

CHAPTER 2.0

PROJECT DESCRIPTION

2.1 PROJECT DESCRIPTION

2.1.1 INTRODUCTION

This Supplemental Environmental Impact Report (SEIR) assesses the environmental impacts that may result from Southern Power Company's (Applicant) development of a Battery Energy Storage System as part of the Campo Verde LLC's Campo Verde Solar Project. In August 2012, the County of Imperial Board of Supervisors selected the Reduced Size Solar Generation Facility Alternative identified in the 2012 Campo Verde Solar Project Final EIR (SCH. No. 2011111049). [Note: This Alternative was ultimately built as the Campo Verde Solar Project and is therefore referred to as the "Approved Project" in this SEIR. The Campo Verde Solar Project, as constructed, is capable of producing 147 MW of electricity].

The Board also certified the Final Environmental Impact Report (State Clearinghouse Number 2011111049) for the Campo Verde Solar Project; approved a Conditional Use Permit (CUP 11-0007) to construct and operate a 140-megawatt (MW) project; approved a Variance (V12-0008) to allow exceedance of height within the designated zoning; and approved other associated discretionary actions. On June 5, 2014, Lot Line Adjustment #00269 for Assessor's Parcel Number (APN) 051-350-012 and 051-350-014 was recorded.

The Applicant is currently requesting to amend CUP 11-0007 which is being evaluated in this SEIR as the Battery Energy Storage System for the Campo Verde Solar Project (hereafter Battery Energy Storage System or proposed Project). The proposed Project would add an energy storage system to a single parcel (APN 051-350-018 [previously APN 051-350-014]) – that is included within the boundaries of the Campo Verde Solar Project.

2.1.2 SITE LOCATION

The Campo Verde Solar Project is approximately 7 miles southwest of the community of El Centro, California, south of Interstate 8 (I-8), west of Drew Road, and north and east of the Westside Main Canal (**Figure 2.0-1**). The Battery Energy Storage System is proposed within the existing fenced Campo Verde Solar Project, adjacent to the Campo Verde Substation. The Substation is located west of Liebert Road, south of Wixom Road and north of Mandrapa Road (**Figure 2.0-2**). The proposed Battery Energy Storage System site is immediately to the west of the Substation (**Figure 2.0-3**).

2.1.3 BATTERY ENERGY STORAGE SYSTEM CHARACTERISTICS

A. Existing Uses and Features

The Approved Project (i.e. Reduced Size Solar Generation Facility Alternative) originally encompassed 1,443 acres. The final survey after construction indicated that the Campo Verde Solar Project covered approximately 1,394 acres. Approximately 14 acres were deeded to the Imperial Irrigation District (IID) leaving a final total acreage of approximately 1,379 acres.

The proposed Battery Energy Storage System represents a complementary use which will be located within the existing footprint of the Campo Verde Solar Project to the west of the existing Campo Verde Substation and south and east of one of the solar array fields (i.e. the southernmost portion of Block 01) (Refer to **Figure 2.0-2**). The topography of the Project site is flat.

B. General Plan and Zoning Designations

The land on which the Battery Energy Storage System is proposed is zoned A-3 – Agricultural, Heavy. Solar energy electrical generators, electrical power generating plants, substations, and

facilities for the transmission of electrical energy are allowed as conditional uses in Agricultural zones. In keeping with the provisions of the zoning designations, the Applicant is seeking to amend CUP 11-0007 to allow development of a battery energy storage system.

C. Battery Energy Storage System Design

The proposed Project is a utility-scale battery energy storage system incorporating traditional lithium ion batteries. The batteries are expected to meet the minimum 20-year design life with 50 percent capacity remaining (Southern Power Company 2016). The Project is proposed to be constructed in two phases as illustrated in **Figures 2.0-4A** through **2.0-6B**.

Phase 1

Phase 1 of the proposed Project will be designed to store up to 5 megawatt-hours (MWH) of energy. Phase 1 will consist of an approximately 424 square foot (sq. ft.) metal modular battery system container placed on a concrete foundation housing 440 modules and 13,200 batteries (Southern Power Company 2016). Other components will be located adjacent to the battery system container. These components include the Power Conversion System (PCS) cabinets and transformer; Supervisory Control and Data Acquisition (SCADA) cabinet; power distribution panel; and the station service transformer (Refer to **Figure 2.0-5A** and **2.0-5B**). The components will be spaced to provide isolation as well as access and occupy approximately 707 sq. ft. No offices or staffed control centers will be located within the container or other components. Two Heating Ventilation and Air Conditioning (HVAC) units will be required: one for the container and one for the SCADA cabinet.

The wiring extending from the battery containers to connect the PCS to the transformers and ultimately to the Campo Verde Substation will be placed underground in trenches. Alternatively, the wiring could be strung overhead. The maximum length that wires would extend either underground or overhead is 50 linear feet. The wiring would not span any roads or canals. The preferred method would be to install the wiring underground which would require a trench at least 36 inches (3 feet) in depth. The wiring from the battery containers in Phase 1 to the Campo Verde Substation will follow the sequence below:

- Container/Building to PCS - Distance approximately 15 linear feet; Preferred: underground; Alternative: overhead using two poles.
- PCS to Transformer - Distance approximately 15 linear feet; Preferred: underground; Alternative: overhead using two poles.
- Transformer to Switchgear - Distance approximately 20 linear feet; Preferred: underground; Alternative: overhead using two poles.
- Switchgear to Raceway - Distance approximately 150 linear feet; overhead using two poles. (No alternative).
- Empty Raceway to Substation - Distance 100 linear feet; Preferred: underground using existing raceway; Alternative: overhead using two poles.

Phase 2

Phase 2 of the proposed Project will be designed to store up to 100 MWH of energy. Phase 2 will consist of a 12,300 square foot (sq. ft.) metal building with battery racks on a concrete foundation housing 8,800 modules and 264,000 batteries. No offices or staffed control centers will be located within the building. Other components will be located adjacent to the battery

system container. These components include the PCS cabinets and transformers, eight HVAC units, power distribution panel, and electrical switch gear. Refer to **Figure 2.0-6A** and **2.0-6B**. The building and components will occupy approximately 16,068 sq. ft. of ground space.

As with Phase 1, the wiring extending from the battery containers to connect the PCS to the transformers and ultimately to the Campo Verde substation will be placed underground in trenches. Alternatively, the wiring could be strung overhead. The maximum length that wires would extend either underground or overhead is 50 linear feet. The wiring would not span any roads or canals. The preferred method would be to install the wiring underground which would require a trench at least 36 inches (3 feet) in depth. The wiring from the Phase 2 battery structure to the Campo Verde Substation will follow the sequence below:

- Container/Building to PCS - Distance approximately 15 linear feet; Preferred: underground; Alternative: overhead using two poles.
- PCS to Transformer - Distance approximately 15 linear feet; Preferred: underground; Alternative: overhead using two poles.
- Transformer to Switchgear - Distance approximately 20 linear feet; Preferred: underground; Alternative: overhead using two poles.
- Switchgear to Raceway - Distance approximately 150 linear feet; overhead using two poles. (No alternative).
- Empty Raceway to Substation - Distance 100 linear feet; Preferred: underground using existing raceway; Alternative: overhead using two poles.

D. Construction Process for Battery Energy Storage System

Construction

PHASE 1

Phase 1 construction is anticipated to begin in late 2016 and last approximately 66 days with completion in early 2017. Most of the equipment will arrive at the site pre-assembled. Approximately 12 workers will be on site for six to eight weeks to install the foundations and connect the components to the existing controls system and Campo Verde Substation. Work hours will be from approximately sunrise to 2:30 p.m. Three technicians will work an additional three to six weeks to commission and debug the system integration. To avoid interference with the facility when solar power is being generated, work hours will be approximately from 8 p.m. to 5 a.m.

PHASE 2

Phase 2 construction is expected to occur in 2018 and will take up to eight months or approximately 160 days. Phase 2 building construction activities include: mobilization (surveying/staking, environmental BMPs, grading); civil and foundation work (conduit, equipment pads, concrete foundations); building works (form and pour slab) framing, sheathing, roofing, mechanical (Heating, Ventilation and Air Conditioning [HVAC]), lighting and electrical, fire suppression); data support installation; batteries (install battery racks, install batteries in racks); electrical works (pull and test cable, set and test equipment, point of interconnection work); certificate of occupancy; and commissioning. Construction will require approximately 30 workers to install and integrate the equipment. Work hours will be approximately from sunrise to 2:30 p.m. Approximately three technicians will work on the commissioning, debugging and system integration of Phase 2. The work hours will be approximately 8 p.m. to 5 a.m. to avoid

interference with the facility when solar power is being generated. Three technicians are anticipated to work three to six weeks during commissioning.

Access and Traffic

Construction of Phase 1 will take approximately 66 days and construction of Phase 2 will take up to approximately eight months. Daily trip generation during construction will be generated by delivery of equipment and supplies and commuting of the construction workforce. The number of workers expected on the site for both phases will range from approximately three to thirty.

Currently, there is minimal traffic on any of the roads bordering or in the immediate vicinity of the Campo Verde Solar Project. The use on these roads is associated with accessing the Campo Verde Solar Project, the surrounding agricultural areas, and providing access to the small number of residences in the area. There are no traffic signals in the area because of the low traffic volumes.

Access to the Battery Energy Storage System site will be via Liebert Road at the existing Campo Verde Solar Project entry northeast of the Operations and Maintenance (O&M) building. Within the facility fence, construction traffic will use the existing north-south paved internal roadway parallel to Liebert Road. A proposed gravel road approximately 1,000-feet long, 20-feet wide and 6-inches in depth will be constructed as an extension of the existing paved access road. The gravel road will align east-west just south of the O&M building and Substation then align north-south along the west side of the Substation before extending to the west to terminate at the Phase 1 site and immediately north of Phase 2 of the Battery Energy Storage System site (refer to **Figure 2.0-4A**).

Material providers and workers will use the route shown on **Figure 2.0-7** to travel to the Battery Energy Storage System site. A Traffic Impact Assessment has been prepared to analyze potential equipment haul routes. Required Department of Transportation permits will be included in the scope of work for vendors delivering equipment.

For Phase 1, the batteries and direct current (DC) disconnect switches will arrive in a refrigerated container. The battery trays and switches will be installed in the permanent container on site. The SCADA cabinet, power distribution panel, switchgear, power conversion system, and transformers will arrive separately. Construction materials such as conduit, cable, rebar, etc., will also be delivered to the Project site.

For Phase 2, material will be delivered as follows:

- Civil and foundations materials (conduit, equipment pad material, rebar, concrete trucks to pour foundations).
- Battery building materials (framing materials, sheathing materials, roofing materials, supports, wall material).
- Utilities support equipment (lighting and electrical, fire suppression, HVAC).
- Batteries and support equipment (battery racks, batteries).

Equipment

Heavy equipment will be used for digging foundations and excavating trenches for conduit installation. Fork lifts will be used for off-loading equipment. A crane (likely a truck crane) will be used to lift the Phase I container from the delivery trailer and set the container on its foundation. Cement trucks will arrive at the site to pour concrete foundations.

Materials Deliveries

Deliveries of materials will occur for both phases of the Battery Energy Storage System. The number of deliveries is summarized below by phase.

**TABLE 2.0-1
MATERIAL DELIVERIES BY PHASE**

Phase 1		Phase 2	
Week 1	15	Month 1	25
Week 2	20	Month 2	30
Week 3	25	Month 3	35
Week 4	10	Month 4	20
Week 5	10	Month 5	15
Week 6	5	Month 6	5
TOTAL	85	TOTAL	130

Phase 1 is anticipated to generate approximately 85 deliveries to the Battery Energy Storage System site over the course of approximately 37 workdays. The deliveries will include approximately 25 for electrical equipment and construction materials and approximately 60 deliveries of gravel (approximately 600 cubic yards) for the road and Phase 1 site. Approximately 65 of the deliveries will occur in the AM and approximately 20 will occur in the PM. Batteries and DC disconnect switches will arrive in a refrigerated container. Other materials delivered separately include the SCADA cabinet, power distribution panel, switchgear, power conversion system, and transformers and construction materials such as conduit, cable, rebar, etc.

Phase 2 is anticipated to generate approximately 130 deliveries (during weekdays) over a period of approximately six months or 120 days. Phase 2 will include approximately 70 deliveries of electrical equipment and construction materials and approximately 60 deliveries of gravel (approximately 600 cubic yards). Approximately 90 of the deliveries will occur in the AM and approximately 40 will occur in the PM. Civil and foundation equipment and material deliveries include concrete trucks to pour foundations and conduit and rebar.

Battery building materials include framing materials, sheathing materials, roofing material supports and wall material. Utilities support equipment deliveries include lighting and electrical, fire suppression, and HVAC. Batteries and support equipment deliveries include battery racks and batteries.

Construction Staging Areas

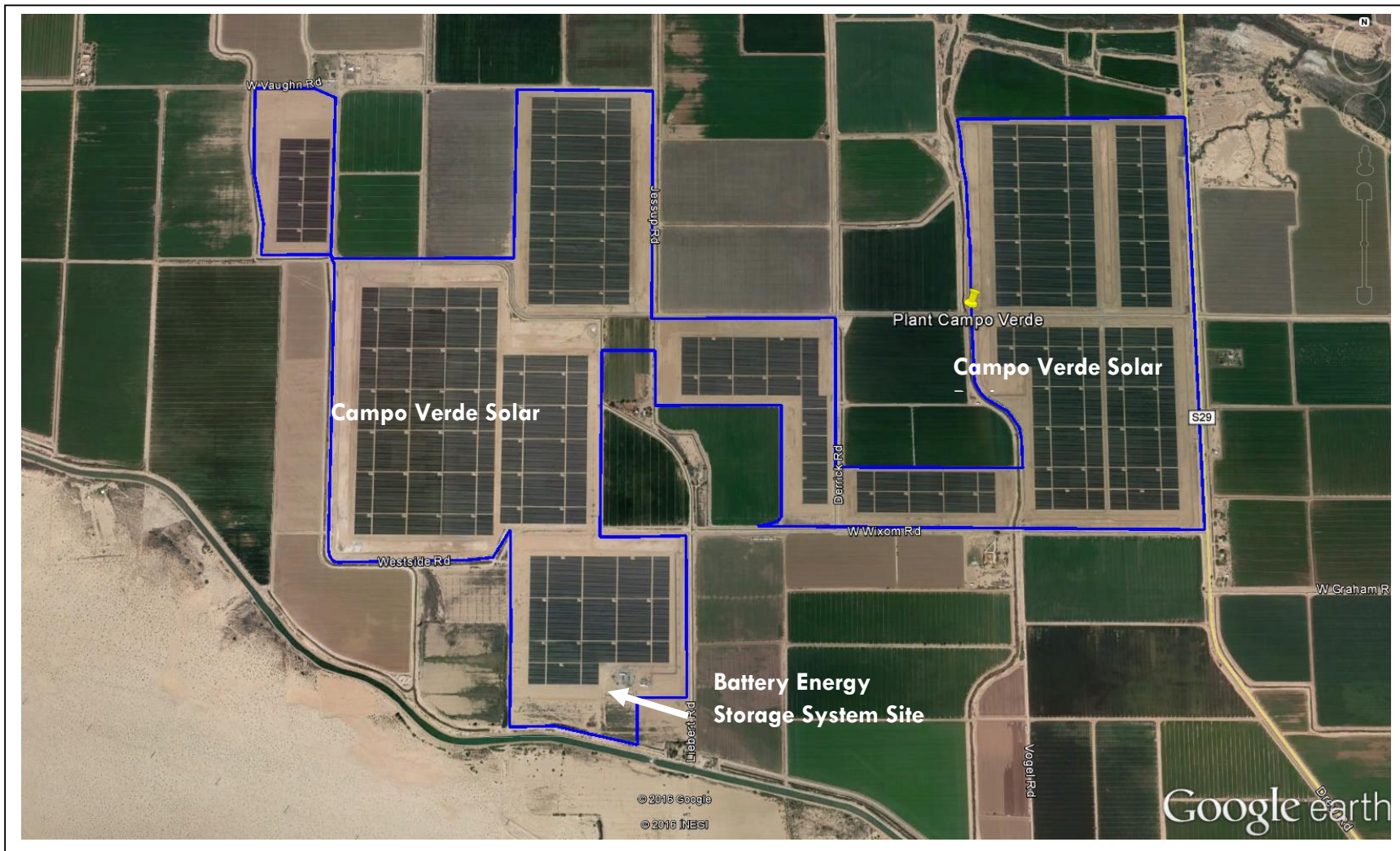
Prior to installation, equipment and materials brought to the site will require staging. The Phase 1 staging area and construction trailer(s) will occupy an area approximately 100 feet by 70 feet immediately west of the Phase 1 site (refer to **Figure 2.0-5B**). The staging area for Phase 2 will occupy an area approximately 100 feet by 170 feet (17,000 sq. ft.) immediately west of the Phase 2 site (refer to **Figure 2.0-6B**).

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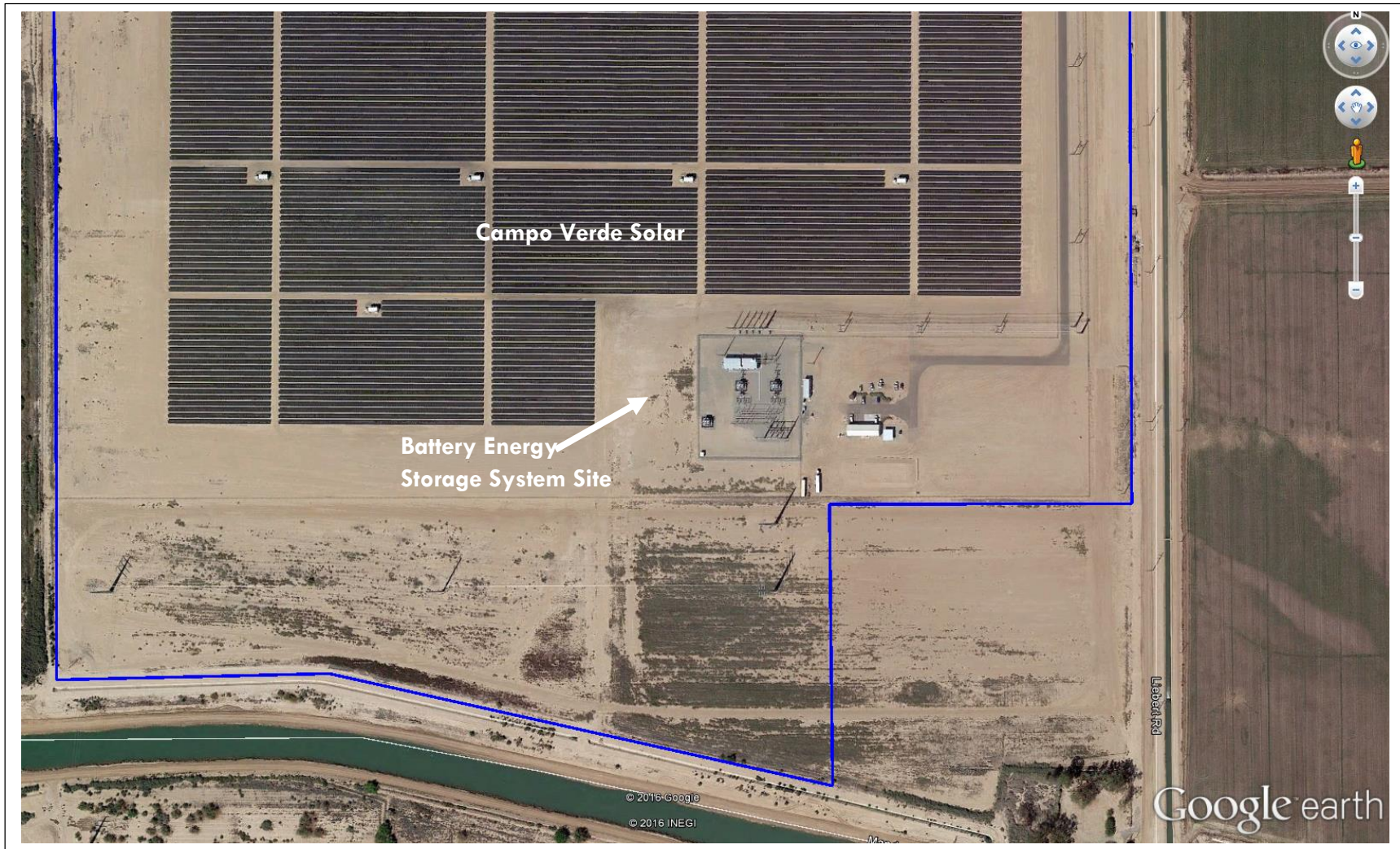
Source: Google Earth, EGI 2016.

FIGURE 2.0-1 - REGIONAL LOCATION MAP



Source: Google Earth, EGI 2016.

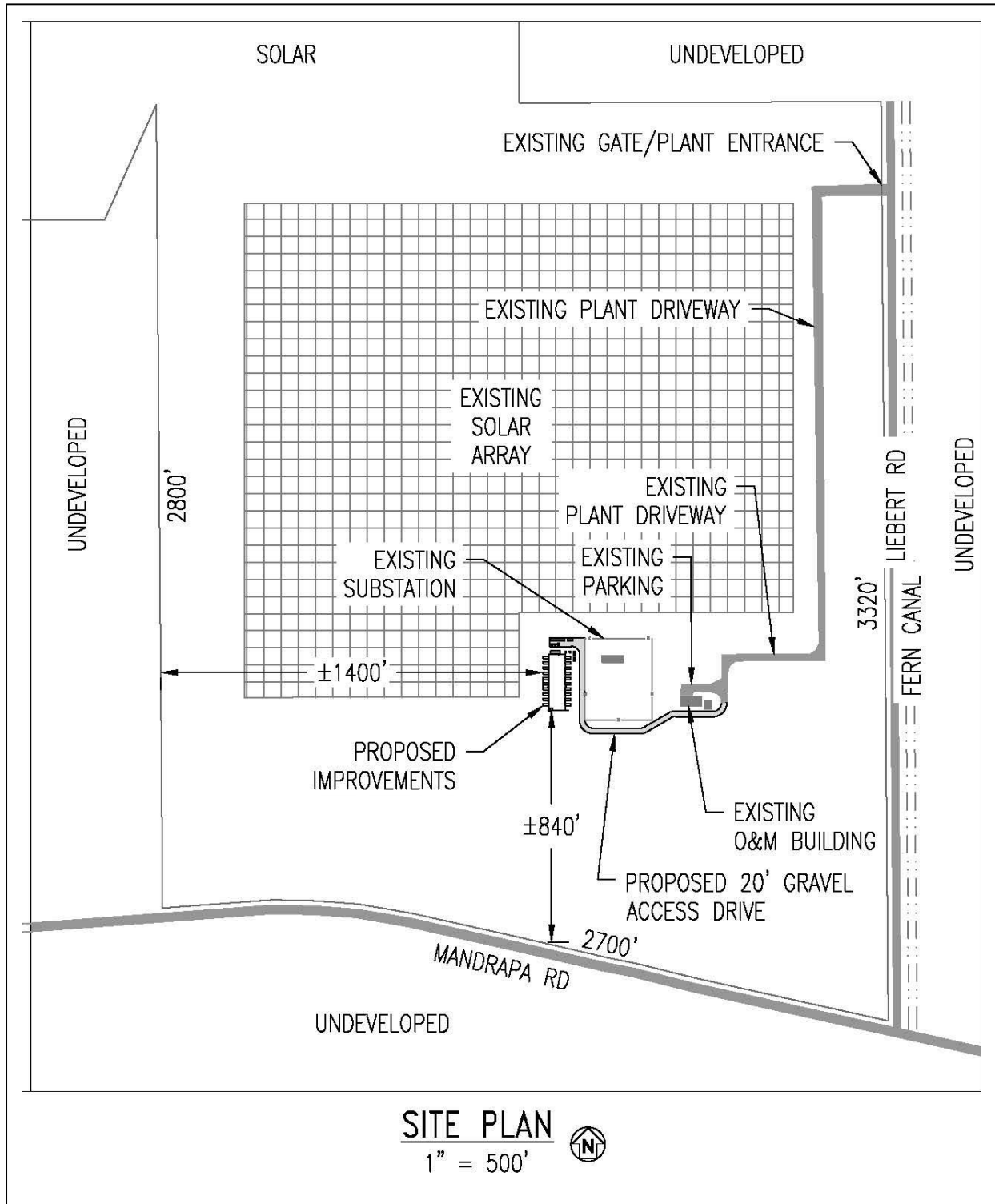
FIGURE 2.0-2 - CAMPO VERDE SOLAR PROJECT SITE PLAN



Source: Google Earth, EGI 2016.

FIGURE 2.0-3 - CAMPO VERDE BATTERY ENERGY SYSTEM SITE

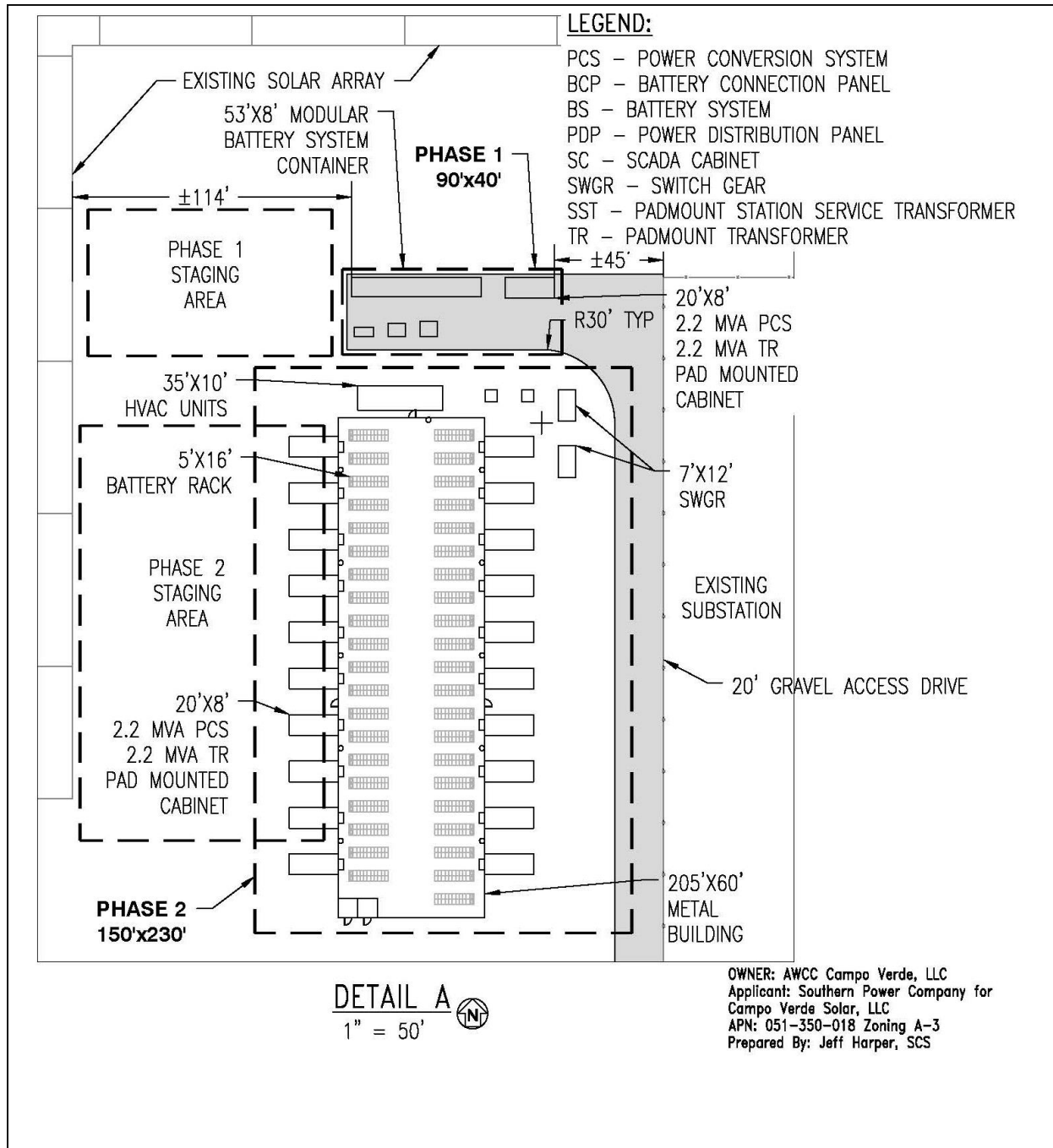
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Source: Southern Power Company Generation Engineering and Construction Services 2016.

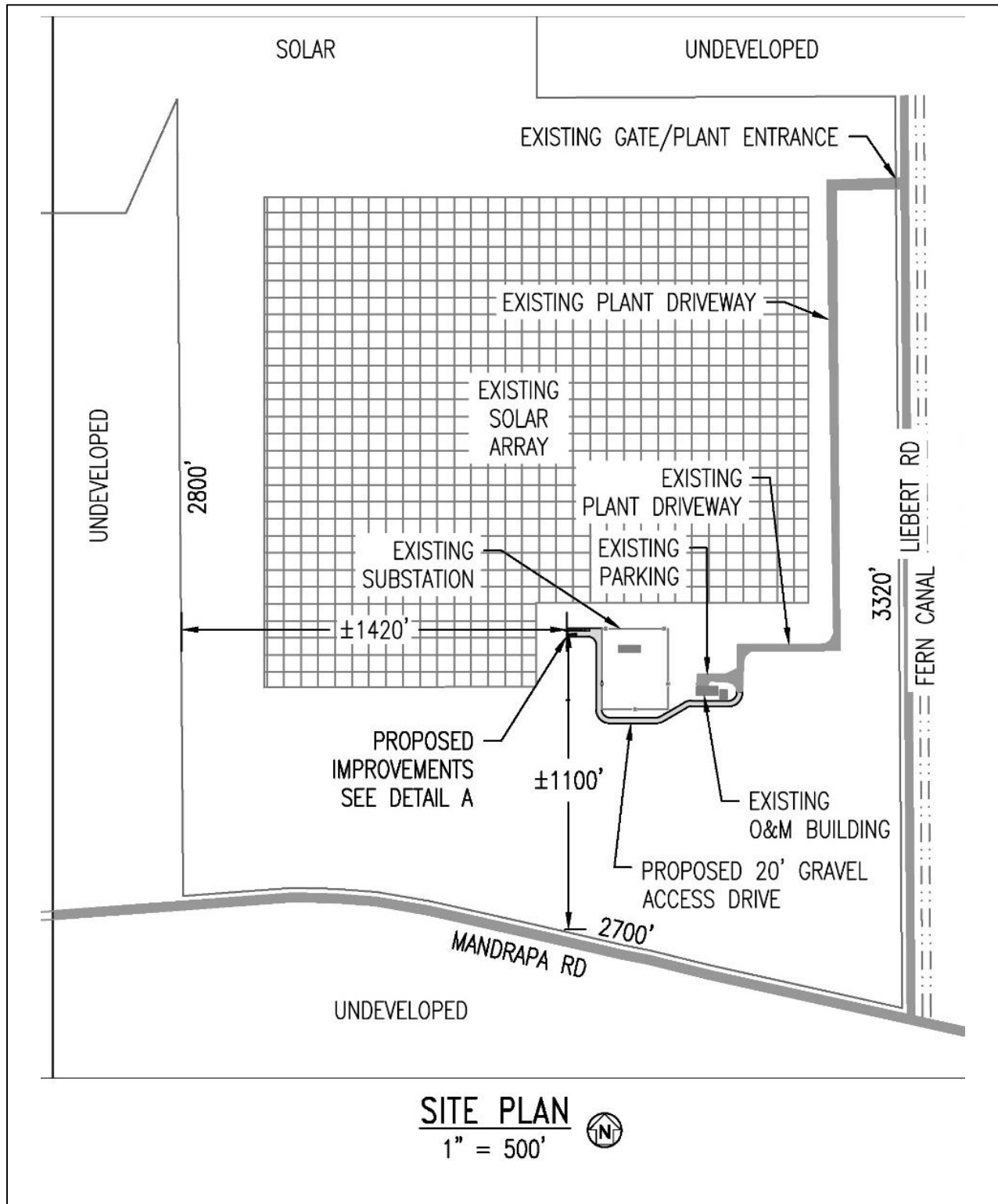
FIGURE 2.0-4A - CAMPO VERDE BATTERY ENERGY SYSTEM SITE PLAN

2.0 PROJECT DESCRIPTION



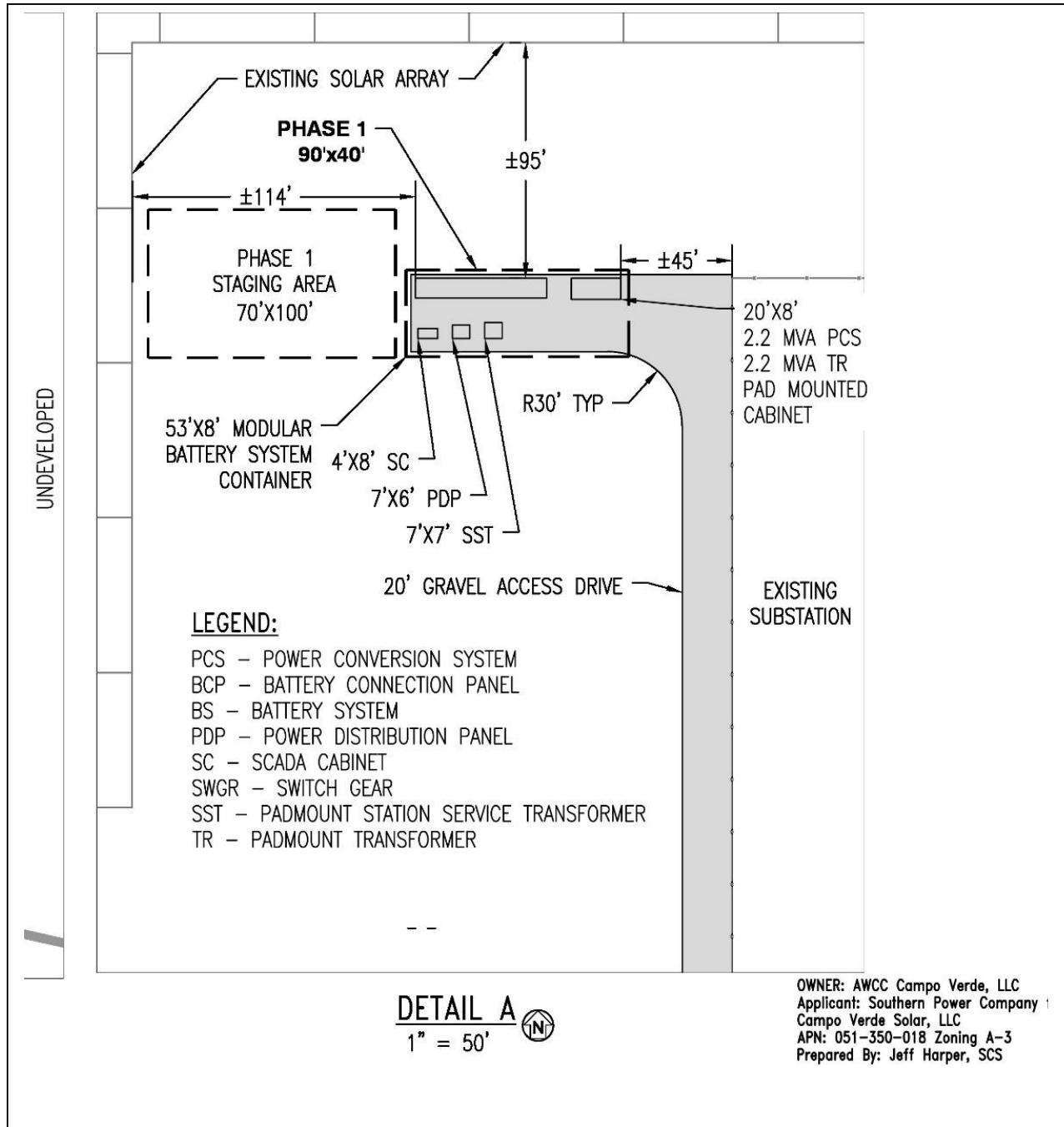
Source: Southern Power Company Generation Engineering and Construction Services 2016.

**FIGURE 2.0-4B - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM SITE PLAN
PHASE 1 & 2 DETAIL**



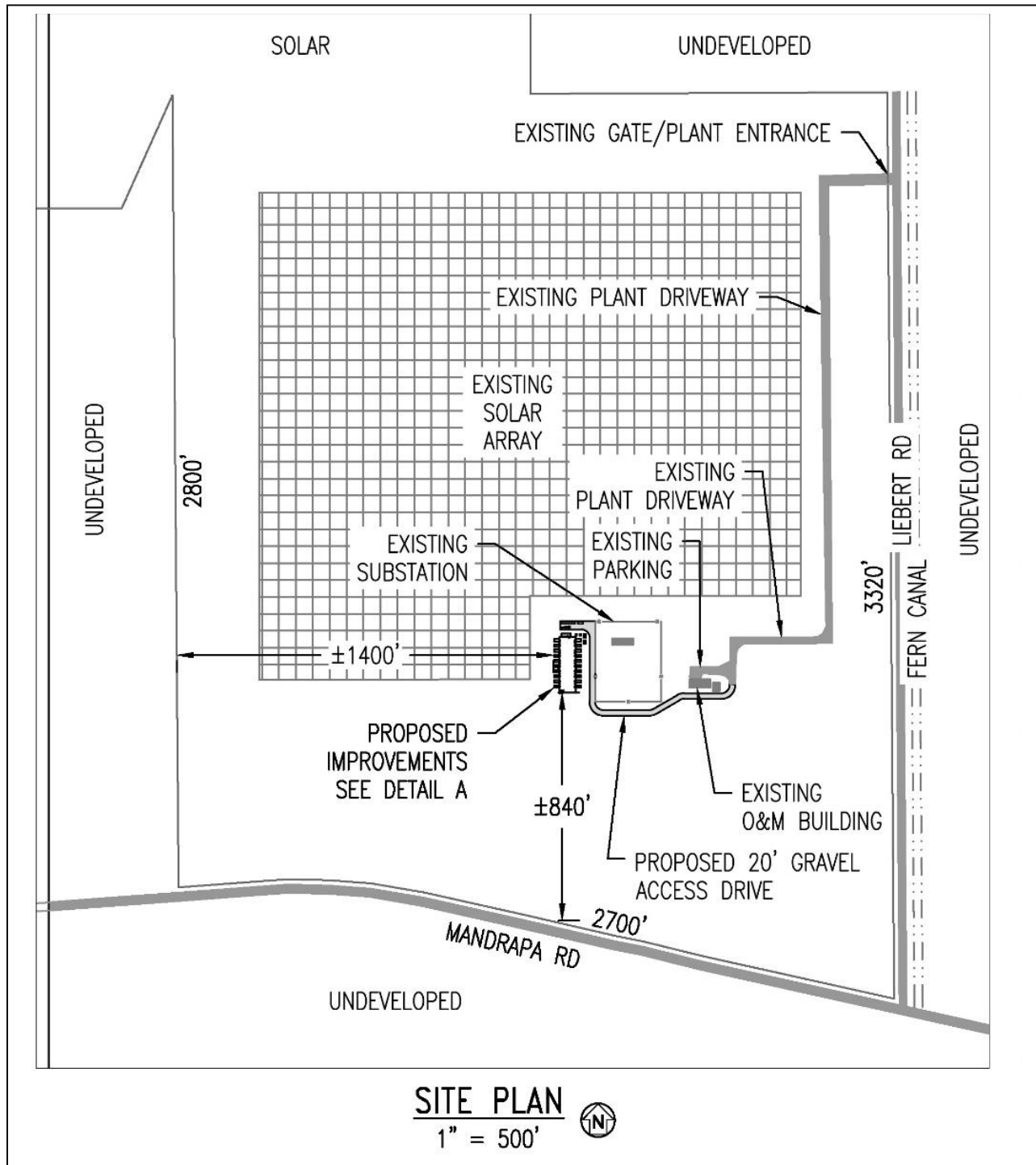
Source: Southern Power Company Generation Engineering and Construction Services 2016.

**FIGURE 2.0-5A - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM
PHASE 1 SITE PLAN**



Source: Southern Power Company Generation Engineering and Construction Services
2014

**FIGURE 2.0-5B - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM
PHASE 1 DETAIL A**

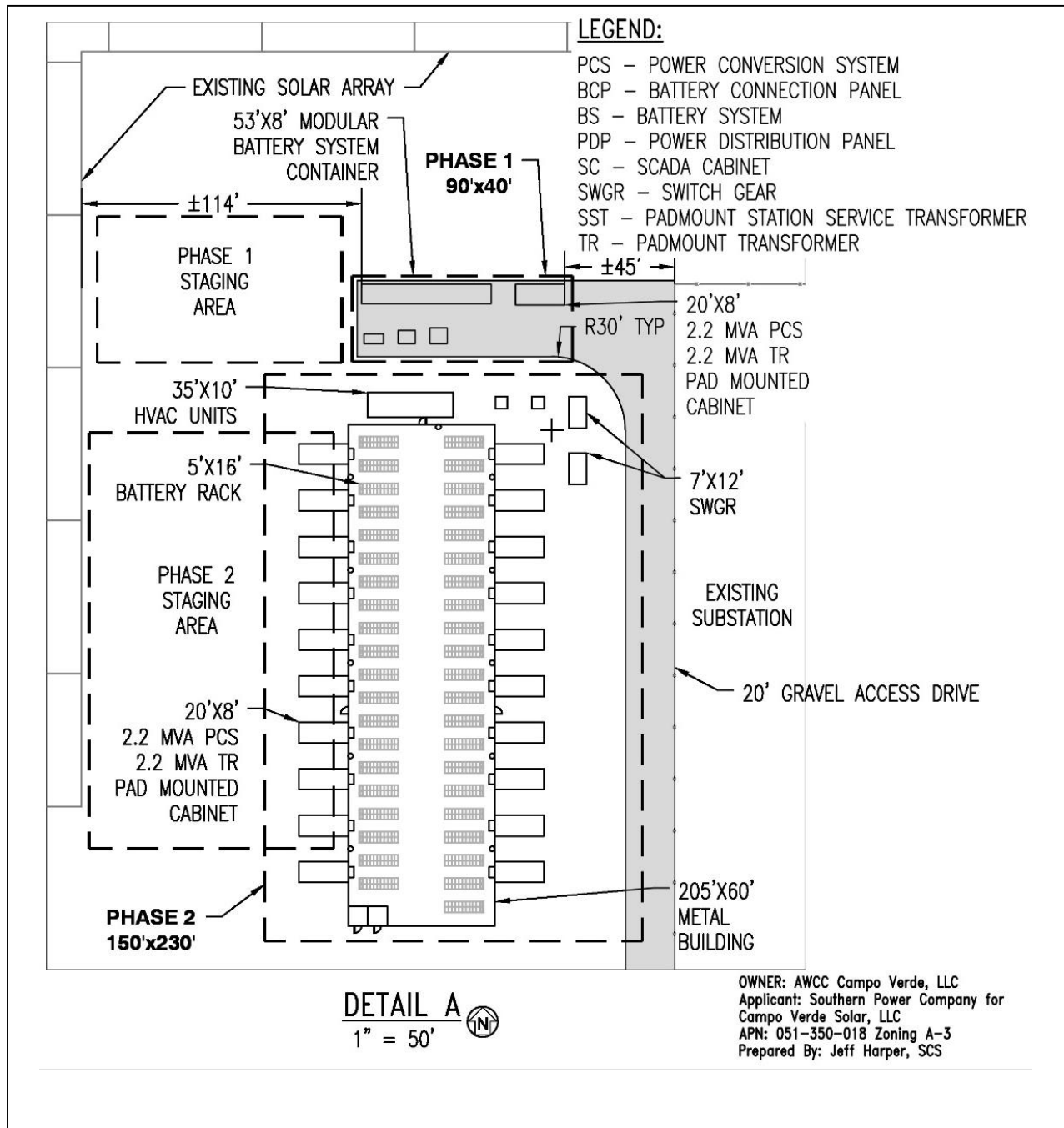


Source: Southern Power Company Generation Engineering and Construction Services 2016.

**FIGURE 2.0-6A - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM
PHASE 2 SITE PLAN**

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2.0 PROJECT DESCRIPTION



Source: Southern Power Company Generation Engineering and Construction Services 2016.

**FIGURE 2.0-6B - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM
PHASE 2 DETAIL A**



Source: AWCC Campo Verde LLC 2016.

FIGURE 2.0-7 - CAMPO VERDE BATTERY ENERGY STORAGE SYSTEM MATERIALS AND EMPLOYEE HAUL ROUTE

Construction Parking

Construction employee parking needs will be minimal with typically no more than 10 people expected on site at any one time for Phase 1. The estimated maximum number of employees on site at any time during Phase 2 will be 30 people.

Grading and Drainage

The Battery Energy Storage System is located on property previously used for irrigated agricultural production. Minimal grading will be necessary because the area surrounding the Campo Verde Substation was previously graded and compacted. The site will require some clearing to remove weeds. The soil surface will be smoothed and engineered to prepare the site for the battery energy storage system concrete foundations based on the findings of the Geotechnical Report (**Appendix E**). Phase 1 is anticipated to require grading of approximately 30,000 square feet (.68 acre) for the proposed access road and Battery Energy Storage System site. Phase 1 grading is anticipated to take five days and excavation for conduits and footings would take approximately 25 days. Phase 2 grading is anticipated to take five days and would affect approximately 60,000 square feet (1.37 acres) for the Battery Energy Storage System site. Phase 2 conduit and footing excavation would take approximately 60 days.

One drainage basin is provided in the northern portion of each block in the solar array. The area within the boundaries of the Campo Verde Project site, including the Battery Energy Storage System site, was included in the drainage calculations to determine the size of the basin. However, the additional concrete foundations and structures proposed as Phase 1 and Phase 2 of the Battery Energy Storage System were not part of the original calculation. The existing basin to the north of the Project site in Block 1 of the Campo Verde Solar Project, directly north of the Battery Energy Storage System site, has been sized to account for the proposed Project. As noted in the *Campo Verde Solar Conceptual Drainage Study and Storm Water Quality Analysis* (Fusco 2012) prepared for the Campo Verde Solar Project, the basins were sized to meet the County of Imperial Standards for water storage (i.e. basin were designed to have a total volume capacity for 100-year, 3-inch storm covering the entire site with no “C” reduction factor). Detention requirements over the Campo Verde Solar Project site were satisfied by a combination of detention basins (typically less than 3.5 feet deep) located outside the solar arrays and detention runoff in shallow ponded areas (less than 12-inches deep) under the arrays such that the County of Imperial standard of 3-inches of detention over the Campo Verde Solar Project site is satisfied (Corrales 2016).

Air Quality & Dust Suppression

No dust suppressant was used as part of the Substation construction. The ground was tilled, compacted and gravel mix was added to the high-traffic areas. These high-traffic areas also received water to help the soil/gravel mix harden. Gravel will be applied to the area affected by the Battery Energy Storage System to control dust during construction and operation. Refer to Section 4.1 and the Air Quality Assessment (**Appendix B**).

Noise

Noise generated during construction will be limited to traffic along haul routes and construction within the Battery Energy Storage System site west of the Campo Verde Substation. No sensitive receptors are located nearby and most construction activities will not produce substantial noise (i.e. no blasting or pile driving). Refer to Section 4.6 and the Noise Impact Assessment (**Appendix F**).

Hazardous Materials

The chemical composition of the lithium ion batteries includes cobalt oxide; manganese dioxide; nickel oxide; carbon; electrolyte; polyvinylidene fluoride; aluminum foil; copper foil; aluminum and inert materials. The transformers contain mineral oil. All of these materials will be present with the arrival of the batteries and transformers on the Project site.

In addition, limited quantities of hazardous materials will be stored or used on site during construction. These include diesel, gasoline, motor oil and hydraulic fluids and lube oils for vehicles and equipment, and mineral oil for transformers. Spill containment and clean-up kits will be kept on site during construction and operation Battery Energy Storage System.

The existing Hazardous Materials Business Plan prepared for the Campo Verde Solar Project will be updated to include the lithium ion batteries and mineral oil associated with the Battery Energy Storage System transformers. The batteries will be housed in a container for Phase 1 and a building for Phase 2.

Water

The Battery Energy Storage System will use relatively small amounts of water supplied by the Imperial Irrigation District (IID) for dust control during construction. One water truck with a capacity of approximately 11,600 gallons will be used to apply water to disturbed areas during earthmoving activities. Water may be withdrawn from the existing tank within the Campo Verde Solar Project which is connected to the IID. Alternatively, water may be trucked to the site from a yet-to-be determined location using the same route as shown in **Figure 2.0-7**. If water is trucked to the site, there will be approximately four trips associated with Phase 1 and seven trips associated with Phase 2.

Phase 1 will require a total of approximately 40,000 gallons. Approximately 3,000 gallons per acre per day will be used during grading (five days) and approximately 1,000 gallons per acre per day (25 days) will be used while doing excavation work for conduit and footings to control dust on disturbed soil within the construction footprint.

Phase 2 will require a total of approximately 75,000 gallons to control dust on disturbed soil within the construction footprint. Dust control water will be needed in association with 5 days of grading activities and 60 days of excavation for conduit and footings. Approximately 3,000 gallons per acre per day will be used during grading (5 days) and approximately 1,000 gallons per acre per day (60 days) will be used while doing excavation work for conduit and footings to control dust on disturbed soil within the construction footprint.

Bottled water will be provided for potable purposes.

Stormwater

Phase 1 will disturb approximately 0.68 acres and Phase 2 will affect 1.37 acres. In total approximately 2.05 acres would be affected. Because Phase 1 is less than one acre, a National Pollution Discharge Elimination Permit (NPDES) permit will not be required. Because Phase 2 is between one and five acres, the Applicant will submit a Small Construction Waiver to the Regional Water Quality Control Board (RWQCB). A Stormwater Pollution Prevention Plan (SWPPP) will be required for Phase 2 to protect water quality during construction. However, the SWPPP will be exempt for Phase 1 because it is under one acre. Phase 2 is larger than one acre and is located in a zone that previously had a SWPPP when the Campo Verde Solar Project was constructed, therefore it requires a SWPPP.

Waste Disposal

During construction, typical construction wastes such as wood, concrete, and miscellaneous packaging materials will be generated. Construction wastes will be disposed of in accordance with local, state and federal regulations, and recycling will be used to the greatest reasonable extent possible.

Sanitation

During Phase 1 construction, two portable toilets (one male and one female) will provide sanitary facilities for workers on site. During Phase 2 construction, four portable toilets (three male and one female) will provide sanitary facilities for workers on site.

E. Operations and Maintenance of Battery Energy Storage System

Workforce

The battery systems are designed to operate automatically within the existing photovoltaic system architecture. The six staff currently operating the Campo Verde Solar Project, as well as the 24-hour remote monitoring staff, will be able to see and react to alarms from the system. Staff will have the capability to remotely disengage part or all of the system if necessary until technicians arrive to perform detailed diagnostics.

The on-site staff will be responsible for routine visual inspections and normal housekeeping tasks. The staff will also have the responsibility for coordinating routine HVAC service and physical building maintenance. Maintenance of the internal battery infrastructure will be infrequent and highly specialized. A focused team will be brought in to perform maintenance of internal battery infrastructure.

Sanitation

During the operational phase of the Project, sanitary facilities will be provided in the existing O&M Building.

Other Maintenance Activities

The battery system will not require major maintenance. Minor maintenance will include HVAC maintenance and replacement of any bad battery cells. This will be on a periodic, but not continuous, schedule. No replacement batteries will be stored on site.

Noise

The battery system will not generate noise. The only noticeable noise associated with the proposed Project will be from operation of HVAC equipment.

Air Quality

Normal operations of the Project will not result in any direct air emissions from the Battery Energy Storage System. No fossil fuels are consumed in the process and no pollutants are emitted during operations. Daily air pollutant emission sources are anticipated to be limited to vehicular traffic associated with maintenance and operation activities.

Weed and Pest Management

The Battery Energy Storage System will adhere to the Integrated Pest Management Plan for Private Lands (Heritage 2012c) prepared for the Campo Verde Solar Project. Invasive/weedy

species will be controlled and any vegetation that re-establishes on site will be maintained to a height of less than 18 inches. Herbicides will be used to control weedy species when necessary.

Waste Management

No major sources of waste will be generated during operation of the Battery Energy Storage System. Batteries removed from service will be returned to the manufacturer for recycling. The batteries (13,200 in Phase 1 and 264,000 in Phase 2) will be transported/shipped in compliance with all applicable federal, state and local regulations addressing hazardous materials transport. In the event that cell damage is suspected, Samsung SDI's Customer Service Team and our RMA (Return Merchandise Authorization) service provider, CKS, will assist in removal of affected equipment. Recycling is also performed by CKS. In general, old cells are opened, and the major components (electrolyte, electrode, current collector foils, case) are separated and repurposed (Southern Power Company 2016).

Fire Safety

Fire risk that the traditional lithium ion cells have will most likely be caused by over-charging or through short circuit due to age. This risk will be mitigated through monitoring and a fire suppression system that includes FM200 gas agent with smoke detectors, control panel, alarm, piping and nozzles. Potential causes of fire will be addressed as follows:

- Overcharging will be monitored and prevented through several levels of safety in the diagnostic system.
- End of life monitoring will be detectable through monitoring and notice to replace batteries.
- A fire suppression system agreed upon by Imperial County will be installed to extinguish possible ignition.

Fire safety is discussed further in Section 4.5.

Hazardous Material Handling and Storage

The chemical composition of the lithium ion batteries planned to be installed is cobalt oxide; manganese dioxide; nickel oxide; carbon; electrolyte; polyvinylidene fluoride; aluminum foil; copper foil; aluminum and inert materials. The Campo Verde Solar Project Hazardous Materials Business Plan (HMBP) will be updated to incorporate the hazardous materials associated with the battery storage systems, including the location, quantity, composition and storage conditions.

Batteries removed from service will be returned to the manufacturer for recycling as described under Waste Disposal, above.

F. Decommissioning Plan

The Campo Verde Solar Project will operate at a minimum for the 20-year life of its Power Purchase Agreement (PPA).

When the Campo Verde Solar Project is decommissioned, the Battery Energy Storage System will also be decommissioned. The batteries will be returned to the manufacturer for recycling. The Campo Verde Solar Project decommission plan will be amended to include the Battery Energy Storage System.

2.2 ALTERNATIVES

This SEIR considered three alternatives in addition to the proposed Project:

- **Alternative 1 – Phase 1 South of Diehl Road in Block 1.** Alternative 1 is located in the area south of Diehl Road in the north section of Block 1. This location would only accommodate Phase 1. A 1,400-yard (4,200 linear feet) gravel access road would need to be constructed off of Diehl Road from an existing gate to the site. Wiring from the Battery Energy Storage System would be connected to an existing Photovoltaic System Control box at this location which is currently connected to the Substation.
- **Alternative 2 – Phase 1 Along Diehl Road at the North Section of Block 4B.** Alternative 2 is located along Diehl Road at the north section of Block 4B. This location would only accommodate Phase 1. A 90-yard (270 linear feet) access road would need to be constructed off of Diehl Road from an existing gate to the site. Wiring from the Battery Energy Storage System would be connected to an existing Photovoltaic System Control box at this location which is currently connected to the Substation.
- **Alternative 3 – No Project Alternative.** Under this alternative, the proposed Battery Energy Storage System would not be constructed nor would an amendment to CUP 11-0007 be requested. The Project site would remain in its existing state as undeveloped land within the Campo Verde Solar Project site to the west of the Substation.

Each of these are discussed in greater detail in Chapter 6.0, Alternatives.

2.3 INTENDED USES OF THE SEIR/AUTHORIZING ACTIONS

The County of Imperial is the Lead Agency with regard to the Battery Energy Storage System. The County will serve as the Lead Agency regarding the California Environmental Quality Act (CEQA) and the Applicant's request for an amended CUP.

2.3.1 DISCRETIONARY ACTIONS AND APPROVALS

A. County of Imperial

In conformance with Sections 15050 and 15367 of the State CEQA Guidelines, the County of Imperial has been designated the "lead agency," defined as, "the public agency which has the principal responsibility for carrying out or approving a project." The following discussion identifies the discretionary actions and approvals by the Imperial County Planning Commission and/or Board of Supervisors for the proposed Campo Verde Battery Energy Storage System.

Certification of the Final SEIR

After the required public review for the Draft SEIR, Imperial County shall respond to written comments, edit the document, and produce a Final SEIR to be considered for certification by the Planning Commission and/or Board of Supervisors prior to making a decision on the Campo Verde Battery Energy Storage System.

Mitigation Monitoring and Reporting Program

A Mitigation Monitoring and Reporting Program (MMRP) shall be adopted as required by CEQA Guidelines Section 15097.

Amend Conditional Use Permit (CUP11-0007)

The proposed Project will require amendment of CUP 11-0007 by Imperial County to allow construction and operation of the proposed Battery Energy Storage System at the proposed site.

Site Plan

Site Plan and Architectural Review is required for all non-residential projects.

2.3.2 SUBSEQUENT/CONCURRENT ENTITLEMENTS TO IMPLEMENT THE PROPOSED PROJECT

Several entitlement actions and discretionary permits will be required from Imperial County to implement the proposed Project. They are summarized by Phase in the table below.

**TABLE 2.0- 2
DISCRETIONARY PERMITS**

	Phase 1	Phase 2
Imperial County Planning & Development Services Department		
Grading Permit/Civil Engineering Plans – Grading Permit	X	X
Mechanical Engineering Documents & Plans – Mechanical Permit	X	X
Electrical Engineering Documents & Plans – Electrical Permit	X	X
Generators- If used - Permitted or Documented	X	X
Structural Engineering Documents & Plans – Foundations – Permit	X	X
Pre-Fabricated CA Certifications	X	
Architectural Plans		X
Move-On Plan Permit	X	X
Transportation Permit(s)	X	X
Fire Suppression System Permit	X	X
Imperial County Planning & Development Services Department (Con't.)		
Haul Route Plan	X	X
Fencing (Temporary fencing to protect while under construction, security)	X	X
Imperial County Air Pollution Control District		
Haul Route Plan	X	X
Rule 310	X	X
Construction Dust Control Plan	X	X
Operational Specialty Dust Control Plan	X	X
Potential Generators	X	X
List of all Construction Equipment	X	X
Environmental Health & Safety		
Project Review Building Plan Review (Applicant)	X	X
Purchase Order for Potable Water - Dependent on water supply. Hauled or Point of Entry.	X	X
Purchase Order Septic Waste Removal	X	X
Purchase Order Port-a-Potties	X	X
Purchase Order for Above-Ground Septic System	X	X

TABLE 2.0- 2
DISCRETIONARY PERMITS

	Phase 1	Phase 2
Regional Water Quality Control Board		
SWPPP & all Associated Documents and Reports		X
Construction NPDES Waiver	X	X

Source: DD&E 2016.

2.3.3 DISCRETIONARY ACTIONS AND APPROVALS BY OTHER AGENCIES

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

- California Department of Fish and Wildlife (CDFW) (Trustee Agency) - State Endangered Species Act compliance, California Native Plant Protection Act.
- California Regional Water Quality Control Board (RWQCB), Colorado River Basin, Region 7 – Section 401 Water Quality Certification, General Construction Activity Storm Water Permit.
- California Air Resources Board (CARB) – Review of SEIR.
- California Energy Commission (CEC) – Review of SEIR.
- California Public Utilities Commission (CPUC) – Review of SEIR.
- California Department of Toxic Substances Control (DTSC) – Review of SEIR.
- Imperial County Air Pollution Control District (ICAPCD) – Rule 801 compliance.
- Imperial County Fire Department (ICFD) – Approval of final design of the proposed fire system.

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