3 Street Segment Operations

Table 7–2 summarizes the Construction Year + Project street segment operations. As shown in *Table 7-2*, the Drew Road street segment is calculated to continue to operate acceptably at LOS B on a daily basis.

TABLE 7–1
CONSTRUCTION YEAR INTERSECTION OPERATIONS

Intersection	Control Type	Movement/ Approach	Peak Hour	Construction Year		Construction Year + Project		Δ[e]
				Delay[a]	LOS[b]	Delay[a]	LOS[b]	
1. West Evan Hewes Hwy / Drew Road	AWSC[c]	Overall	AM PM	9.9 9.8	A A	9.9 9.9	A A	0.0 0.1
2. Drew Road / I-8 Westbound Ramps	OWSC	MSSC[d]	AM PM	9.3 9.6	A A	9.3 9.8	A A	0.0 0.2
3. Drew Road / I-8 Eastbound Ramps	OWSC	MSSC	AM PM	10.3 11.9	B B	10.6 13.2	B B	0.3 1.3

Footnotes:
a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. AWSC – All-Way Stop Controlled intersection. Overall, LOS and delay reported.
d. MSSC – Minor-Street Stop Controlled intersection. Worst case LOS and delay reported.

UNSIGNALIZED

Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

TABLE 7-2
CONSTRUCTION YEAR STREET SEGMENT OPERATIONS

Street Segment	Functional Capacity	Capacity (LOS E) [a]	Construction Year Without Project			Construction Year + Project			Δ V/C [e]	Impact?
			ADT [b]	LOS [c]	V/C [d]	ADT [b]	LOS [c]	V/C [d]		
Drew Road										
West Evan Hewes Highway to I-8 Westbound Ramps	Local Collector	16,200	2,860	B	0.17	2,993	B	0.18	0.01	No

e. ***Footnotes:***

a. Capacity at which the roadway currently functions and based on County of Imperial Roadway Classification Table.
b. Average Daily Traffic Volumes.
c. Level of Service
d. Volume to Capacity ratio.
e. Δ denotes the increase in V/C due to Project.

EEC ORIGINAL PKG

8.0 Conclusions

8.1 VMT Assessment

8.1.1 *Heavy Vehicles*

Per OPR guidelines, "vehicle miles traveled" refers to the amount and distance of ***automobile*** travel attributable to a project. Here the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. VMT does not include trips from heavy trucks. Therefore, the trips generated by the construction truck trips are excluded from VMT analysis.

8.1.2 *Employee Passenger Vehicles*

The Project's employee passenger vehicles are calculated to generate 100 ADT, as shown in *Table 5-1*. Therefore, the employee component of the Project can be considered a "small project", assumed to cause a less-than significant transportation impact per OPR guidelines.

The designated truck routes, which based on client discussions will be oriented to / from the east, are intended to restrict heavy vehicles from turning across multiple lanes of oncoming traffic at unsignalized intersections on. The truck route requirements will be included as a Condition of Approval and will be enforced through on-site signage, off-site signage as appropriate, and in contracts with outside trucking agencies.

- When leaving the site, trucks heading towards I-8 will utilize Street 'A', turn right onto Drew Road and head south to reach the I-8 ramps.
- Inbound trucks coming from the south will exit I-8 at Drew Road. Trucks will drive north along Drew Road before making a right-turn onto Street 'A'.