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Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	260827
Document Title:	CEC Data Request Response No 1 for the Potentia-Viridi Energy Storage Project
Description:	This document provides responses to the CEC's September 6, 2024 data request for the following resource areas: Alternatives, Cultural and Tribal, Geological, Paleontological, Traffic and Transportation, Transmission System Design, System Safety and Nuisance, and Waste Management.
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CEC Data Request Response No. 1

Potentia-Viridi Battery Energy Storage Project

DECEMBER 2024

Prepared for:

CALIFORNIA ENERGY COMMISSION

Prepared by:

LEVY ALAMEDA LLC

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ATTACHMENTS

- 1 CONFIDENTIAL Revised Cultural Resources Inventory and Evaluation Report
- 2 Revised Section 3.3, Cultural and Tribal Cultural Resources
- 3 Revised Section 3.8, Paleontological Resources
- 4 Revised Traffic Analysis
- 5 Revised Section 3.12, Traffic and Transportation
- 6 CONFIDENTIAL Project and PG&E One Line Diagrams
- 7 EMF and EF Calculations
- 8 Soil Sampling Report

- 9 Revised Construction Waste Management Plan
- 10 Revised Section 3.14, Waste Management

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1 Introduction

On September 6, 2024, Levy Alameda LLC and Affiliates (applicant) received a Determination of Incomplete Application and Request for Information from the California Energy Commission (CEC) for the Potentia–Viridi Battery Energy Storage Project (Project; Docket Number 24-OPT-04) in response to the applicant’s application filed on August 7, 2024. Table 1 lists the data requests responded to in Response No. 1. The responses provided below are grouped by individual discipline or topic area and are presented in the same order and with the same numbering provided by the CEC.

Table 1. Data Responses Included

Data Request Resources Area	Data Request Number
Alternatives	DR ALT-1
Cultural and Tribal Resources	DR CUL/TRI-1 through DR CUL/TRI-12
Geological Resources	DR GEO-1 through DR GEO-2
Paleontological Resources	DR PALEO-1
Traffic and Transportation	DR TRANS-1 through DR TRANS-4
Transmission System Design	DR TSD-1 through DR TSD-6
Transmission System Safety and Nuisance	DR TSSN-1 through DR TSSN-5
Waste Management	DR WASTE-1 through DR WASTE-2

Table 2 provides a list of all remaining data requests received from the CEC that have not been addressed in Response No. 1. Supplemental Data Request Response Sets will be provided to the CEC in response to the Data Requests not addressed in this document.

Table 2. Outstanding Data Responses

Data Request Resources Area	Data Request Number
Mandatory Opt-in Requirements	DR MAND-1 and DR MAND-6
Air Quality	DR AQ-1 through DR AQ-13
Biological Resources	DR BIO-1 through DR BIO-79
Greenhouse Gas Emissions (Climate Change)	DR GHG-1 through DR GHG-8
Executive Summary	DR ES-1 through DR ES-3
Hazardous Materials Handling	DR HAZ-1 through DR HAZ-7
Land Use	DR LAND-1 through DR LAND-7
Noise	DR NOISE-1 through DR NOISE-2
Project Description	DR PD-1 through DR PD-4
Public Health	DR PH-1 through DR PH-10
Socioeconomics	DR SOCIO-1 through DR SOCIO-4
Visual Resources	DR VIS-1 through DR VIS-14
Wildfire	DR FIRE-1 through DR FIRE-2
Water Resources	DR WATER-1 through DR WATER-8
Worker Safety	DR WS-1 through DR WS-5

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2 Alternatives

2.1 Data Requests DR ALT-1

DR ALT-1. Data is required that evaluates the comparative environmental merits of alternative sites to the proposed project site. Please provide assessor’s parcel numbers and large-scale, zoomed in maps showing the locations of the alternative sites that were considered and rejected. Please provide additional data on these sites that was collected prior to submittal of the application (i.e., specific information from a preliminary site assessment or constraints analysis).

RESPONSE: As detailed in Table Alt-1, three alternative locations were considered by Levy Alameda LLC for the Potentia–Viridi Battery Energy Storage System (BESS) Project (Figure ALT-1, Alternatives). Although discussions and initial agreements were initiated with the various landowners of the alternative sites, no additional detailed site assessments or constraints analyses were performed because none of the alternative sites had viable generation tie-line (gen-tie line) routes to Pacific Gas & Electric’s (PG&E) Tesla Substation. As such, all three alternative sites were considered but rejected.

Table Alt-1. Alternative Project Sites Considered but Rejected

Alt. Site No.	County	Assessor’s Parcel Numbers	Distance from Parcels to Tesla Substation*	Reasons Discarded
1	San Joaquin	251-320-01 251-320-002	2.07 miles	Alternative Site 1 had no viable gen-tie line route to Pacific Gas & Electric’s (PG&E) Tesla Substation because potential gen-tie line routes were blocked by competitors through control of intervening properties.
2	Alameda	99A-1780-1-5 99B-6500-2-1 99B-6425-2-4 99B-6300-3-3 99B-6300-3-1 99B-6300-3-2	5.17 miles	<p>Alternative Site 2 had no viable gen-tie line route to PG&E’s Tesla Substation because potential gen-tie line routes were blocked by competitors through control of intervening properties and by landowners who were unresponsive/not interested in selling an easement to Levy Alameda LLC.</p> <p>Use of the County of Alameda (County) road rights-of-way for gen-tie line facilities was reviewed but not found to be suitable after conferring with the County because landowner consent agreements would have been required for the properties adjacent to the County roadway. Landowners who were able to be contacted were not interested in signing agreements with Levy Alameda LLC.</p> <p>In addition, the variation and steepness of the terrain of Alternative Site 2 would make it difficult to construct the project.</p>

Table Alt-1. Alternative Project Sites Considered but Rejected

Alt. Site No.	County	Assessor's Parcel Numbers	Distance from Parcels to Tesla Substation*	Reasons Discarded
3	San Joaquin	209-100-35	1.76 miles	Alternative Site 3 had no viable gen-tie line route to PG&E's Tesla Substation because potential gen-tie line routes were blocked by competitors through control of intervening properties.

* Distances were determined based on the most viable route along public roadways.

3 Cultural and Tribal Resources

3.1 Data Requests DR CUL/TRI-1 through DR CUL/TRI-12

3.1.1 Data Request DR CUL/TRI-1

DR-CUL/TRI-1. The California Energy Commission siting regulations require a “list of all literature relied upon or referenced in the documents, along with brief discussions of the relevance of each such reference.” (Cal. Code Regs. tit. 20 §§ 1704(a)(3)(C), 1877(a).) Appendix 3.3A cites five sources of information without providing a full bibliographic entry for them.

Please provide bibliographic entries for: CASQA (2019), Dudek (2021), OHP (1995), Williams (1997), and WRCC (2023).

RESPONSE. CASQA (2019), OHP (1995), and Williams (1997) were removed from the updated Cultural Resources Inventory and Evaluation Report (Appendix 3.3A) because they were not necessary to include. Dudek (2021) and WRCC (2023) were added to the references. See Attachment 1 for the Revised Cultural Resources Inventory and Evaluation Report (Confidential).

3.1.2 Data Request DR CUL/TRI-2

DR CUL/TRI-2. Opt-in applications must include copies of California Department of Parks and Recreation (DPR) 523 forms for all cultural resources (ethnographic, architectural, historical, and archaeological) identified in the literature search as being 45 years or older or of exceptional importance as defined in the National Register Bulletin Guidelines (36 CFR 60.4(g) per Cal. Code Regs. tit. 20, Appendix B (g) (2) (B)).

Please provide copies of the DPR 523 forms for the following cultural resources:

- P-39-000098
- P-39-004332
- P-39-005337
- P-01-000154
- P-01-000155
- P-01-001783
- P-01-010498
- P-01-010499
- P-01-010500
- P-01-010503
- P-01-010504
- P-01-010505
- P-01-010506
- P-01-010507
- P-01-010508
- P-01-010614
- P-01-010947
- P-01-010948
- P-01-010949
- P-01-010950
- P-01-011394
- P-01-011395
- P-01-011477
- P-01-011479
- P-01-011480
- P-01-011481
- P-01-011482
- P-01-012147

RESPONSE: Department of Parks and Recreation (DPR) forms for previously recorded resources are included in Appendix A of the Cultural Resources Inventory and Evaluation Report. The following DPR 523 forms are attached to the updated DPR 523 forms in Appendix C of the updated Cultural Resources Technical Report (Confidential Attachment 1):

- P-39-000098
- P-39-005337
- P-01-010499
- P-01-010500
- P-01-010614
- P-01-010947

- P-01-011395
- P-01-011479
- P-01-011479
- P-01-011480
- P-01-012147

See Attachment 1 for the Revised Cultural Resources Inventory and Evaluation Report (Confidential).

3.1.3 Data Request DR CUL/TRI-3

DR CUL/TRI-3: Opt-in applications must provide copies, in pdf format, of all technical reports whose survey coverage is wholly or partly within 0.25 mile of the area surveyed for the project under California Code of Regulations, Appendix B, section (g) (2) (C) or which report on any archaeological excavations or architectural surveys within the literature search area (Cal. Code Regs. tit. 20, Appendix B(g)(2)(B)).

Please provide these studies from within the project area:

S-000848	S-009795	S-017835	S-030204	S-033600
S-002458	S-011826	S-018217	S-032596	S-048927
S-002865	S-012790	S-020395	S-033239	S-052105
S-009462	S-016660	S-024986	S-033545	

Please provide technical reports from within a quarter mile of the area surveyed for the project, or that report on architectural surveys: S-035796, S-043682, S-052299, and SJ-05528.

RESPONSE: These technical reports are included in Appendix A of the Revised Cultural Resources Inventory and Evaluation Report (Confidential Attachment 1).

3.1.4 Data Request DR CUL/TRI-4

DR CUL/TRI-4: The application states that the pedestrian survey was of the Area of Potential Impacts (API) only. Please clarify whether the API incorporated an area extending to no less than 200 feet around the project site, and to no less than 50 feet to either side of the right-of-way of project linear facility routes per California Code of Regulations, title 20, Appendix B (g) (2) (C).

RESPONSE: An archaeological field survey was conducted of the API and the required buffer surrounding the API. See Confidential Attachment 1 for the Revised Cultural Resources Inventory and Evaluation Report.

3.1.5 Data Request DR CUL/TRI-5

DR CUL/TRI-5: Please conduct a historic architecture field survey no less than 0.5 mile out from the proposed project site and from routes of all above ground linear facilities (Cal. Code Regs. tit. 20, Appendix B (g) (2) (C)). The results of these additional surveys need to be incorporated into a Data Completeness Supplement and an addendum to the technical report and submitted.

RESPONSE: An architectural survey was conducted from the public right-of-way (unless otherwise noted in the report) of the API and within the 0.5-mile radius per Appendix B of the Cultural Resources Inventory and Evaluation

Report. The survey was completed by an architectural historian who meets the Secretary of the Interior's Professional Qualification Standards for architectural history and history. See Confidential Attachment 1 for the Revised Cultural Resources Inventory and Evaluation Report.

3.1.6 Data Request DR CUL/TRI-6

DR CUL/TRI-6: Please include the professional qualifications for Gregory Wada and Victoria Martin, who conducted the pedestrian survey (Cal. Code Regs. tit. 20, Appendix B (g)(2)(C)(v)).

RESPONSE: Gregory and Victoria both meet the Secretary of the Interior's Professional Qualification Standards for archaeology. The text of the report has been updated to include their degrees (both have an MA), and their resumes are included in Appendix D of the Revised Cultural Resources Inventory and Evaluation Report (Confidential Attachment 1).

3.1.7 Data Request DR CUL/TRI-7

DR CUL/TRI-7: Opt-in applications must include a copy of the applicant's request to the Native American Heritage Commission (NAHC) for information on Native American sacred sites and lists of Native Americans interested in the project vicinity, and copies of any correspondence received from the NAHC. (Cal. Code Regs. tit. 20, Appendix B (g)(2)(D)). The applicant's request to the NAHC is not provided in the application. Please provide a copy of the NAHC request.

RESPONSE: The NAHC Sacred Lands File (SLF) results are included in Appendix B of the Revised Cultural Resources Inventory and Evaluation Report (Confidential Attachment 1).

3.1.8 Data Request DR CUL/TRI-8

DR CUL/TRI-8: Please provide a copy of all correspondence the applicant sent to those individuals listed on the NAHC Contact List and copies of all responses, including a written summary of oral responses as required by California Code of Regulations, title 20, Appendix B (g)(2)(D).

RESPONSE: Examples of information request letters from Dudek and the U.S. Army Corps of Engineers (USACE) are included in Appendix B of the Revised Cultural Resources Inventory and Evaluation Report. Certified mail receipts from Dudek Letters are also included in Appendix B of the report (Confidential Attachment 1).

3.1.9 Data Request DR CUL/TRI-9

DR CUL/TRI-9. Section 3.3.7 of the application provides a description of applicable laws, ordinances, regulations, and standards (LORS). Please provide a table of LORS with a discussion of the applicability of, and conformance with each. The table or matrix shall explicitly reference pages in the application wherein conformance with each law or standard during both construction and operation of the facility is discussed in accordance with California Code of Regulations, title 20, Appendix B (i)(1)(A).

RESPONSE: Table 5, LORS Applicable to Cultural Resources, was added to Section 1.9 of the Cultural Resources Inventory and Evaluation Report (Confidential Attachment 1) and the updated application Section 3.3.7 (Attachment 2, Revised Section 3.3, Cultural and Tribal Cultural Resources).

3.1.10 Data Request DR CUL/TRI-10

DR CUL/TRI-10. Section 3.3.9 of the application states that no permits are required. However, Section 3.3.7.1 of the application states that a Section 404 permit from the Army Corps of Engineers is anticipated and consultation will be initiated to ensure that permit processing is completed in accordance with the requirements of Section 106 of the National Historic Preservation Act. If a Section 404 permit is anticipated, please provide a table with an updated list identifying agencies, jurisdictions, etc., in accordance with California Code of Regulations, title 20, Appendix B (i) (1) (B).

RESPONSE: Table 7, Agency Contacts for Cultural Resources, listing applicable cultural resources contacts has been added to Section 5.4 of the Cultural Resources Inventory and Report. USACE is the lead federal agency and the point of contact is as follows:

Matthew Di Loreto
 Regulatory Project Manager, CA Delta Section
 Regulatory Division, Sacramento District
 U.S. Army Corps of Engineers
 Office: (916) 557-7882
 Mobile: (919) 356-6179
 matthew.j.diloreto@usace.army.mil

3.1.11 Data Request DR CUL/TRI-11

DR CUL/TRI-11. If the Section 404 permit is anticipated, please provide phone numbers and titles for agency contacts in accordance with California Code of Regulations, title 20, Appendix B (i) (2).

RESPONSE: A Section 404 permit is currently being processed by USACE. The regulatory contact is as follows:

Matthew Di Loreto
 Regulatory Project Manager, CA Delta Section
 Regulatory Division, Sacramento District
 U.S. Army Corps of Engineers
 Office: (916) 557-7882
 Mobile: (919) 356-6179
 matthew.j.diloreto@usace.army.mil

3.1.12 Data Request DR CUL/TRI-12

DR CUL/TRI-12. If the Section 404 permit is anticipated, please update the schedule on page 3.3-20 of the application, in accordance with California Code of Regulations, title 20, Appendix B (i) (3).

RESPONSE: USACE is currently processing a request for a federal Clean Water Act (CWA) permit, as well as the ancillary consultations that are conducted by USACE, acting as the lead federal agency. These include consultation with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the federal Endangered Species Act (ESA), as well as consultation with local Native American tribes and the State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act.

A Biological Assessment was provided to USACE as an appendix to the CWA Section 404 application. This Biological Assessment is currently being reviewed under Section 7 Consultation with USFWS. Consultation was initiated by USACE on September 6, 2024, and we expect to have comments back by the end of December.

USACE was provided with the Cultural Resources Inventory and Evaluation Report Potentia Viridi BESS Project, Alameda County, California, dated June 2024 (by Dudek) for use in conducting cultural and historic consultations. USACE provided this report in its notification to 10 Native American tribal groups and the Native American Heritage Commission in the middle of September 2024, and concluded its consultation on October 25, 2024. No requests for consultation were received by USACE. USACE is currently in the process of completing consultation with the SHPO. We expect this consultation to conclude by the end of January 2025.

We anticipate that USACE will issue the CWA permit following consultations with USFWS and the SHPO. The expectation is that the permit will be issued within 90 days following conclusion of these consultations (expected March or April 2025).

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4 Geological Hazards

4.1 Data Requests DR GEO-1 through DR GEO-2

4.1.1 Data Request DR GEO-1

DR GEO-1. Please revise Figure 3.4-1 using a more current reference as a basemap to depict the surface geology. CEC staff suggests utilizing “Deattre, M.P. et. al 2023. Geologic and Geophysical Maps of the Stockton 30’ x 60’ Quadrangle, California Joint venture between California Department of Conservation, U.S.G.S., and the Coast Range Geologic Mapping Institute” available at: https://www.conservation.ca.gov/cgs/Documents/Publications/Regional-Geologic-Maps/RGM_005/RGM_005_Stockton_100k_2023_Plate1of1_a11y.pdf.

RESPONSE: Figure 3.4-1 has been revised in response to the DR GEO-1 comment. Revised Figure 3.4-1, Surface Geology, is included below.

4.1.2 Data Request DR GEO-2

DR GEO-2. Please revise Figure 3.4-2 to include the pre-Quaternary faults immediately southeast of the site between the Midway Fault and the Corral Hollow- Carnegie Fault Zone. For further details, please consult the California Geological Survey (CGS) Fault Activity Map of California available at: <https://maps.conservation.ca.gov/cgs/fam/>.

RESPONSE: Figure 3.4-2 has been revised in response to the DR-GEO-2 comment. Revised Figure 3.4-2, Regional Faulting, is included below.

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5 Paleontological Resources

5.1 Data Request DR PALEO-1

DR PALEO-1: Please revise subsection 3.8.1.1.1 of the application to include the more recent geologic reference provided in DR GEO-1, Deattre, M.P. et. al 2023, in the discussion of paleontological sensitivity. Please submit an updated Section 3.8.

Before resubmitting an updated Section 3.8, please correct the numbering of subsection 3.8.2.3 on page 3.8-4, as it appears incorrect. Also correct the subsection numbers under subsection 3.8.6, beginning on page 3.8-7 to read 3.8.6.1, 3.8.6.2, etc., instead of 3.8.5.1, 3.8.5.2, etc.

RESPONSE: A more recent geologic reference has been added in the DR GEO-1 discussion of paleontological sensitivity and has been included in the reference list located in Section 3.8.9. See Attachment 3 for revised Section 3.8, Paleontological Resources.

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6 Traffic and Transportation

6.1 Data Requests DR TRANS-1 through DR TRANS-4

6.1.1 Data Request DR TRANS-1

DR TRANS-1. Provide an assessment of the ability of Patterson Pass Road to safely accommodate project and construction traffic. The facility lacks shoulders and does not currently meet the County’s design standards. Provide an evaluation of potential safety issues at the Patterson Pass Road/Mountain House Parkway/I-580 interchange in accordance with the requirements of the *Caltrans Local Development Review Safety Review Practitioners Guide* (Caltrans Division of Safety Programs, February 2024). That document indicates that *“If the Project adds two or more car lengths to the ramp queue that would extend into the freeway mainline, then the location must be reviewed for traffic safety impacts. This review must evaluate speed differential between the off-ramp queue and mainline of the freeway during the same period.”* As level of service (LOS) E and F are identified at this interchange, the project may result in adverse queuing into the freeway mainline resulting in a safety impact.

RESPONSE: Additional review of Patterson Pass Road was conducted to determine its ability to safely accommodate project and construction traffic. The applicant concurs that the majority of the facility lacks shoulders and does not currently meet the County’s design standards south of the existing northern project access driveway. The northern driveway will serve as the primary access to the site, and the southern driveway will be used for emergency access only; as such, the majority of project traffic would not be expected to travel along the unimproved stretches of Patterson Pass Road. A Transportation Management Plan has been developed to reduce potential safety impacts along Patterson Pass Road due to existing facility deficiencies. The Transportation Management Plan is included as Appendix D to the revised Traffic Analysis (see Attachment 4).

An evaluation of the Patterson Pass Road/Mountain House Parkway/Interstate 580 interchange was also conducted in accordance with the requirements of the California Department of Transportation (Caltrans) Local Development Review Safety Review Practitioners Guide. The Transportation Analysis has been updated to reflect the additional queuing analysis. Additionally, review of current Caltrans District 10 projects indicated that extensive improvements are planned under the Interstate 580/International Parkway/Patterson Pass Interchange project, which would modify the existing compact diamond (Tyler L-1) interchange into a diverging diamond interchange (DDI). Per communication with City of Tracy Public Works, the current schedule identifies a completion date of August 2026 for the proposed interchange. Because the proposed project is expected to start construction in 2027, the new DDI interchange would be in place prior to project construction, and the interchange deficiencies noted above would be improved.

6.1.2 Data Request DR TRANS-2

DR TRANS-2: Provide estimated one-way trip lengths for workers, deliveries, and truck haul trips generated by the construction of the project.

RESPONSE: Estimated one-way trip lengths for workers, deliveries, and truck haul trips generated by construction of the project are provided in Section 8.2 of the revised Transportation Analysis (Attachment 4).

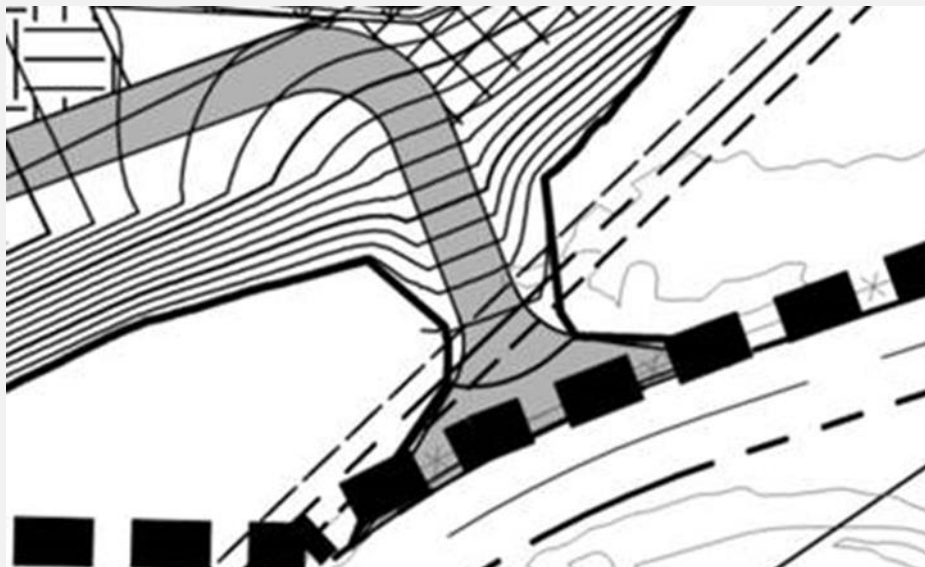
6.1.3 Data Request DR TRANS-3

DR BIO-3: Provide a drawing, description, and assessment of the safety and adequacy of the project’s driveway on Patterson Pass Road. The intersection as depicted on Figure 2, Appendix 3.12, shows a narrow steep driveway intersecting Patterson Pass Road with limited acceleration or deceleration space for heavy vehicles entering and exiting the facility.

RESPONSE: After further evaluation of the project’s driveway on Patterson Pass Road, it was determined that this entrance would only be used for emergency vehicle access for both project construction and operational activities. The driveway apron was expanded to allow vehicles space to decelerate off the main road and to provide additional visibility for exiting vehicles to enter onto Patterson Pass Road. A sight distance analysis was conducted at the southern project driveway and is provided in Section 7.2 of the revised Transportation Analysis (Attachment 4).

As shown in the exhibit below, the driveway entrance at Patterson Pass Road has been re-designed according to the Engineering Design Guidelines for Unincorporated Alameda County to provide 100 feet of straight driveway perpendicular to the centerline of Patterson Pass Road. The grade has been adjusted to provide a maximum 6% grade for 50 feet from the road edge. Entry to the site will be through the gate at the entry to the BESS yard and the gate adjacent to the roadway has been removed.

Exhibit TRANS-1. Re-Designed Emergency Access Road off of Patterson Pass Road



6.1.4 Data Request DR TRANS-4

DR TRANS-4. Indicate whether any relevant government officials were contacted to-date and provide contact information for all agencies listed in Section 3.12-6, along with the name and contact information for each agency official the applicant has contacted.

RESPONSE: Per the request in DR TRANS-4, a list of government officials contacted to date has been added to Revised Section 3.12.6 of the application in Table 3.12-6 (Attachment 5, Revised Section 3.12, Traffic and Transportation).

7 Transmission System Design

7.1 Data Requests DR TSD-1 through DR TSD-6

7.1.1 Data Request DR TSD-1

DR TSD-1: Please provide one-line diagrams for the project substation. Show all equipment ratings including the bay arrangement of the circuit breakers, disconnect switches, buses, transformers, and other equipment that would be required for the project interconnection at the project site.

RESPONSE: See below for Figure TSD-1, One-Line Diagram of Project Substation.

7.1.2 Data Request DR TSD-2

DR TSD-2: Please provide one-line diagram for the existing PG&E Tesla substation. Show all equipment ratings including bay arrangement of the breakers, disconnect switches, buses, and other equipment. Show the project interconnection to the existing PG&E Tesla substation.

RESPONSE: PG&E treats station drawings as confidential and provides information on a need-to-know basis. It is PG&E's position that the entire Station Line Drawing is not needed for permitting. The Station Line Drawing included in Appendix C-1 of the Interconnection Agreement (previously submitted as Confidential Appendix 2E to the Potentia-Viridi Opt-In Application) should suffice as an overview of the work at the Tesla Substation. See Confidential Attachment 6, PG&E Tesla Substation One-Line Diagram, as it relates to upgrades at the Tesla Substation associated with the Potentia-Viridi Project.

7.1.3 Data Request DR TSD-3

DR TSD-3: According to the California Independent System Operator (California ISO) study report one line-diagram included in the Interconnection Study, Confidential Appendix 2D, the applicant-proposed generator tie line will end at the dead-end structure of the current Tesla substation fence line. If this is the case, please specify the length of the gen-tie line that the applicant will construct.

Additionally, please indicate the number of poles needed to support the overhead 500-kilovolt (kV) gen-tie line.

RESPONSE: The gen-tie line will connect to the POCO (Point of Change of Ownership) outside the Tesla fence line. Refer to the Plan and Profile drawing submitted as part of the initial Transmission Line Design package, in Appendix 2B. Three poles are required to support the 500 kV gen-tie line between the substation and the POCO (inclusive of the POCO structure). Drawings specific to each structure were also included in Appendix 2B.

The Potentia-Viridi 500 kV gen-tie line is approximately 0.3 miles long beginning at the new Obra Mastra Renewables Substation and terminating at a new POCO dead-end structure outside the existing PG&E Tesla Substation.

7.1.4 Data Request DR TSD-4

DR TSD-4. Please discuss the CPUC GO 128 standards in reference to the project's underground construction facilities, such as grounding, duct banks, derated ampacity, underground conductor clearances, and soil resistivity analysis.

RESPONSE: There are no underground facilities related to the project substation or transmission line.

7.1.5 Data Request DR TSD-5

DR TSD-5. Please provide a table that identifies Transmission System Design laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project.

RESPONSE: Table TSD-1, Transmission System Design Regulations, identifies transmission system design laws, regulations, ordinances, and standards; adopted local, regional, state, and federal land use plans; and leases and permits applicable to the Potentia-Viridi BESS Project.

Table TSD-1. Transmission System Design Regulations

Item	Title
CPUC GO-95	Rules for Overhead Electric Line Construction
NESC	National Electrical Safety Code (NESC)
GO-131-D	Rules for Planning and Construction of Electric Generation Line and Substation Facilities in California
Decision 93-11-013	California Public Utilities Commission (CPUC) EMF Decision
CPUC GO-52	Construction and Operation of Power and Communication Lines for the Prevention or Mitigation of Inductive Interference
ASCE 48-19	Design of Steel Transmission Structures
ASCE 74	Guidelines for Electrical Transmission Line Structural Loading
ASCE 113	Substation Structure Design Guide
FAA 70/7460	Proposed Construction and/or Alteration of Objects that May Affect the Navigation Space
IEEE 81	Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Grounding System
IEEE 525	Guide for the Design and Installation of Cable Systems in Substations
IEEE 605	Guide for Bus Design in Air Insulated Substation
IEEE 691	Guide for Transmission Structure Foundation Design and Testing
IEEE 738	Standard for Calculating the Current-Temperature Relationship of Bare Overhead Conductors
IEEE 1127	Guide for the Design, Construction, and Operation of Electric power Substations for Community Acceptance and Environmental
IEEE 1427	Guide for Recommended Electrical Clearances and Insulation Levels in Air Insulated Electrical Power Substations
IEEE 1863	Guide for Overhead AC Transmission Line Design
Code of Ordinances	Code of Ordinances for Alameda County

7.1.6 Data Request DR TSD-6

DR TSD-6. Please confirm if the Western Area Power Administration (WAPA) and Modesto Irrigation District (MID) have reviewed the California ISO cluster study 13, Phase I and II study reports, and have engaged in discussions with the applicant regarding downstream impacts and their mitigation measures. Furthermore, please confirm if there has been an agreement with the above utilities to carry out necessary reliability upgrades prior to the project's online date.

RESPONSE: The applicant confirms that both the Western Area Power Administration (WAPA) and Modesto Irrigation District (MID) have reviewed the California ISO cluster study 13, Phase I and II study reports, and have engaged in discussions with the applicant regarding downstream impacts and their mitigation measures.

System impact studies are underway with both WAPA and MID, the results of which will determine what, if any, upgrades will be necessary to accommodate the interconnection of Potentia–Viridi. Agreements will be executed to carry out any necessary upgrades following the completion of these studies and analysis of the results.

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8 Transmission System Safety and Nuisance

8.1 Data Requests DR TSSN-1 through DR TSSN-5

8.1.1 Data Request DR TSSN-1

DR TSSN-1: Please discuss future EF and EMF that would be created by the proposed project.

RESPONSE: EF and EMF mitigation was performed by oversizing the project's 500 kV conductor size and increasing the 500 kV cables clearance to ground. Calculated EF at edge of the right-of-way is less than 8 MG, and calculated EF field is less than 0.7 kV/M at edge of the right-of-way. See Attachment 7 for EMF and EF calculations along the project right-of-way.

8.1.2 Data Request DR TSSN-2

DR TSSN-2: Please provide calculated EMF, EF values at the project substation of the site and at the edge of the rights of way for gen-tie line.

RESPONSE: See Response to DR TSSN-1, above.

8.1.3 Data Request DR TSSN-3

DR TSSN-3: Please estimate the radio and television interference that could result from the project.

RESPONSE: No significant radio or television interference is expected from the proposed project. Corona was limited by conductor sizing and conductor separations. The line would not run through a populated area where radio and television interference would be expected.

8.1.4 Data Request DR TSSN-4

DR TSSN-4: Please discuss California Public Utilities Commission (CPUC) General Order 95, 128 and 131-D design standards and National Electrical Safety Code (NESC) design requirements relevant to project design. Indicate the steps which have been taken to minimize the EMF and EF effects, such as: over-head transmission line clearances with ground, right of way requirement, duct bank design for underground circuits, de-rated ampacity of conductors, conductor selection and substation grounding grid, etc.

RESPONSE: See Table TSSN-1, below.

Table TSSN-1. System Design Requirements and Regulation

Item	Title
CPUC GO-95	Rules for Overhead Electric Line Construction

Table TSSN-1. System Design Requirements and Regulation

Item	Title
NESC	National Electrical Safety Code (NESC)
GO-131-D	Rules for Planning and Construction of Electric Generation Line and Substation Facilities in California
Decision 93-11-013	California Public Utilities Commission (CPUC) EMF Decision
CPUC GO-52	Construction and Operation of Power and Communication Lines for the Prevention or Mitigation of Inductive Interference
ASCE 48-19	Design of Steel Transmission Structures
ASCE 74	Guidelines for Electrical Transmission Line Structural Loading
ASCE 113	Substation Structure Design Guide
FAA 70/7460	Proposed Construction and/or Alteration of Objects that May Affect the Navigation Space
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IEEE 1427	Guide for Recommended Electrical Clearances and Insulation Levels in Air Insulated Electrical Power Substations
IEEE 1863	Guide for Overhead AC Transmission Line Design
Code of Ordinances	Code of Ordinances for Alameda County

Also, see Response to DR TSSN-1, above.

8.1.5 Data Request DR TSSN-5

DR TSSN-5: Please provide a table that identifies Transmission System Safety and Nuisance laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, leases, and permits applicable to the proposed project.

RESPONSE: See Response to DR TSSN-4, above.

9 Waste Management

9.1 Data Requests DR WASTE-1 through DR WASTE-2

9.1.1 Data Request DR WASTE-1

DR LAND-1: Please revise Appendix 1I with results of the soil testing and construction management actions based on the soil test results in DR HAZ-2.

RESPONSE: The field investigation was performed by Tetra Tech on November 4, 2024. Four soil samples were collected during field work. The soil samples were collected between the surface and a depth of approximately 6 inches below ground surface using a metal trowel. All of the samples were analyzed for the following:

- Organochlorine pesticides using U.S. Environmental Protection Agency (EPA) Method SW8081A
- Chlorinated herbicides using EPA Method SW8151A
- CAM-17 metals using EPA Methods SW6020/7471A

Results of the soil sampling are included in Attachment 8, Soil Sampling Report, and concluded the following:

- Organochlorine pesticides were not detected in any of the soil samples
- Low levels of four chlorinated herbicides (2,4,5-T, 2,4,5-TP, Dicamba, and Dichlorprop) were detected in three of the four soil samples; all of the detected concentrations were more than five orders of magnitude lower than the human health-based screening levels, where listed
- Concentrations of CAM 17 metals other than arsenic were less than human health screening levels
- Arsenic concentrations were less than the Department of Toxic Substance Control background value of 12 milligrams per kilogram

All results are well below California hazardous waste criteria, suggesting that soils exported from the project site during construction will not require special handling or disposal, and therefore no special management actions are required. Appendix 1I, Construction Waste Management Plan, was updated to include the above language in Section 3.1.3, Soil (Attachment 9, Revised Construction Waste Management Plan).

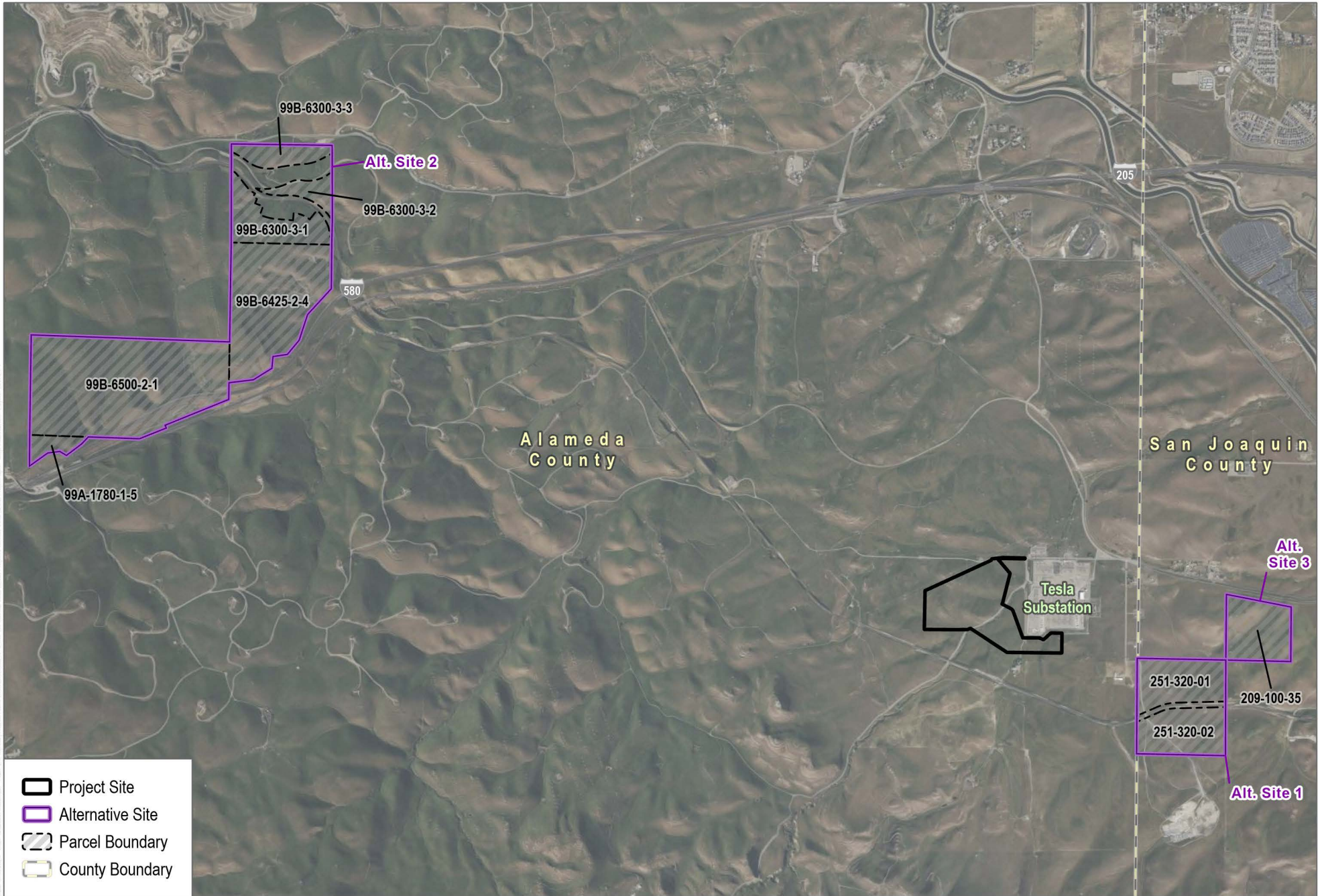
9.1.2 Data Request DR WASTE-2

DR WASTE-2: Please add information on management of hazardous waste generated during operations to Appendix 1I, including storage areas and accumulation times. Appendix 1I (p.10) includes federal regulations and not recent amended California regulations. Please include most current California regulations, which were amended in 2024 with the generator amendments.

RESPONSE: Section 3.14 has been revised to include a discussion on management of hazardous waste generated during operations (Attachment 10, Revised Section 3.14, Waste Management). Appendix 1I (Attachment 9) is related only to construction activities and has been revised to include California regulations related to generation and handling of hazardous waste.

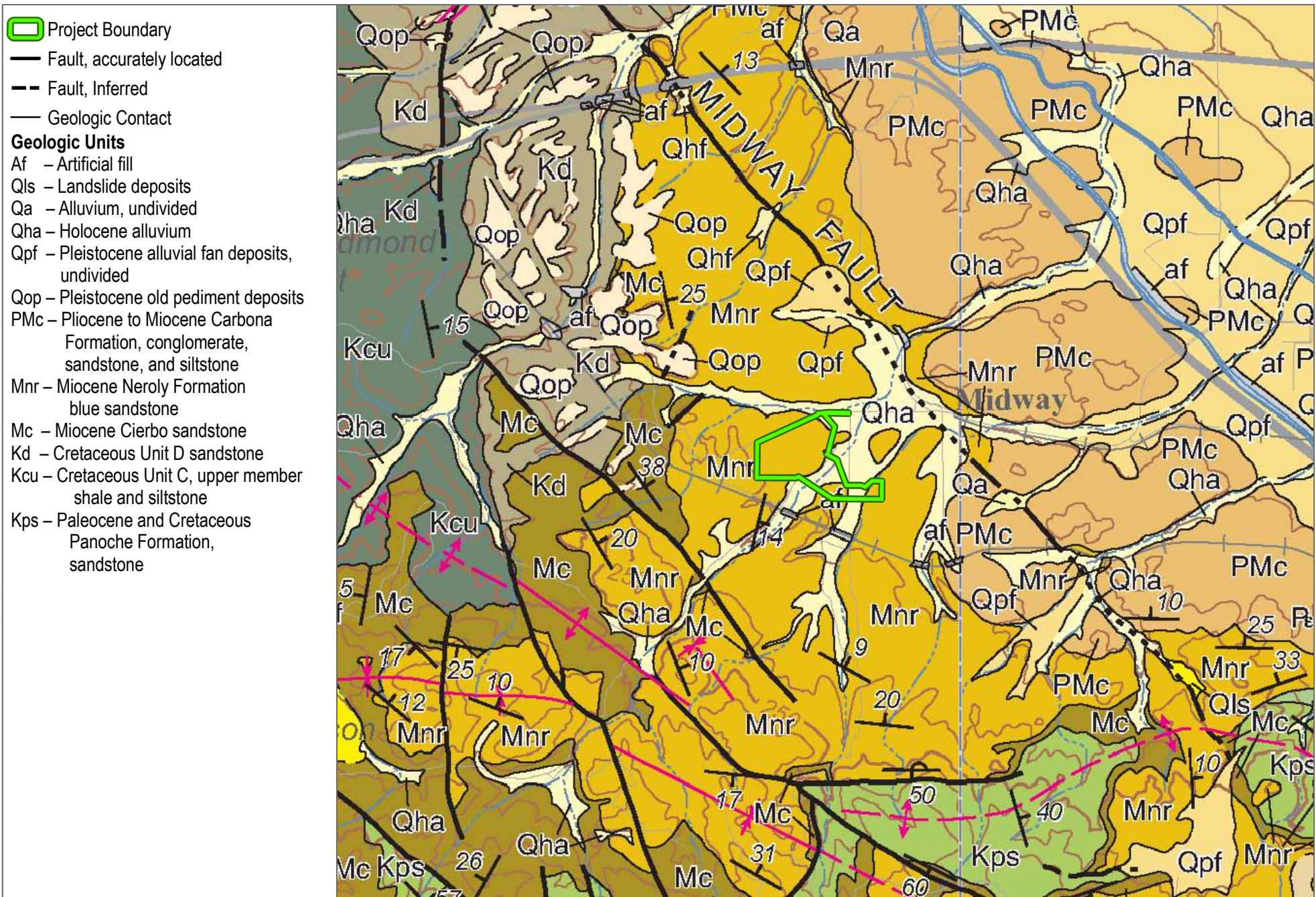
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Figure ALT-1 Alternatives



SOURCE: Bing Maps (accessed 2024); Alameda County 2024; San Joaquin County 2024

Revised Figure 3.4-1 Surface Geology



SOURCE: Delattre, et al. 2023

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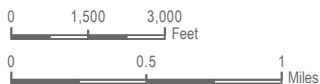


FIGURE 3.4-1
Surface Geology
Potencia-Viridi BESS Project

Revised Figure 3.4.-2 Regional Faulting

