DOCKETED	
Docket Number:	24-OPT-05
Project Title:	Corby Battery Energy Storage System Project
TN #:	259884
Document Title:	Volume 2 App 4-1 Aesthetics Appendices
Description:	N/A
Filer:	Doug Urry
Organization:	Tetra Tech
Submitter Role:	Applicant Consultant
Submission Date:	11/4/2024 2:12:36 PM
Docketed Date:	11/4/2024

APPENDIX 4.1-A: VISUAL IMPACT ASSESSMENT

Opt-in Application

VISUAL IMPACT ASSESSMENT

Corby Battery Energy Storage System Project Solano County, California

October 2024



Prepared for

Corby Energy Storage, LLC 700 Universe Boulevard Juno Beach, FL 33408

Prepared by



17885 Von Karman Avenue, Suite 500 Irvine, CA 92614

Table of Contents

1.0	OVE	RVIEW	1
2.0	PRO	JECT SETTING	2
	2.1	Existing Setting	2
3.0	PRO	JECT DESCRIPTION	4
	3.1	Location of Facilities	4
	3.2	Location of Offsite Facilities	4
	3.3	BESS Facility Description, Design, and Operation	5
	3.4	Methodology	15
4.0	ENV	IRONMENTAL SETTING	30
	4.1	Regional Character	30
	4.2	Local Setting	30
	4.3	Scenic Vistas	30
	4.4	Scenic Routes	30
	4.5	Agricultural Reserve Overlay	30
	4.6	Viewer Groups	30
	4.7	Existing Visual Character	30
5.0	REG	ULATORY SETTING	34
	5.1	Federal	34
	5.2	State	34
	5.3	Local	34
6.0	IMP	ACT ANALYSIS	36
	6.1	Scenic Vistas	36
	6.2	Scenic Highways	36
	6.3	Visual Character	38
	6.4	Light and Glare	44
7.0	DFF	FRENCES	45

List of Tables

Table 3-1.	Approximate Dimensions, Color, Materials, and Finishes of the Major Project Features.	14
Table 3-2.	Degree of Contrast Rating System	17
	List of Figures	
Figure 2-1.	Project Location	3
Figure 3-1.	Project Layout	6
Figure 3-2a.	BESS Elevation Looking North and West	7
Figure 3-2b.	BESS Elevation Looking East and South	8
Figure 3-3a.	Substation Elevation General Layout	9
Figure 3-3b.	Substation Elevations Sections A-A & B-B	10
Figure 3-3c.	Substation Elevations Sections C-C, D-D, & E-E	11
Figure 3-4.	KOP Locations	18
Figure 3-5.	KOP 1 and KOP 2a Existing Conditions	19
Figure 3-6.	KOP 2b and KOP 3 Existing Conditions	20
Figure 3-7.	KOP 4 and KOP 5 Existing Conditions	21
Figure 3-8.	KOP 6 Existing Conditions	22
Figure 3-9.	KOP 1 Simulation Conditions	24
Figure 3-10.	KOP 2a Simulation Conditions	25
Figure 3-11.	KOP 2b Simulation Conditions	26
Figure 3-12.	KOP 3 Simulation Conditions	27
Figure 3-13a.	KOP 6 Simulation Conditions	28
Figure 3-13b.	KOP 6 Simulation Conditions With Indicators	29
Figure 3-14.	Scenic Resources	37
Figure 3-15.	KOP 2a Simulated Conditions with Landscaping After 5 Years	40
Figure 3-16.	KOP 2b Simulated Conditions with Landscaping After 5 years	42

Acronyms and Abbreviations

AC alternating current
AG General Agricultural

Applicant Corby Energy Storage, LLC

BESS battery energy storage system

BLM U.S. Bureau of Land Management

DC direct current gen-tie generation tie

HVAC heating, ventilation, and air conditioning

I-80 Interstate 80

KOP Key Observation Point

PCS power conversion system
PG&E Pacific Gas and Electric's

Project Corby Battery Energy Storage Project

Property Property which the Project would be built on consists of 40.3 acres

SCADA Supervisory Control And Data Acquisition

VRI Visual Resource Inventory

ZVI Zone of Visual Influence

1.0 OVERVIEW

Corby Energy Storage, LLC (Applicant), is proposing to construct and operate the 300-megawatt (MW) Corby Battery Energy Storage System Project (Project) to provide reliable and flexible power to the local electrical system. The property which the Project would be built on consists of approximately 40.3 acres (Project site) of privately-owned land in Solano County, California. The Project would interconnect at the Vaca-Dixon Substation to the northwest of the Project via a 230-kilovolt (kV) interconnection generation tie (gen-tie) line. The Project will include a 300-MW battery energy storage system (BESS), associated Project substation, inverters, and other ancillary facilities, such as fencing, sound barrier, roads, retention basins, storage containers, and a supervisory control and data acquisition (SCADA) system.

Tetra Tech was retained by the Applicant to perform a Visual Impact Assessment for the Project. This Visual Impact Assessment was prepared to identify and evaluate the potential visual and aesthetic impacts associated with construction and operation of the Project.

2.0 PROJECT SETTING

2.1 Existing Setting

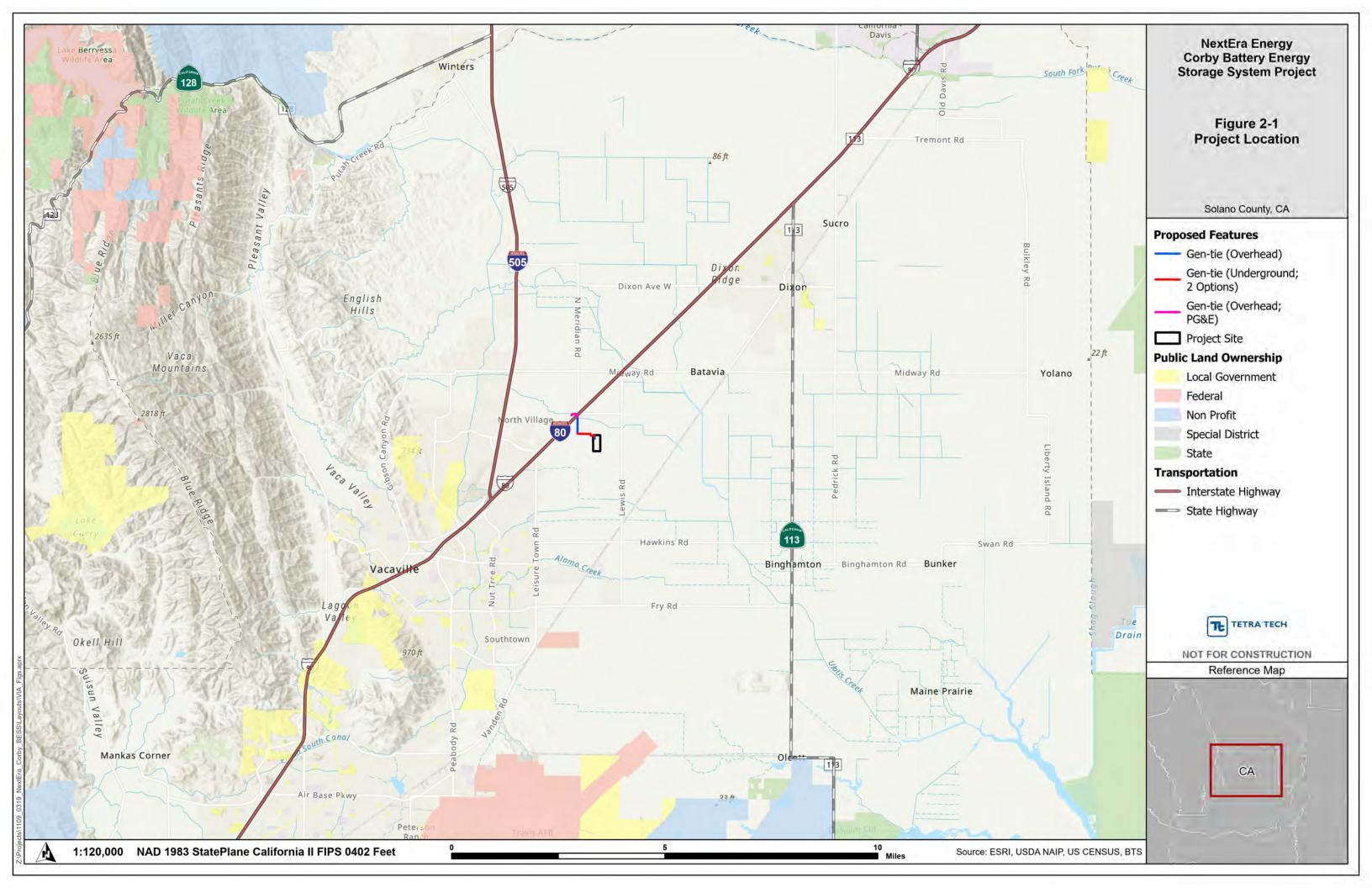
The Project site is adjacent to the city of Vacaville, approximately 0.6 mile east of Interstate 80 (I-80), and approximately 0.75 miles southeast of the Pacific Gas and Electric's (PG&E) Vaca-Dixon Substation, as shown on Figure 2-1.

2.1.1 On-site Land Uses

The proposed Project site is currently used as agricultural land for row crops. Much of the surrounding land is also in agricultural use, with orchards to the south, irrigated pastures to the east and west, and rural residential uses immediately north of the Project site.

2.1.2 Surrounding Land Uses

The Project parcel is bound on all sides by existing agricultural lands, with rural residences located across Kilkenny Road directly to the north. Additional rural residences also exist in the Project vicinity, to the east, south, and west of the Project site. The Project site is located approximately 250 feet southeast of the City of Vacaville jurisdictional boundary, and approximately 5 miles northeast of the city center; approximately 0.6 mile southeast of I-80; and approximately 0.75 mile southeast of the PG&E Vaca-Dixon Substation.



3.0 PROJECT DESCRIPTION

The Applicant proposes to construct, own, and operate the Project. The Project will be constructed on an approximately 40.3-acre privately-owned parcel in Solano County, California. The Project will include a 300-MW, 1200-megawatt-hour BESS, an associated Project substation, inverters, and other ancillary facilities, such as fencing, sound barrier, roads, stormwater retention basins, storage containers, and a SCADA system.

The Project will connect to the PG&E Vaca-Dixon Substation, northwest of the Project site and across I-80, via a 1.1-mile-long 230-kV gen-tie line, portions of which would be installed overhead and underground. The underground portions of the gen-tie line will run east-west parallel to and crossing Kilkenny Road, either within acquired easements on adjacent parcels or within the Solano County road right-of-way. The overhead portions include two structures on the Project site, four structures between Kilkenny Road and I-80 on private land owned by the Applicant, and up to four structures north of I-80 on PG&E-owned property adjacent to the Vaca-Dixon Substation, for a total of up to 10 overhead gen-tie structures.

The following description has been prepared to provide an overview of the facilities that are proposed to be constructed and operated for the Project.

3.1 Location of Facilities

The Project site is situated roughly in the northwestern corner of Section 6, Township 6 North, Range 1 East, just outside the City of Vacaville, California, U.S. Geological Survey 7.5-minute topographic quadrangle at approximate latitude 121°54'27.80"W, longitude 38°23'31.14"N. The overhead portion of the gen-tie that connects the Project site to the Vaca-Dixon Substation is within Section 1, Township 6 North, Range 1 West.

The permanent operational facility, including the BESS array, Project substation, associated equipment, roads, fencing, sound barrier, and drainage facilities, will be located on an approximately 40.3-acre parcel (Project site). The Project site includes the entirety of the Project parcel (Assessor's Parcel Number [APN] 0141-030-090). The Project parcel is bound on all sides by existing agricultural lands, with rural residences located across Kilkenny Road directly to the north and across Byrnes Road directly to the east. Additional rural residences also exist in the project vicinity, both to the south and west of the Project site. The Project site is located approximately 250 feet southeast of the City of Vacaville jurisdictional boundary, and approximately 5 miles northeast of the city center. I-80 is approximately 0.6 mile northwest of the Project site.

Refer to Figure 2-1 for the Project location and Figure 3-1 for the site layout.

3.2 Location of Offsite Facilities

The energy will be transported from the Project substation to the nearby PG&E Vaca-Dixon Substation through a 1.1-mile-long 230-kV gen-tie transmission line. The first section of the gen-tie corridor will begin at the northwest corner of the Project site and will follow one of the following route options:

1. **Underground Route Option #1** would be located within easements secured from private landowners (APNs 0141-030-080 and 0141-010-030), City of Vacaville and Solano Irrigation

- District; this east-west portion of the gen-tie will be underground, crossing then turning and running parallel to both Kilkenny Road and a Solano Irrigation District canal.
- 2. **Underground Route Option #2** would be located within easements secured from the private landowner of the parcel immediately west of the Project site (APN 0141-030-080) and City of Vacaville to construct the gen-tie within the Kilkenny Road (County Road 393) right-of-way.

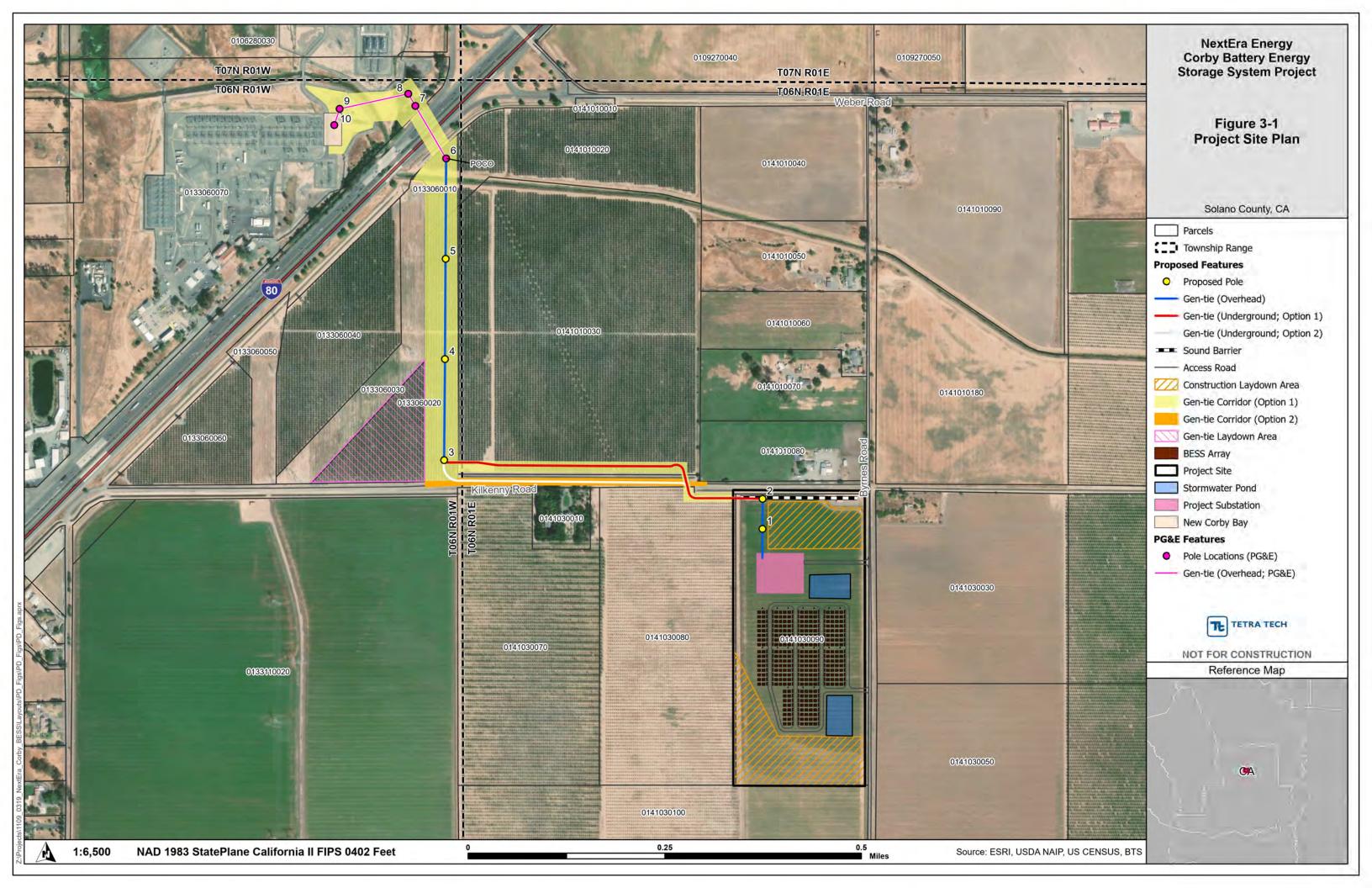
To the west of the initial east-west underground section (Option #1 or #2), the gen-tie corridor will run north-south up to I-80 with four overhead structures on two parcels (APNs 0133-060-010 and 0133-060-020). The overhead gen-tie line will continue northwest across I-80 to PG&E's Vaca-Dixon Substation parcel (APN 0133-060-070). Up to four overhead structures will be sited on PG&E's parcel. The gen-tie corridor is depicted on Figure 3-1.

3.3 BESS Facility Description, Design, and Operation

3.3.1 Facility Components

The Project consists of the following components as depicted on the site plan (Figure 3-1) and elevation drawings (Figures 3-2a through 3-3c):

- BESS:
- Onsite Project substation;
- Inverters;
- Gen-tie line; and
- Ancillary facilities.



NextEra Energy Corby Battery Energy Storage Project

Solano County, CA

Figure 3-2a
Elevation Views Looking
North and West

SOURCE

Burns & McDonnell Corby BESS Site Plan Drawing BCR-EXS-101 rev. A

NOT FOR CONSTRUCTION



NextEra Energy Corby Battery Energy Storage Project

Solano County, CA

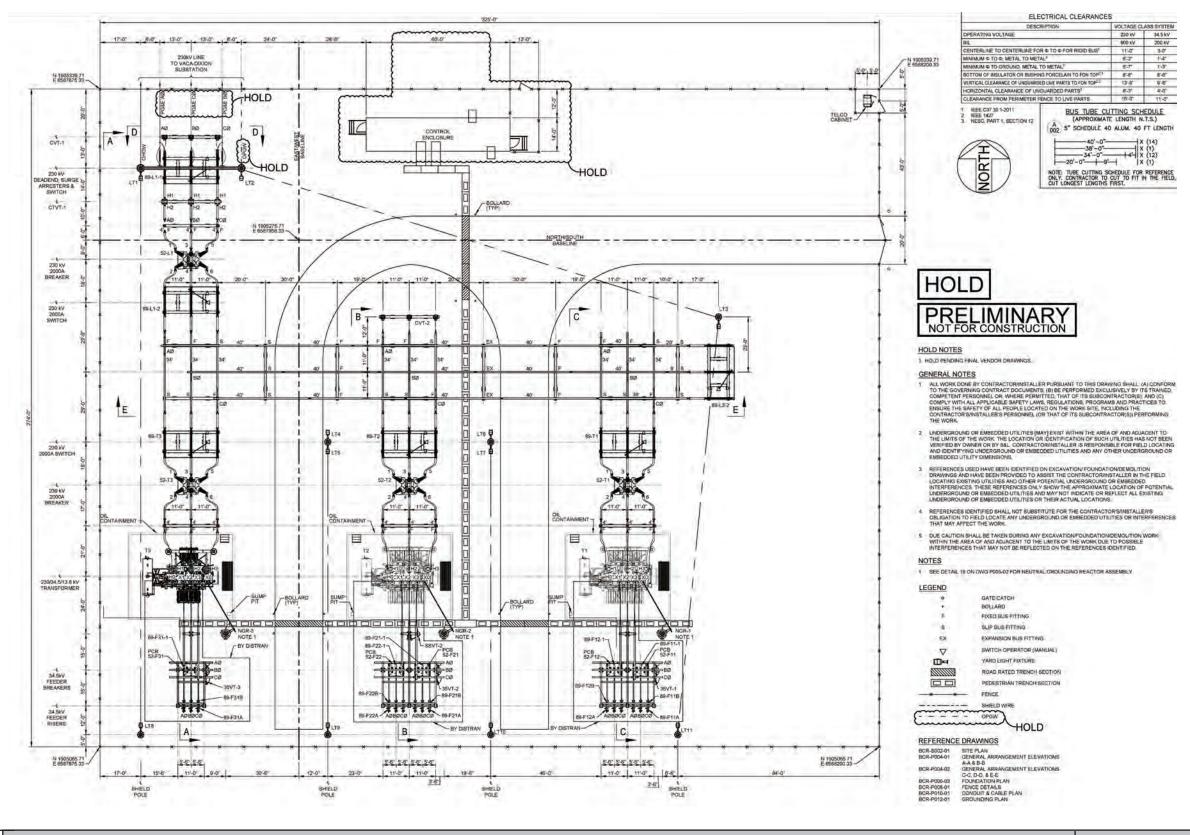
Figure 3-2b
Elevation Views Looking
South and East

Source

Burns & McDonnell Corby BESS Site Plan Drawing BCR-EXS-102

NOT FOR CONSTRUCTION

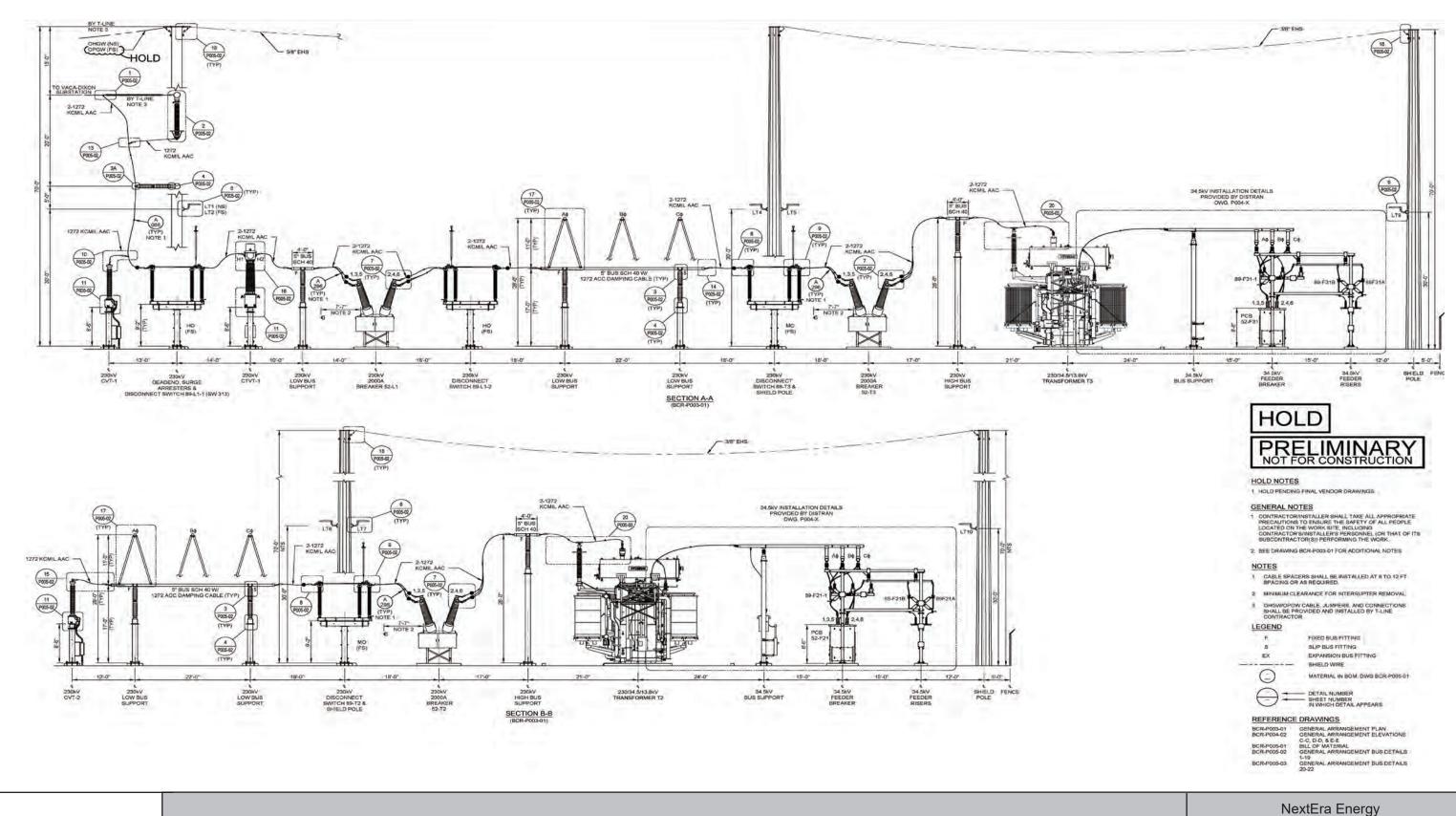






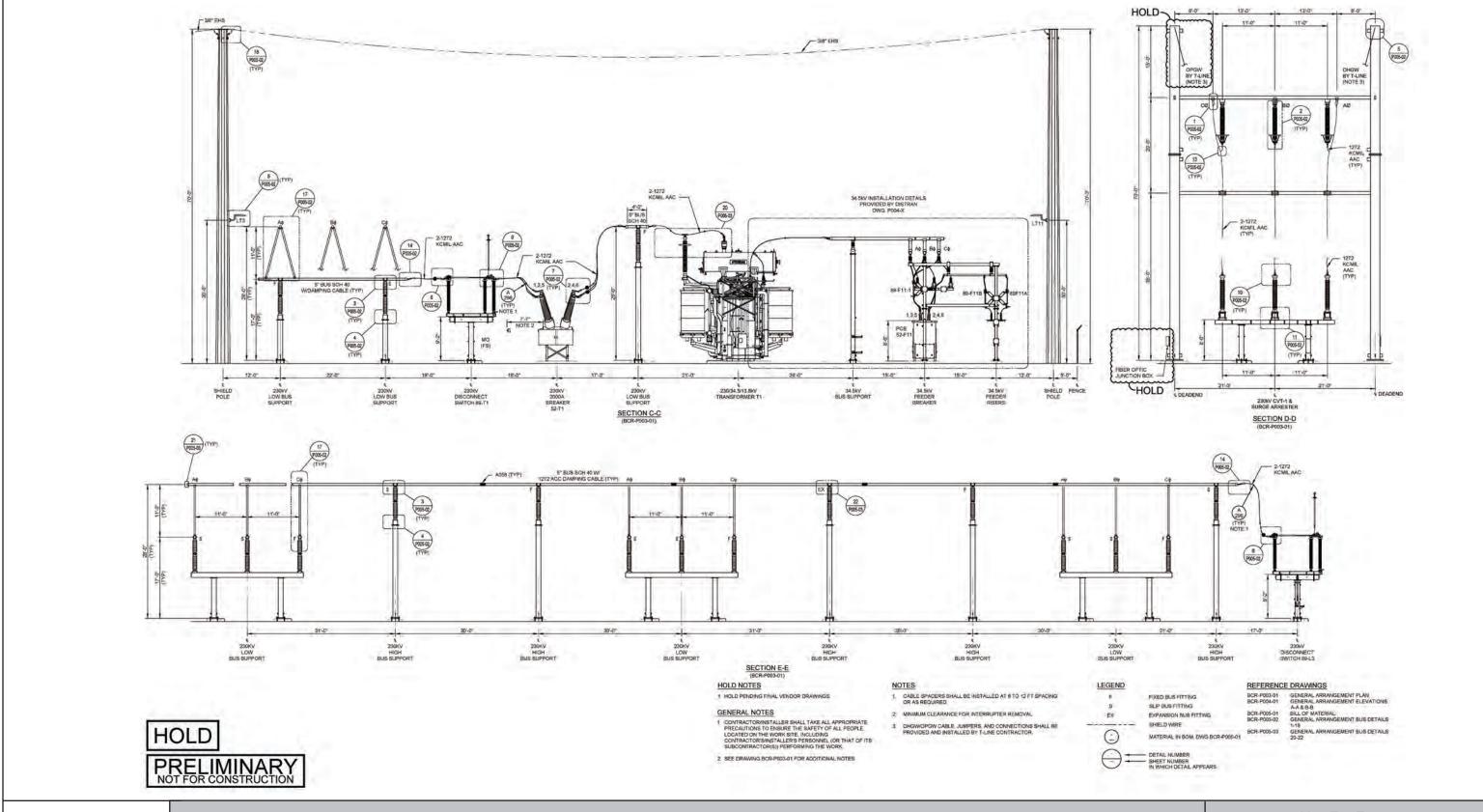
NextEra Energy
Corby Battery Energy Storage
System Project

Figure 3-3a.
Substation Elevation
General Layout





NextEra Energy
Corby Battery Energy
Storage System Project





NextEra Energy Corby Battery Energy Storage System Project

Figure 3-3c. Substation Elevations Sections C-C, D-D, & E-E

3.3.1.1 Battery Energy Storage System

The BESS will include multiple self-contained, prefabricated enclosure units in a parallel configuration with spacing between each unit as required by the manufacturer. Each of the enclosure units will be approximately 9.5 feet tall, 8 feet wide, and 20 feet long. Batteries will be placed within the BESS yard on native compacted soil, gravel, and underground steel piles or concrete foundations.

The initial BESS installation will include 384 BESS enclosures at the "beginning of life" (BOL). As batteries degrade over time, additional batteries will be installed every 2 to 3 years to replenish the system and maintain an overall 300-MW output. At the "end of life" (EOL), the Project will include up to 544 BESS enclosures. The site plan accounts for this augmentation activity and depicts both the BOL and EOL BESS arrays.

3.3.1.2 Inverters

The Project will install inverters with the BESS yards adjacent to the battery enclosures. The inverters convert between alternating current, which is used by the transmission grid, and direct current, which is used to charge and discharge the batteries. The Project will initially include 96 inverters (BOL) and, following full augmentation, will be expanded to 136 inverters at EOL.

3.3.1.3 Project Substation

Underground or aboveground collector lines will transmit energy between the Project substation and the inverters within the BESS yards. The proposed substation will host the grid intertie safety equipment and switches required to interconnect to the high-voltage transmission system. The Project substation will include switchgear and additional electrical equipment as required by PG&E specifications. The associated transformers, control enclosure, and microwave tower will be located within the onsite substation area.

The Project substation will include three generator step-up transformers to step up the voltage of electricity from 34.5 kV to 230 kV for transmission to the Vaca-Dixon Substation or step down the voltage coming from the grid for storage in the BESS batteries.

The Project substation will include an approximately 14-foot by 60-foot control enclosure housing the SCADA system. Auxiliary power required for the control enclosure and SCADA system will be provided by a connection to the local PG&E distribution system.

3.3.1.4 Operations and Maintenance Facility

The Project will include operations and maintenance (O&M) equipment that will be stored in up to eight conex storage containers, each approximately 10 feet by 20 feet in size placed in open areas within the fenced BESS yard. Operational staff will perform periodic inspections and maintenance as needed using the containers for storage of materials, equipment and other O&M work as needed.

3.3.1.5 Ancillary Facilities

Site Access and Maintenance Roads

Site access will be provided via new connections to Byrnes Road adjacent to the eastern Project site boundary (see Figure 3-1). Internal site maintenance roads will also be installed to allow access

throughout the Project site during O&M. Maintenance roads will be placed between groups of BESS enclosures at sufficient frequencies to allow for routine maintenance and emergency access. All roads will be at least 20 feet wide with adequate turnarounds, graveled (or potentially asphalt-paved, depending upon final design), extending to within 150 feet of the furthest BESS container.

Lighting

Low-elevation (i.e., less than 14-foot), controlled security lighting will be installed at primary access gates and the onsite substation. The lighting will only switch on when personnel enter the area (through either motion sensor or manual activation [i.e., switch]). Lighting features will only be installed in areas where it is required for safety, security, or operations. All lighting will be directed onsite and will include shielding as necessary to direct light downward and minimize illumination of the night sky or potential impacts to surrounding viewers.

Perimeter Fence

The perimeter of the BESS array and Project substation will be enclosed by a 6-foot-tall chain-link fence above-grade topped with 1 foot of three-strand barbed wire to prevent unauthorized access to the site. Access to the Project site will be controlled through entry/egress gates located along Byrnes Road.

Sound Barrier

A sound barrier will be used to reduce the sound levels at the nearby residential receivers north of the Project site. An approximately 15-foot-high by 785-foot-long sound barrier will be installed along the northern edge of the Project parcel to attenuate sound levels (see Figure 3-1). The proposed sound barrier will be a post and pre-cast panel system with a gray textured finish.

Signage

A sign no larger than 8 feet by 4 feet will be installed at the main entrance to identify the Project site. In addition, required safety signs (e.g., to identify high voltage) as well as information for emergency services will be installed on the fence near the entrance gate and within the premises, as required.

Site Drainage and Retention Basins

The Project design incorporates onsite stormwater facilities, including two retention basins to capture the increase in runoff. The retention basins will be located east of the Project substation and southeast of the BESS array within the Project parcel (Figure 3-1), and onsite stormwater flows will be conveyed to the proposed retention basins via overland flow and a perimeter ditch.

Except for equipment enclosures and potentially asphalt-paved site maintenance roads, most of the Project site will be surfaced with crushed rock, allowing infiltration.

Landscaping

A 36-foot-wide landscape strip will be planted along Kilkenny Road and Byrnes Road, as requested by Solano County (Landscape Plan can be found in Appendix 4.1-B of the Opt-in Application). Drought-tolerant and native vegetation will be used, and all landscaping will comply with the California

Department of Water Resources Water Efficient Landscape requirements. The vegetation will include trees, shrubs, and herbaceous ground cover. Within the BESS yard and Project substation, the ground will be covered with gravel. Outside of the BESS yard, Project substation, and the 36-foot-wide landscape strip, the land will be planted with short-cover vegetation to provide soil stabilization and noxious weed control.

3.3.1.6 Project Appearance and Dimensions

Figure 3-1 shows the general arrangement and layout of the proposed Project features on the site, and Figures 3-2a through 3-3c provide typical elevation views. Table 3-1 summarizes the dimensions, finishes, and materials of the generating facility's major features.

Table 3-1. Approximate Dimensions, Color, Materials, and Finishes of the Major Project Features

Feature	Length (feet)	Width (feet)	Height (feet)	Color	Materials	Finish
BESS Array Compo	nents					
Batteries and battery enclosures	20	8	9.5	Traffic Gray RAL 7042	Prefabricated Metal Building	Semi-gloss
Inverters	22	7	7	Gray/Dark gray	Electrical Equipment	NA
Auxiliary transformers	7	6.5	8	Munsell Green 7GY 3.29/1.5	Electrical Equipment	NA
Auxiliary switchboard	10	3	7.5	ANSI 61 Gray	Electrical Equipment	Textured powder coaf
Project Substation	Components					
GSU transformers	22	28	26	Painted steel – ANSI 61 Gray	Electrical Equipment	NA
Switchgear	8	12	28	No paint - Steel/Galvanized steel	Electrical Equipment	NA
Busbar structures	274	275	28	No paint - Galvanized steel	Electrical Equipment	NA
Riser structures	-	-	65	No paint/gray	Steel	NA
Substation control house	60	14	10.5	Gray	Concrete, Steel, Metal alloys, Electrical Equipment	NA
Shield Poles	NA	NA	70	No paint/gray	Steel	NA
Other Project Comp	onents					
Generation tie line (above ground portion)			90 - 130 (Monopole, H-Frame, and 3- Pole Tubular Steel Pole [TSP])	No paint/gray	Steel	NA
Perimeter Fence (Substation)	1,230	-	6	No paint/gray	Steel	NA
Perimeter Fence (BESS array)	2,977	-	6	No paint/gray	Steel	NA

Feature	Length (feet)	Width (feet)	Height (feet)	Color	Materials	Finish
Sound Barrier	785	-	15	Gray	Blend of wood shavings and cement	NA
Signage	NA	8	4	various	Steel/plastic	NA

BESS = battery energy storage system

The exteriors of all major Project components will be treated with a neutral earthtone finish in colors including white, gray, green, and light brown. This combination of darker and lighter colors is intended to optimize their visual integration with the surrounding environment.

3.4 Methodology

3.4.1 Visual Impact Criteria

For this analysis, the significance criteria outlined in Appendix G of the California Environmental Quality Act Guidelines, as amended, are applied to determine the Project's impact to existing visual resources. The California Environmental Quality Act-defined aesthetic issues of concern are:

- Would the proposed project cause substantial, adverse effects on a scenic vista?
- Would the proposed project cause substantial damage to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway?
- In non-urbanized areas, would the proposed project 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 a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- Would the proposed project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

3.4.2 Visual Change Criteria

Visual impacts are generally defined in terms of a project's physical characteristics and potential visibility, as well as the extent to which the project's presence would change the perceived visual character and quality of the environment in which it would be located. Tetra Tech followed the contrast rating system used by the U.S. Bureau of Land Management (BLM) to objectively measure potential changes to the visual environment (BLM 1986). The BLM's contrast rating system is commonly used by federal agencies to assess potential visual resource impacts from proposed projects.

Potential visual impacts were characterized by determining the level of visual contrast introduced by the Project based on comparing existing conditions and photo simulations. Visual contrast is a means to evaluate the level of modification to existing landscape features. Existing landscape is defined by the visual characteristics (form, line, color, and texture) associated with the landform (including water), vegetation, and existing development.

Specific terminology used in describing the existing visual environment is provided below.

- Contrast: opposition or unlikeness of different forms, lines, colors, or textures in a landscape.
- Contrast rating: a method of analyzing the potential visual impacts of proposed management activities.
- Color: the hues, variety, contrast, and harmony of colors in the visual environment.
- Form: the mass or shape of landforms or structures.
- Key Observation Point (KOP): one or a series of publicly accessible points on a travel route or at a use area or potential use area, where the view of a management activity would be representative of viewers within the area and be most revealing.
- Landscape Visibility: perception of details (e.g., form, line, color, and texture) diminishes with increasing distance. The distance zone is dependent on the location of the observer relative to the Project. These distance zones are:
 - o Foreground: 0 to 0.5 mile from point of interest
 - o Middle ground: 0.5 to 5 miles from point of interest
 - o Background: over 5 miles away from the point of interest
- Scenic quality: a measure of the visual appeal of a tract of land. In the visual resource inventory process, the apparent scenic quality is determined using seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications.
- Sensitivity level: a measure of public concern for scenic quality. Public lands are assigned high, medium, or low sensitivity levels by analyzing the various indicators of public concern.
- Sensitive viewers: specific user groups associated with various land uses that have a sensitivity to landscape change, and therefore could be adversely affected by the construction and operation of a project.
- Simulation: a realistic visual portrayal that demonstrates the perceivable changes in landscape features caused by a proposed management activity. This is done using photography, artwork, computer graphics, and other such techniques.
- Texture: the visual manifestations of the interplay of light and shadow created by the variations in the surface of an object or landscape.
- Viewshed: the area within the Project's vicinity where viewers would theoretically have visibility toward part or all of the Project components.
- Visual quality: the relative worth of a landscape from a visual perception point of view.
- Visual resource: the visible physical features on a landscape (for example, land, water, vegetation, animals, structures, and other features).

The Project will be evaluated as to the level of contrast Project elements exhibit to the existing visual character of the Project site and area, as shown in Table 3-2.

Table 3-2. Degree of Contrast Rating System

Degree of Contrast	Rating Criteria
None	The element contrast is not visible or perceived.
Weak	The element contrast can be seen but does not attract attention.
Moderate	The element contrast begins to attract attention and begins to dominate the characteristic landscape.
Strong	The element contrast demands attention, will not be overlooked, and is dominant in the landscape.

Source: BLM Manual Visual Resources Inventory, 2010

Contrast ratings for the expected condition with the Project were prepared for each representative viewpoint using a form adapted from BLM's Visual Contrast Rating Worksheet (Form 8400-4); the results are included in Attachment A.

3.4.3 Viewshed

The viewshed is generally the area that is visible from an observer's viewpoint and includes the screening effects of intervening vegetation and/or physical structures. Although some portion of the Project site may be visible from a relatively large area, the degree of visibility would depend on distance and view angle. Generally, the Project site would be most visible from viewpoints within 0.5 mile, while site visibility would diminish as distance increases and view angle decreases. Air quality, including dust and other visible particulates, can affect visibility in the area. Distance is only one of the factors that determine visibility of a site from a viewpoint. Terrain, vegetation, and structural features can obscure views that might otherwise be available at a certain distance.

3.4.4 Key Observation Points

Based on the identification of publicly accessible routes and viewpoints, potential KOPs were identified and further assessed during the field assessment. KOPs were identified based on locations from which the Project infrastructure would potentially be visible and noticeable to the casual observer. The "casual observer" is considered an observer who is not actively looking or searching for the Project, but who is engaged in activities at locations with potential views of the Project, such as hiking or driving along a scenic road. If the Project infrastructure is not noticeable to the casual observer, visual impacts can be considered minor to negligible.

Six KOPs were selected as representative public vantage points in the landscape that offer views of the proposed Project site (Figure 3-4) from publicly accessible areas.

Factors considered in the selection of KOPs included locations with sensitive viewers and potential for the Project site to be visible (e.g., distance and view angle). The KOPs were selected to capture representative vantages for local travelers/motorists commuting on the surrounding county roads; and regional travelers, which include travelers/motorists on I-80 and visitors to the Sacramento Valley National Cemetery.

Digital photographs were taken from the selected KOP locations to support the discussion on existing visual setting and the analysis of potential visual impacts associated with the proposed Project site (Figures 3-5 through 3-8). Photographs of existing conditions were taken on June 26, 2024, using a full-frame, digital single-lens reflex Canon EOS R5 camera.

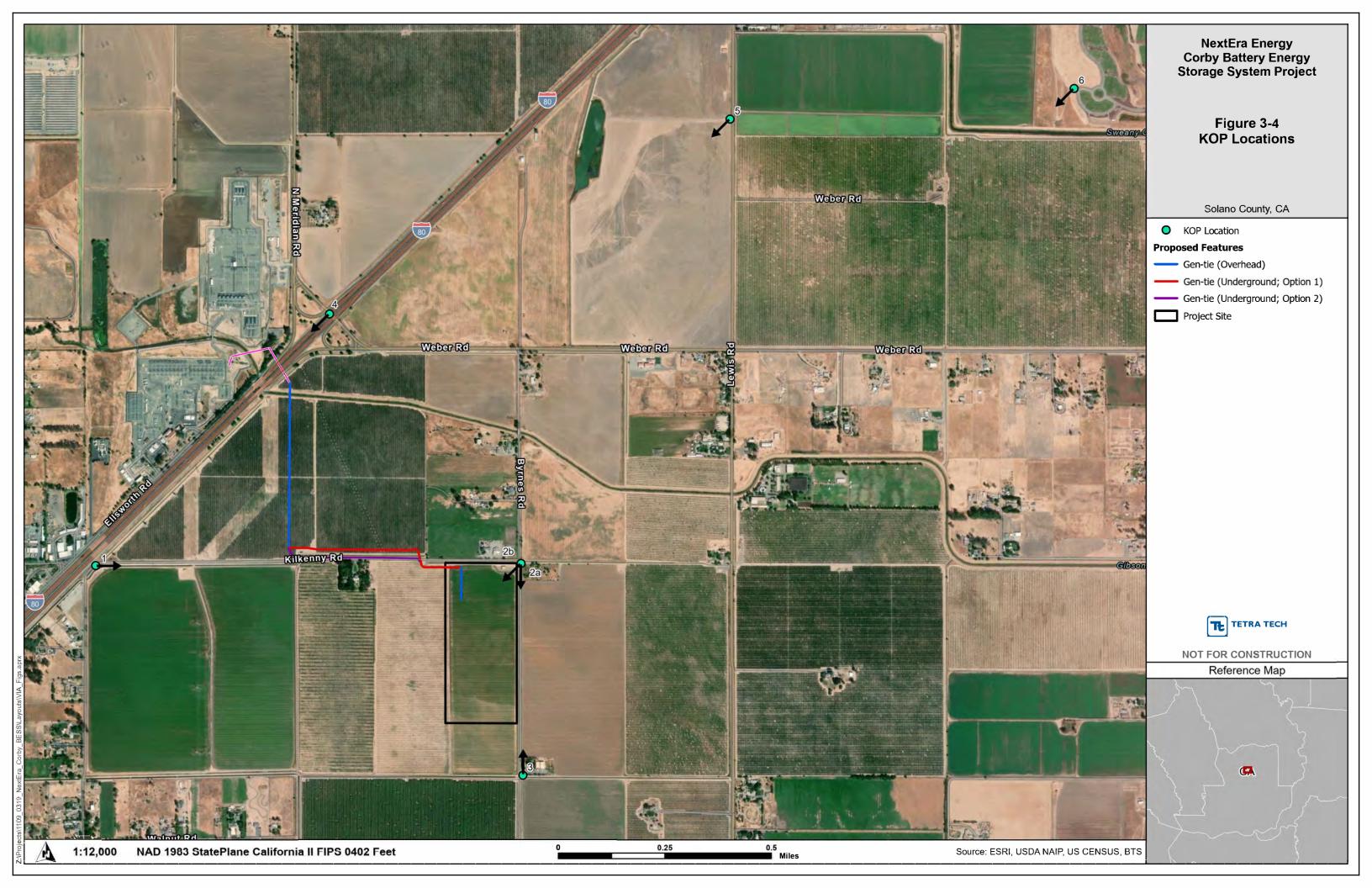






Figure 3-5. KOP 1 and KOP 2a Existing Conditions





Figure 3-6. KOP 2b and KOP 3 Existing Conditions





Figure 3-7. KOP 4 and KOP 5 Existing Conditions



Figure 3-8. KOP 6 Existing Conditions

3.4.5 Visual Simulations

Three-dimensional visual simulations from representative photographs from four of the six KOPs were rendered to approximate the visual conditions resulting with Project implementation for the following reasons:

- KOP 1: Figure 3-9 Represents best view from the County scenic highway I-80.
- KOP 2a: Figure 3-10 and KOP 2b: Figure 3-11 Represents nearest location to the Project site
 while driving south in Byrnes Road. Simulations from two different views at this location were
 created for fuller coverage of the Project facilities.
- KOP 3: Figure 3-12 Represents next nearest location to the Project site and a different view direction while driving north on Byrnes Road.
- KOP 6: Figure 3-13a and 3-13b Represents views from areas located further from the Project site, where there is potential Project visibility by sensitive users at the Sacramento Valley National Cemetery. Due to intervening vegetation and distance, views of the Project from these locations are limited to the Project gen-tie line. To aid in review of this document, the simulation was prepared with and without Project location indication arrows (Figures 3-13a and 3-13b, respectively).

Simulations were not produced for KOP 4 and KOP 5. In preliminary discussions with California Energy Commission Staff to discuss potential KOP locations, it was determined that a simulation would not be necessary from KOP 4, as the views of the Project would be limited to the Project gen-tie and views of the gen-tie would not attract attention due to the numerous transmission lines in the area.

Simulations were not created for KOP 5 due to intervening vegetation and any views of the Project from KOP would be similar to KOP 6.

Simulation production used selected photographs acquired at each applicable KOP. A three-dimensional physical massing model was created that incorporated the Project scale model, then placed in configurations as shown in Figure 3-1. The model was then georeferenced and placed on global positioning system-controlled, site-specific photographs to create simulations that demonstrate visual changes from the Project.





Figure 3-9 KOP 1

Simulation Conditions

Kilkenny Road, adjacent to I-80



VICINITY MAP

LEGEND

SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 4:02 PM

DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: EAST

LATITIUDE: 38.39513450°

LONGITUDE: -121.92421902°
DISTANCE TO BESS: .87 MILES

CAMERA TYPE: CANON EOS R5

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

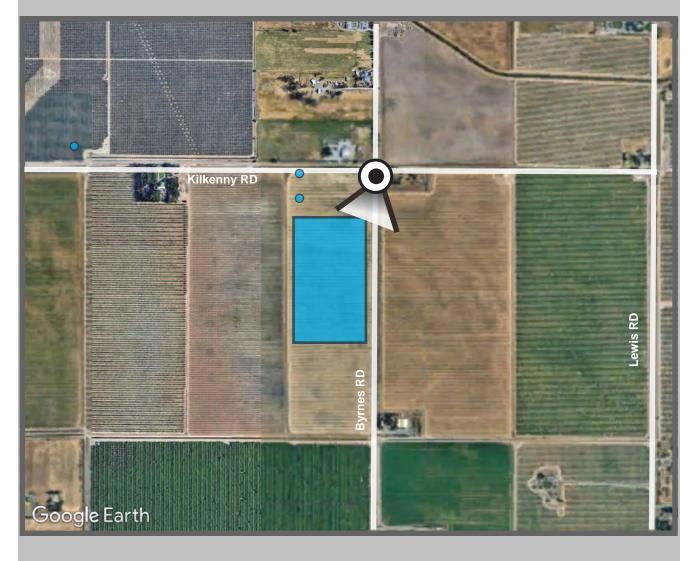




Figure 3-10 KOP 2a

Simulation Conditions Intersection of Byrnes Road and

Kilkenny Road



VICINITY MAP

LEGEND



SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:59 AM DATE: 06/26/2024 WEATHER CONDITION: SUNNY VIEWING DIRECTION: SOUTH

LATITIUDE: 38.39519349° -121.9058341° LONGITUDE:

DISTANCE TO BESS: .12 MILES

CANON EOS R5 **CAMERA TYPE:**

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

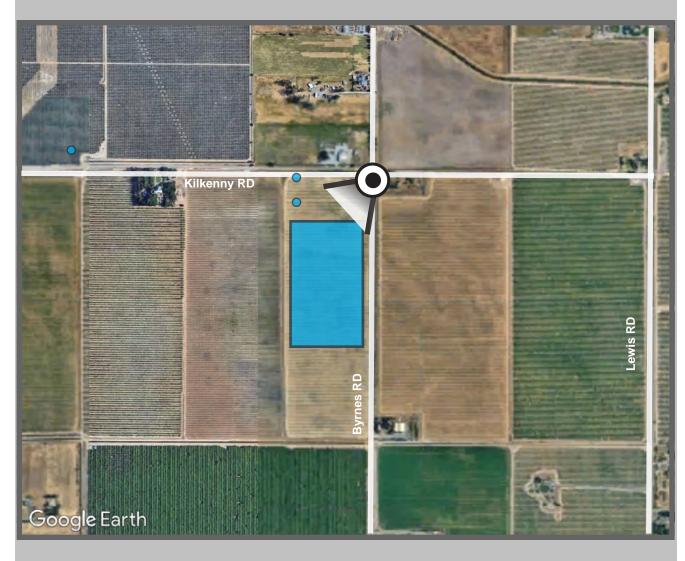




Figure 3-11 KOP 2b

Simulation Conditions Intersection of Byrnes Road and

Kilkenny Road



VICINITY MAP

LEGEND



SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:59 AM DATE: 06/26/2024

WEATHER CONDITION: SUNNY SOUTHEAST VIEWING DIRECTION:

LATITIUDE: 38.39519349°

LONGITUDE: -121.9058341° DISTANCE TO BESS: .12 MILES CANON EOS R5 **CAMERA TYPE:**

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

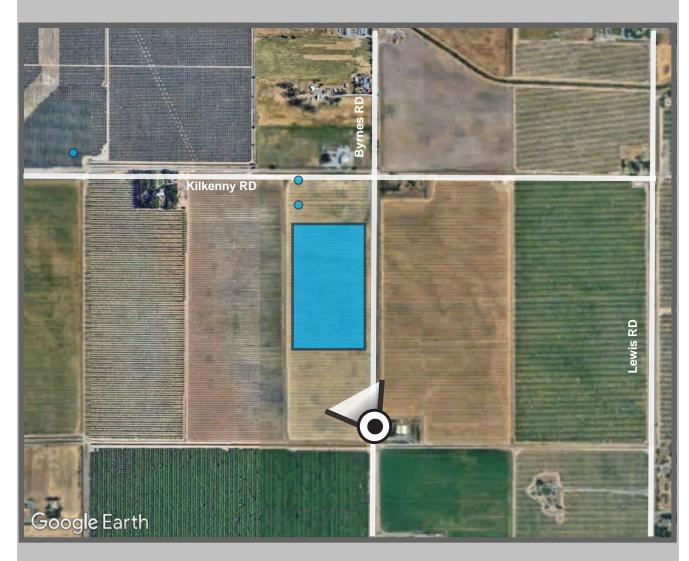




Figure 3-12 KOP 3

Simulation Conditions

View North on Byrnes Road



VICINITY MAP

LEGEND



SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 12:06 PM

DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: NORTH

LATITIUDE: 38.3879916°

LONGITUDE: -121.905764°

DISTANCE TO BESS: .24 MILES

CAMERA TYPE: CANON EOS R5

LENS FOCAL LENGTH: 50MM

Preliminary Visualization





Figure 3-13a
KOP 6
Simulation Conditions

Sacramento Valley National Cemetery



VICINITY MAP

LEGEND

SIMULATED EQUIPMENT



CAMERA TYPE:

KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:31 AM

DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: SOUTHWEST

LATITIUDE: 38.4113211°

LONGITUDE: -121.881903°

DISTANCE TO BESS: 1.82 MILES

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

CANON EOS R5





Figure 3-13b KOP 6

Simulation Conditions With Indicators
Sacramento Valley National Cemetery



VICINITY MAP

LEGEND



SIMULATED EQUIPMENT



CAMERA TYPE:

KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:31 AM

DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: SOUTHWEST

LATITIUDE: 38.4113211°

LONGITUDE: -121.881903°

DISTANCE TO BESS: 1.82 MILES

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

CANON EOS R5

4.0 ENVIRONMENTAL SETTING

4.1 Regional Character

The Vacaville urban area is surrounded by the Vaca Mountains to the south and to the west, and largely agricultural uses to the north and to the east.

4.2 Local Setting

The Project site and surrounding properties consist of agricultural land uses. The terrain on the Project site and the immediate area is relatively flat. Energy-related uses are found near to the Project site, including PG&E's Vaca-Dixon Substation to the northwest and 500-kV transmission towers and lines to the west and southwest of the Project site.

4.3 Scenic Vistas

While no specific views are identified, the County's General Plan states that the "county's agricultural landscapes, the delta and marshlands, and the oak and grass covered hills offer an abundance of scenic vistas (Solano County 2008).

4.4 Scenic Routes

According to the California Department of Transportation (Caltrans) Scenic Highway Map, there are no state scenic highways in the vicinity of the Project. The nearest officially designated state scenic highway is State Route (SR) 128, approximately 9.5 miles northwest of the Project site.

I-80, located approximately 0.6 mile to the west of the Project site, and SR 113, located approximately 5 miles to the east of the Project site, are designated as County scenic roadways (Solano County 2008).

4.5 Agricultural Reserve Overlay

The County has created the General Plan Agricultural Reserve Overlay to contribute to the preservation of valued agricultural landscapes that exist in the areas, including those between Vacaville and Dixon, by encouraging private landowners to voluntarily participate in land conservation. The Agricultural Reserve Overlay will help facilitate the County's various farmland protection goals identified in the Agriculture Chapter and will help maintain scenic resources along the I-80 corridor. The Vacaville-Dixon Greenbelt is located approximately 0.7 mile northeast of the Project site.

4.6 Viewer Groups

In general, the types of viewers present within the viewshed of the Project are classified as: local travelers/motorists commuting on the surrounding county roads; and regional travelers, which include travelers/motorists on I-80, and visitors to the Sacramento Valley National Cemetery.

4.7 Existing Visual Character

Six KOPs were selected to assess the level of visual change resulting from the Project battery energy storage facility on the existing environment, as described in Section 3, Project Description. The locations of the six KOPs are presented in Figure 3-4. The KOPs were selected to capture

representative vantages from 1-80, Kilkenny Road, Byrnes Road, Lewis Road, and the Sacramento Valley National Cemetery. Photographs from each KOP under existing conditions are presented in Figures 3-5 through 3-8.

4.7.1 Key Observation Point 1

KOP 1 is located on Kilkenny Road, adjacent to I-80, approximately 0.8 mile west of the Project site. This KOP depicts views oriented east toward the Project site, with Kilkenny Road on the left side of the view. As shown in Figure 3-5, the existing landscape setting is characterized by agricultural land with flat terrain. Orchards are located along the north side of Kilkenny Road from the foreground to the middle ground, with a transmission tower in the middle ground. An irrigation canal and row crops are located along the south side of Kilkenny Road from the foreground to the middle ground. A transmission tower, its associated lines, and ornamental trees are in the middle ground at the west end of the view. Dominant colors in the landscape are tans, browns, and greens, while the structures are gray, white, and rust-red. The vegetation consists of irregular, organic forms: grasses and row crops are continuous with irregular-shaped ruderal vegetation and trees. The trees are planted in uniform linear rows. The linear and horizontal lines associated with the built features are visible and prominent from this viewpoint.

This view was selected to represent views from I-80 and Kilkenny Road as seen by regional and local motorists, respectively. Views would be of short duration for regional motorists on I-80 due to likelihood of traveling at a high rate of speed, paralleling the Project site for a limited time, and intervening vegetation, and for local motorists, due to limited roadway, approximately 1 mile and intervening vegetation. Considering the short duration of viewing, viewers would have a low exposure to the visual changes in the Project area.

4.7.2 Key Observation Point 2

For fuller coverage of the Project site, two views from KOP 2 were analyzed below.

4.7.2.1 Key Observation Point 2a

KOP 2a is located on Byrnes Road, at the intersection with Kilkenny Road, adjacent to the northeast corner of the Project site. This KOP depicts views oriented southward toward the Project site. As shown in Figure 3-5, the existing landscape setting is characterized by agricultural land with flat terrain and mountainous terrain in the distant background. Row crops and utility poles and line are located along the east side of Byrnes Road from the foreground to the middle ground, with an agricultural building and ornamental trees in the middle ground. A vacant field with low vegetation is located along the west side of Byrnes Road from the foreground to the middle ground with orchard and ornamental trees and transmission towers in the middle ground. Dominant colors in the landscape are tans and greens while the structures are gray, brown, and white. The vegetation consists of irregular, organic forms: grasses and row crops are continuous with irregular-shaped ruderal vegetation and trees. The linear and horizontal lines associated with the built features are visible and prominent from this viewpoint.

This view was selected to represent views from Byrnes Road as seen by local motorists traveling south. Views would be of short duration for motorists approaching the Project site, as views of the site

north of Kilkenny Road are partially or fully blocked. The intervening vegetation, structures, and motorists would parallel the Project site for a limited time. Considering the short duration of viewing, viewers would have a low exposure to the visual changes in the Project area.

4.7.2.2 Key Observation Point 2b

KOP 2b is located on Byrnes Road, at the intersection with Kilkenny Road, adjacent to the northeast corner of the Project site. This KOP depicts views oriented southwest toward the Project site. As shown in Figure 3-6, the existing landscape setting is characterized by agricultural land with flat terrain and mountainous terrain in the distant background.

A vacant field with low vegetation, Byrnes Road, and a dirt road are located from the foreground to the middle ground with orchard and ornamental trees and transmission towers in the middle ground. Dominant colors in the landscape are tans and greens while the structures are gray. The vegetation consists of irregular, organic forms: grasses and row crops are continuous with irregular-shaped ruderal vegetation and trees. The linear and horizontal lines associated with the built features are visible and prominent from this viewpoint.

This view was selected to represent views from Byrnes Road as seen by local motorists traveling south. Views would be of short duration for motorists approaching the Project site, as views of the site north of Kilkenny Road are partially or fully blocked. The intervening vegetation, structure, and motorists would parallel the Project site for a limited time. Considering the short duration of viewing, viewers would have a low exposure to the visual changes in the Project area.

4.7.3 Key Observation Point 3

KOP 3 is located on Byrnes Road approximately 0.12 mile south of the Project site. This KOP depicts views oriented to the northwest toward the Project site. As shown in Figure 3-6, the existing landscape setting is characterized by agricultural land with flat terrain and hilly terrain in the background. A vacant field with low vegetation and Byrnes Road are visible extending from the foreground into the middle ground with orchard and ornamental trees and transmission towers in the middle ground. Dominant colors in the landscape are tans and greens while the structures are gray and white. The vegetation consists of irregular, organic forms: grasses and row crops are continuous with irregular-shaped ruderal vegetation and trees. The linear and horizontal lines associated with the built features are visible and prominent from this viewpoint.

This view was selected to represent views from Byrnes Road as seen by local motorists traveling north. Views would be of short duration for motorists approaching the Project site, as views of the site north prior to paralleling the Project site are blocked. The intervening vegetation and motorists would parallel the Project site for a limited time. Considering the short duration of viewing, viewers would have a low exposure to the visual changes in the Project area.

4.7.4 Key Observation Point 4

KOP 4 is located on Weber Road, an I-80 overpass, approximately 0.65 mile northwest of the Project site. This KOP depicts views oriented southwest toward the Project gen-tie line. As shown in Figure 3-7, the existing landscape setting is characterized by the freeway and agricultural land with flat terrain to hilly and mountainous terrain in the background. I-80 dominates the view from the foreground to

the background. Transmission towers are seen on both sides of I-80 with transmission lines crossing the highway. Orchards and ornamental trees are seen on the east side of the highway. A landscaped median runs down the center of I-80. Grasses and numerous, large ornamental trees are seen on the west side of the highway. The dominant colors in the landscape are tan and green while the structures are gray and white. The vegetation consists of irregular-shaped, organic forms of grasses. The linear and horizontal lines associated with the structures are visible and prominent from this viewpoint. This view was selected to represent views from I-80 as seen by regional motorists. Views would be of short duration for regional motorists on I-80 due to likelihood of traveling at a high rate of speed. Considering the short duration of viewing, viewers would have a low exposure to the visual changes in the Project area.

4.7.5 Key Observation Point 5

KOP 5 is located on Lewis Road, approximately 1.2 miles northeast of the Project site, and adjacent to the Vacaville-Dixon Greenbelt to the east. This KOP depicts views oriented southwest toward the Project site. As shown in Figure 3-7, the existing landscape setting is characterized by agricultural land with flat terrain and hilly terrain in the background. An agricultural field with mowed vegetation is located from the foreground to the middle ground with orchard and ornamental trees, residential and agricultural structures, and transmission towers in the middle ground. Dominant colors in the landscape are tans and greens while the structures are gray, white, and red. The vegetation consists of irregular, organic forms: grasses are continuous with irregular-shaped ruderal vegetation. The linear and horizontal lines associated with the structures are visible from this viewpoint. This view was selected to represent views from Lewis Road and the Vacaville-Dixon Greenbelt as seen by local motorists. Views of the Project would be in the middle ground and limited by intervening structures and vegetation, and motorists would be focused on the immediate foreground; therefore, viewers would have a low exposure to the visual changes in the Project area.

4.7.6 Key Observation Point 6

KOP 6 located at the Sacramento Valley National Cemetery, approximately 1.6 miles northeast of the Project site. This KOP depicts views oriented southwest toward the Project site. As shown in Figure 3-8, the existing landscape setting is characterized by undeveloped portions of the cemetery and agricultural land with flat terrain and hilly terrain in the background. The undeveloped portions of the cemetery and the agricultural field with mowed vegetation is located from the foreground to the middle ground with orchard and ornamental trees, agricultural structures, and transmission towers in the middle ground. Dominant colors in the landscape are tans and greens while the structures are gray. The vegetation consists of irregular, organic forms: grasses are continuous with irregular-shaped ruderal vegetation and trees. The linear and horizontal lines associated with the built features are visible from this viewpoint.

This view was selected to represent views from Sacramento Valley National Cemetery as seen by visitors. Views of the Project would be in the middle ground and limited by intervening structures and vegetation and visitors would be focused on the immediate foreground; therefore, viewers would have a low exposure to the visual changes in the Project area.

5.0 REGULATORY SETTING

5.1 Federal

5.1.1 National Scenic Byways Program

The National Scenic Byways Program, a part of the Federal Highway Administration, recognizes, preserves, and enhances selected roads throughout the United States as All-American Roads or National Scenic Byways based on one or more archaeological, cultural, historic, natural, recreational, and scenic qualities. There are no officially designated National Scenic Byways in the vicinity of the Project site (FHWA 2024; Caltrans 2024).

5.2 State

5.2.1 Caltrans Scenic Highway Program

State scenic highways are those that are either officially designated as state scenic highways by Caltrans or are eligible for such designation. The scenic designation is based on the amount of natural landscape visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes on the motorist's enjoyment of the view.

The nearest officially designated state scenic highway is SR-128, approximately 9.5 miles northwest of the Project site (Caltrans 2024).

5.3 Local

5.3.1 Solano County

Resources Element Scenic Resources

Policies:

RS.P-35: Protect the unique scenic features of Solano County, particularly hills, ridgelines, wetlands, and water bodies.

RS.P-36: Support and encourage practices that reduce light pollution and preserve views of the night sky.

RS.P-37: Protect the visual character of designated scenic roadways.

Regulations:

RS.I-20: Amend the Zoning Ordinance to:

- Include the area, policies and programs of the Tri-City and County Cooperative Plan for Agriculture and Open Space Preservation.
- Direct the use of lighting fixtures that reduce glare and light pollution. The ordinance should provide standards for the type and location of lighting fixtures in development projects.

RS.I-21: Preserve the visual character of scenic roadways as shown in Figure RS-5 through design review, designating alternate routes for faster traffic, regulating off-site advertising, limiting grading

34

in the view corridor through the grading ordinance, limiting travel speeds, and providing pullover areas with trash and recycling receptacles.

RS.I-22: In new developments, require the use of fixtures that direct light toward target areas and shield it from spillage.

6.0 IMPACT ANALYSIS

6.1 Scenic Vistas

Would the proposed Project cause substantial, adverse effects on a scenic vista?

As noted previously, the County's General Plan states that the "county's agricultural landscapes, the delta and marshlands, and the oak and grass covered hills offer an abundance of scenic vistas," however, no specific views or vistas are identified (Solano County 2008).

The Project site is agricultural in character with a wide variety of visual encroachments, including scattered ranch structures, agricultural buildings and infrastructure, fencing, local electrical distribution lines and high-voltage transmission lines, and roadways. There are no delta, marshlands, or oak and grass covered hills in the surrounding area. The Project would add energy storage facilities and infrastructure and reduce the amount of land under agricultural production. The Project facilities would have a consistent visual character with the existing local electrical distribution lines, high-voltage transmission lines, and the nearby Vaca-Dixon Substation.

Due to the orchards and residential and agricultural structures in the surrounding area, views of the Project from surrounding roadways would be limited to a short distance.

Goals of the General Plan Agricultural Reserve Overlay seek to maintain scenic agricultural landscapes resources along the I-80 corridor within the Agricultural Reserve Overlay areas. The Vacaville-Dixon Greenbelt is located approximately 0.7 mile northeast of the Project site, see Figure 3-14. Due to intervening vegetation and structures, most of the Project would not be visible from this area. If the Project gen-tie line can be seen, it would not attract attention of the casual viewer and would be consistent with the other transmission lines in the area. Therefore, less than significant impacts to scenic vistas are expected.

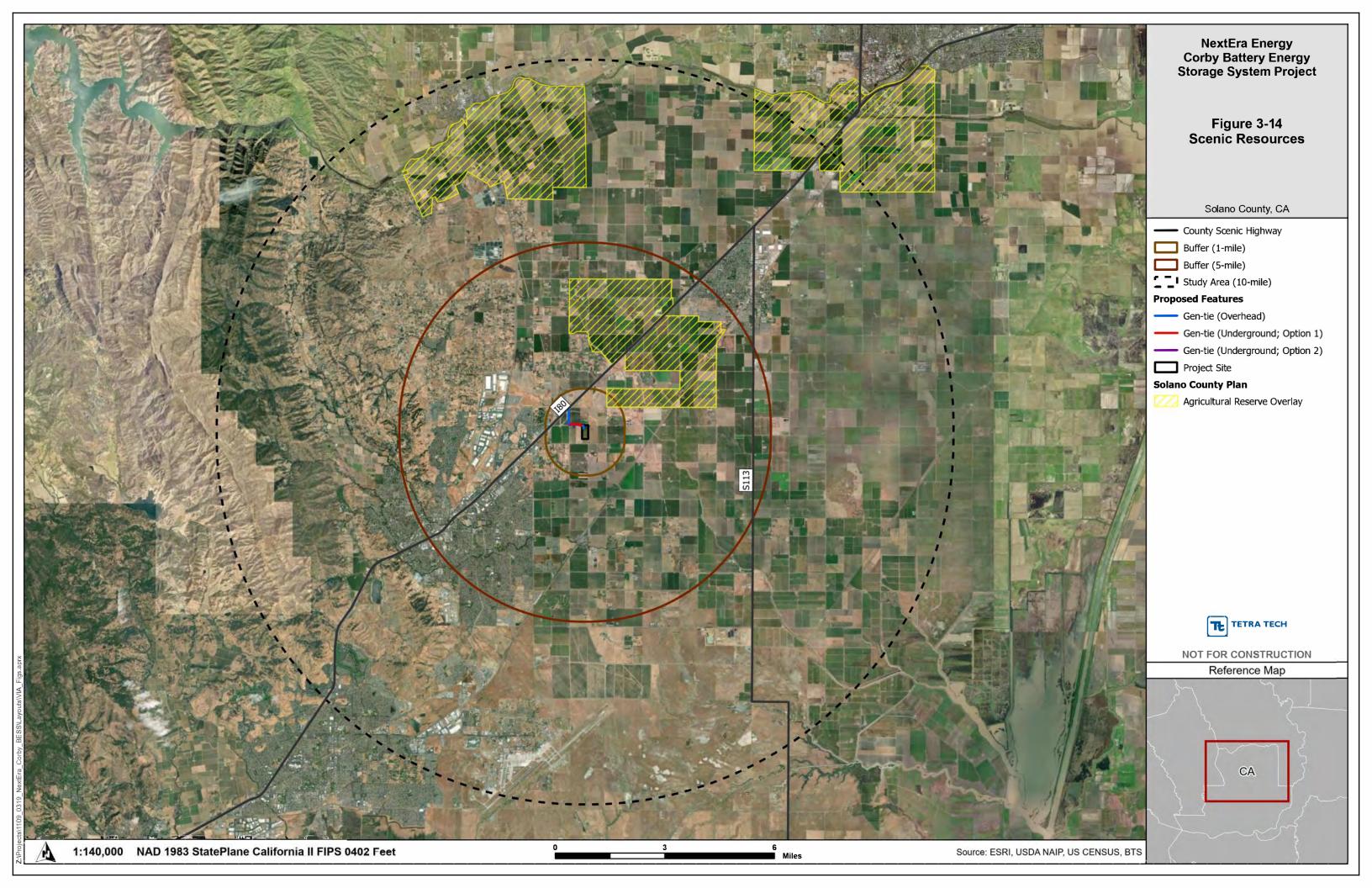
Level of Significance: Less than significant impact.

6.2 Scenic Highways

Would the proposed Project cause substantial damage to scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway?

There are no officially designated or eligible state scenic highways near the Project site, see Figure 3-14. I-80, located approximately 0.6 mile to the west and SR 113, located approximately 5 miles to the east of the Project site are designated as County scenic roadways (Solano County 2008). Due to the orchards and residential and agricultural structures in the surrounding area, the Project BESS facility would not be substantially visible, if visible at all, from these roadway corridors, and the Project gentie line would be consistent in appearance with the existing transmission line (see Figure 3-9). The Project would not involve damage to scenic resources, such as trees, rock outcroppings, and historic buildings. Based on general lack of visibility of the Project site, less than significant impacts to a scenic highway are expected.

36



6.3 Visual Character

In non-urbanized areas, would the proposed Project 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 point.)

6.3.1 Construction

The proposed Project would involve both temporary and permanent changes to the visual character of the site. Temporary changes are associated with construction activities, including construction equipment, staging, and Project construction. These visual impacts would be short-term in nature and are considered to be less than significant.

Level of Significance: Less than significant impact.

6.3.2 Operation

6.3.2.1 KOP 1

The Project gen-tie line and similar Project substation shield poles would be the only proposed components visible from this location and it would not likely be noticed by a casual observer (see Figure 3-9). Dominant visual elements would include the existing orchards and row crops, irrigation canal, and transmission tower and lines. The gen-tie line would introduce gray colors and horizontal and vertical lines into the landscape setting. The regular horizontal and vertical lines associated with the gen-tie line would result in a visual contrast with the irregular, organic forms of the existing vegetation but would be consistent with the horizontal lines associated with the orchards and row crops. In addition, existing structures in the vicinity possess horizontal and vertical lines and gray colors (roadway and transmission towers and lines).

While the gen-tie line and shield poles would be visible, they would blend in with the existing transmission lines and would not attract attention, resulting in a weak contrast. In addition, the existing Project site and adjacent properties landscape settings do not contain any unique scenic features and include a wide variety of visual encroachments.

This view was selected to represent views from I-80 and Kilkenny Road as seen by regional and local motorists, respectively. Views would be of short duration for regional motorists on I-80 due to likelihood of traveling at a high rate of speed, paralleling the Project site for a limited time, and intervening vegetation; and for local motorists, due to limited roadway, approximately one mile and intervening vegetation.

Therefore, due to the limited visibility and view duration, weak contrast, and lack of existing unique scenic features, impacts are considered to be less than significant.

38

6.3.2.2 KOP 2

KOP 2a

The Project BESS facility and fencing would be visible on the west side of Byrnes Road, replacing vacant field. Views would include existing row crops and utility poles and line located along the east side of Byrnes Road from the foreground to the middle ground, orchard and ornamental trees and transmission towers in the middle ground, and mountainous terrain in the distant background. The Project would introduce gray colors, geometric shapes, and horizontal and vertical lines into the landscape setting. The battery storage enclosures and fencing are predominately gray. The Project would be visible from this location by a casual observer, see Figure 3-10. The regular geometric forms and horizontal and vertical lines associated with the battery storage enclosures, fencing, and associated infrastructure would result in a visual contrast with the irregular, organic forms of the existing vegetation but would be consistent with the horizontal lines associated with the row crops and orchards. In addition, existing structures in the vicinity possess horizontal and vertical lines and gray colors (roadway, agricultural structure, and transmission towers and lines).

This view was selected to represent views from Byrnes Road as seen by local motorists traveling south. Appearing as new and visible features, the Project energy storage facilities would contrast with the undeveloped agricultural land but would be consistent with the horizontal and vertical lines and geometric shapes visible and colors of other man-made structures throughout the landscape. The Project would demand attention of the casual viewer and co-dominate the landscape setting, introducing a strong contrast.

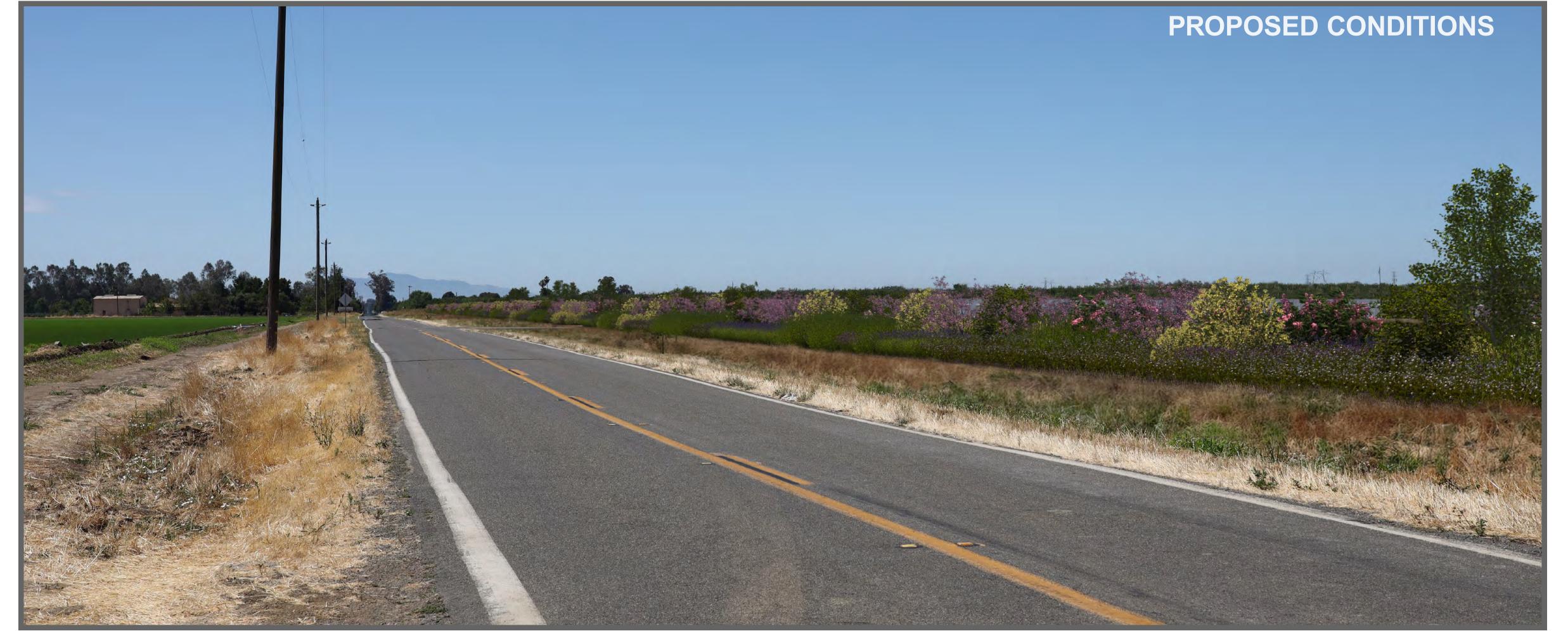
While the Project would introduce a strong contrast, the existing Project site and adjacent properties' landscape settings do not contain any unique scenic features and include a wide variety of visual encroachments. In addition, views for local motorists would be of short duration due to partial or full blockage of views by vegetation and structures prior to approaching the Project site, limiting view accessibility of the Project.

Proposed Project landscaping would soften the contrast between the agricultural land and the Project energy storage facilities. Project landscaping, shown in Figure 3-10, is after one year of growth. In approximately 5 years, as shown in Figure 3-15, trees will be approximately 9 to 13 feet tall and shrubs will be approximately 5 to 9 feet tall, depending on species. With the additional height and filling out, the landscaping will largely obscure the Project, reducing the contrast with agricultural land.

Therefore, due to the limited visibility and view duration, lack of existing unique scenic features, and reduction of contrast through landscaping, impacts are considered to be less than significant.

39



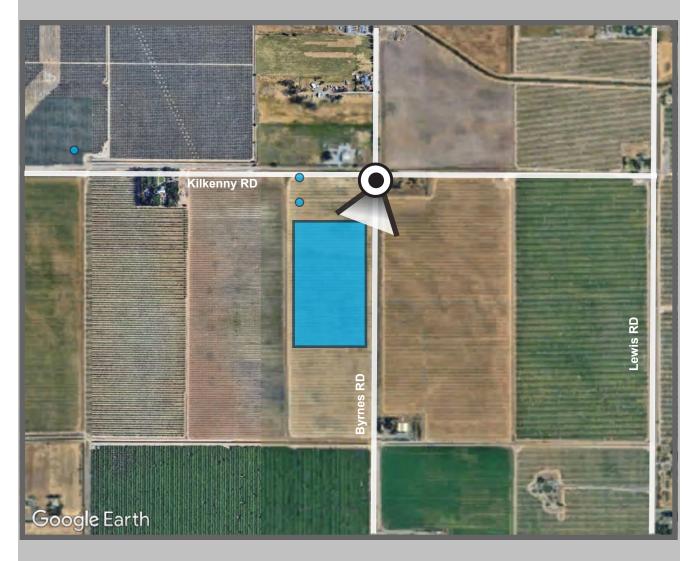


CORBY BATTERY ENERGY STORAGE SYSTEM PROJECT

Figure 3-15 KOP 2a

Simulation Conditions With Landscaping After 5 Years

Intersection of Byrnes Road and Kilkenny Road



VICINITY MAP

LEGEND

SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:59 AM

DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: SOUTH

LATITIUDE: 38.39519349°

LONGITUDE: -121.9058341°

DISTANCE TO BESS: .12 MILES

CAMERA TYPE: CANON EOS R5

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

DISCLAIMER: PRELIMINARY VISUALIZATIONS
ARE FOR REFERENCE ONLY; PROJECT
LAYOUT IS IN DEVELOPMENT AND SUBJECT
TO CHANGE.

KOP 2b

The Project sound barrier, substation, BESS facility, and fencing would be visible in the foreground, replacing vacant field. Views would include existing trees and transmission towers in the middle ground, and mountainous terrain in the distant background would be partially blocked. The Project would introduce gray colors, geometric shapes, and horizontal and vertical lines into the landscape setting. The Project substation, battery storage enclosures, fencing, and sound barrier are predominately gray. The Project would be visible from this location by a casual observer, see Figure 3-11. The regular geometric forms and horizontal and vertical lines associated with the battery storage enclosures, fencing, and associated infrastructure would result in a visual contrast with the irregular, organic forms of the existing vegetation but would be consistent with the horizontal lines associated with the row crops and orchards. In addition, existing structures in the vicinity possess horizontal and vertical lines and gray colors (roadway, agricultural structure, and transmission towers and lines).

This view was selected to represent views from Byrnes Road as seen by local motorists traveling south. As with the view from KOP 2a, appearing as new and visible features, the Project energy storage facilities would contrast with the undeveloped agricultural land but would be consistent with the horizontal and vertical lines and geometric shapes visible and colors of other man-made structures throughout the landscape. The Project sound barrier would partially block views in the middle ground of adjacent agricultural fields and in the background of mountains. The Project would demand attention of the casual viewer and dominate the landscape setting, introducing a strong contrast.

While the Project would introduce a strong contrast, the existing Project site and adjacent properties' landscape settings do not contain any unique scenic features and include a wide variety of visual encroachments. In addition, views for local motorists would be of short duration due to partial or full blockage of views by vegetation and structures prior to approaching the Project site, limiting view accessibility of the Project.

Proposed Project landscaping would soften the contrast between the agricultural land and the Project energy storage facilities. Project landscaping, shown in Figure 3-11, is after one year of growth. In approximately 5 years, as shown in Figure 3-16, trees will be approximately 9 to 13 feet tall and shrubs will be approximately 5 to 9 feet tall, depending on species. With the additional height and filling out, the landscaping will largely obscure the Project, reducing the contrast with agricultural land.

Therefore, due to the limited visibility and view duration, lack of existing unique scenic features, and reduction of contrast through landscaping, impacts are considered to be less than significant.





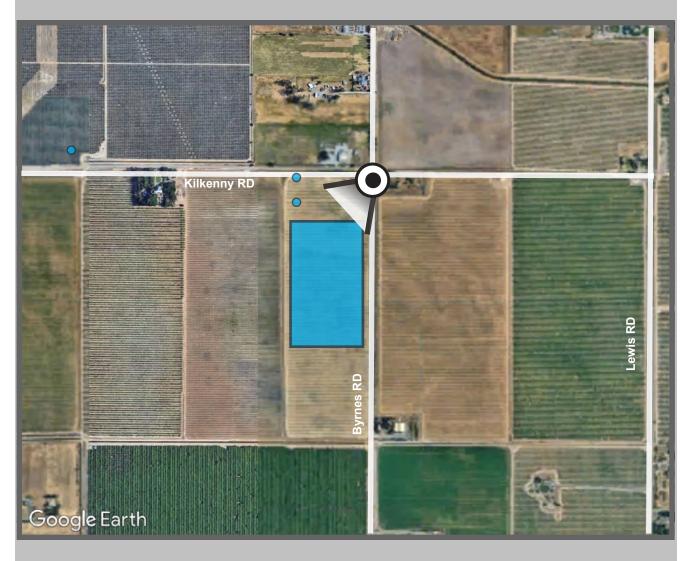
CORBY BATTERY ENERGY STORAGE SYSTEM PROJECT

Figure 3-16 KOP 2b

Simulation Conditions

WithLandscaping After 5 Years

Intersection of Byrnes Road and Kilkenny Road



VICINITY MAP

LEGEND

SIMULATED EQUIPMENT



KOP LOCATION WITH SIMULATION

PHOTOGRAPH INFORMATION

TIME: 11:59 AM DATE: 06/26/2024

WEATHER CONDITION: SUNNY

VIEWING DIRECTION: SOUTHEAST

LATITIUDE: 38.39519349°
LONGITUDE: -121.9058341°

DISTANCE TO BESS: .12 MILES

CAMERA TYPE: CANON EOS R5

LENS FOCAL LENGTH: 50MM

Preliminary Visualization

DISCLAIMER: PRELIMINARY VISUALIZATIONS
ARE FOR REFERENCE ONLY; PROJECT
LAYOUT IS IN DEVELOPMENT AND SUBJECT
TO CHANGE.

6.3.2.3 KOP 3

The Project BESS facility and fencing, substation, and soundwall would be visible on the west side of Byrnes Road, replacing vacant field. Views would include existing orchard and ornamental trees and transmission towers in the middle ground, and mountainous terrain in the background. The Project would introduce gray colors, geometric shapes, and horizontal and vertical lines into the landscape setting. The Project substation, battery storage enclosures, fencing, sound barrier, and gen-tie line are predominately gray. The Project would be visible from this location by a casual observer, see Figure 3-12. The regular geometric forms and horizontal and vertical lines associated with the Project substation, battery storage enclosures, fencing, gen-tie line, sound barrier, and associated infrastructure would result in a visual contrast with the irregular, organic forms of the existing vegetation, but would be consistent with the horizontal lines associated with the row crops and orchards. In addition, existing structures in the vicinity possess horizontal and vertical lines and gray colors (roadway, utility poles and lines, agricultural and residential buildings, and transmission towers and lines).

This view was selected to represent views from Byrnes Road as seen by local motorists traveling north. Similar to views from KOP 2a, the Project energy storage facilities would contrast with the undeveloped agricultural land but would be consistent with the horizontal and vertical lines and geometric shapes visible and colors of other man-made structures throughout the landscape. The Project would attract the attention of the casual viewer and begin to co-dominate the landscape setting, introducing a moderate contrast.

While the Project would introduce a moderate contrast, the existing Project site and adjacent properties' landscape settings do not contain any unique scenic features and include a wide variety of visual encroachments. In addition, views for local motorists would be of short duration due to partial or full blockage of views by vegetation and structures prior to approaching the Project site, limiting view accessibility of the Project. And as previously discussed, proposed Project landscaping would soften the contrast between the agricultural land and the Project energy storage facilities. Therefore, due to the limited visibility and view duration, lack of existing unique scenic features, and reduction of contrast through landscaping, impacts are considered to be less than significant.

Level of Significance: Less than significant impact.

6.3.2.4 KOP 4

The Project gen-tie line would be visible from this location; however, it would introduce colors and lines similar to the numerous existing transmission lines in the area. Dominant visual elements would include the existing freeway, transmission towers and lines, and orchards and ornamental trees. While the gen-tie line would be visible, it would blend in with the existing transmission lines and would not attract attention, resulting in a weak contrast.

This viewpoint reflects the views of drivers traveling along I-80, likely traveling at a high rate of speed. These impacts would be short term for travelers because they would only be approaching the Project site for a limited time and their focus would be on the road ahead. Therefore, due to the limited view duration and weak contrast, the impacts would be less than significant.

Level of Significance: Less than significant impact.

6.3.2.5 KOP 5

The Project gen-tie line would be barely visible from this location; however, it would introduce colors and lines similar to the existing transmission lines in the area. Dominant visual elements would include the agricultural field in the foreground to the middle ground with orchard and ornamental trees in the middle ground. While the gen-tie line would be visible, due to distance it would blend in with the existing transmission lines and would not attract attention, resulting in a weak contrast.

This view was selected to represent views from Lewis Road and the Vacaville-Dixon Greenbelt as seen by local motorists. Views of the Project gen-tie line would be in the middle ground and limited by intervening structures and vegetation, and motorists would be focused on the immediate foreground. Therefore, due to limited views, distance, and weak contrast, impacts are considered to be less than significant.

Level of Significance: Less than significant impact.

6.3.2.6 KOP 6

The Project gen-tie line would be barely visible from this location; however, it would introduce colors and lines similar to the existing transmission lines in the area, see Figures 3-13a and 3-13b. Dominant visual elements would include the undeveloped portions of the cemetery and agricultural field in the foreground to the middle ground, orchard and ornamental trees in the middle ground, and mountainous terrain in the background. While the gen-tie line would be visible, due to distance, it would blend in with the existing transmission lines and would not attract attention, resulting in a weak contrast.

This view was selected to represent views from Sacramento Valley National Cemetery as seen by visitors. Views of the Project site are limited by the surrounding orchards. Therefore, due to limited views, distance, and weak contrast, impacts are considered to be less than significant.

Level of Significance: Less than significant impact.

6.4 Light and Glare

Would the proposed Project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

The Project is not expected to create a substantial new source of nighttime lighting or daytime glare. The proposed Project would provide external safety lighting for both normal and emergency conditions at the primary access points. Lighting would be designed to provide the minimum illumination needed to achieve safety and security and would be downward-facing and shielded to focus illumination in the immediate area. All lighting associated with the proposed Project would comply with Solano County requirements. With the application of anti-reflective coatings, the Project would display overall low reflectivity. Therefore, the Project would have a less than significant impact associated with lighting and glare.

7.0 REFERENCES

- BLM (Bureau of Land Management). 1986. Manual 8431 Visual Resource Contrast Rating. January 17. https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_H8431.pdf. (accessed July 2024).
- BLM. 2010. Visual Resource Inventory. *BLM Manual Handbook H-8410-1*. November 11. https://www.nrc.gov/docs/ML1127/ML112710288.pdf (accessed July 2024).
- Caltrans (California Department of Transportation). 2024. California Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e80 57116f1aacaa (accessed July 2024).
- FHWA (Federal Highway Administration). 2024. America's Byways, California, Central Valley Section Map. Available online at: https://www.fhwa.dot.gov/byways/states/CA/maps/Central Valley (accessed July 2024).
- Solano County. 2008. Solano County General Plan. Chapter 4, Resources. August 5, 2008. Available online at: https://www.solanocounty.com/depts/rm/planning/general_plan.asp (accessed July 2024).

APPENDIX 4.1-B: LANDSCAPE PLAN

NEXTERA

SHEET

STREETSCAP

BY

IRRIGATION PROGRAM

11 (1 (10) (110) (1				
DETAIL REFERENCE	PLAN VIEW SYMBOL	APPURTENANCE	MODEL NUMBER	MANUFACTURER/ NOTES
1/I-1	C	WATER TRUCK CAM COUPLER, POINT OF CONNECTION	RAGCO PF40C 64544000, OR EQUAL	CAM COUPLER, STAINLESS STEEL, 4" SIZE, RAGCO PRODUCTS AVAILABLE THROUGH CAPITOL RUBBER AND GASKET, SACRAMENTO (800) 662-1800.
2/I-1		SUPPLY LINE PIPE		NON-POTABLE WATER IRRIGATION SUPPLY LINE, SCH 40 PVC PURPLE PIPE, SIZE PER CHART, 12" MINIMUM BURIAL, INSTALL PER SPECIFICATIONS. INSTALL THRUST BLOCKS ON LINES 3" AND LARGER, SEE DETAIL 2, THIS SHEET.
2/I-1	NOT SHOWN	SUPPLY LINE TUBING	RAINBIRD XBS, OR EQUAL	NON-POTABLE WATER IRRIGATION SUPPLY LINE, BLANK TUBING EXTRUDED FROM POLYETHYLENE, SIZE PER CHART, 12" MINIMUM BURIAL, INSTALL PER SPECIFICATIONS
3/I-1	NOT SHOWN	FLEXIBLE RISER	RAINBIRD PFR, PFR-FRA, HUNTER IH-RISER-XX-R, OR EQUAL	PRE-ASSEMBLED FLEXIBLE RISER FOR CONNECTING DRIP EMITTER TO SUPPLY LINE, WITH NON-POTABLE WATER FITTINGS, INSTALL SO EMITTER IS LOCATED 3" ABOVE AND OVER THE TOP OF THE ROOTBALL AND PER SPECIFICATIONS
2/1-1	====	SLEEVING		NEW SLEEVE UNDER DRIVEWAY, EXTEND 1' BEYOND EACH SIDE OF PAVEMENT, INSTALL SCHEDULE 40 PVC PIPE, SIZE SHALL BE TWICE THE DIAMETER OF PIPE BEING RECEIVED BY SLEEVE
PER MANUFACTURER	NOT SHOWN	AIR RELIEF VALVE	RAINBIRD ARV050, OR EQUAL	AIR RELIEF VALVE AT HIGH POINT IN LINE, UTILIZE MINIMUM ONE ARV FOR EVERY 6.5 GPM (390 GPH) OF FLOW. THIS PROJECT WILL REQUIRE A MINIMUM OF 57 ARVs (19 FOR EACH ZONE). INSTALL INSIDE 9" PURPLE SUBTERRANEAN EMITTER BOX
PER MANUFACTURER	NOT SHOWN	FLUSH VALVE	HUNTER AFV-T, OR EQUAL	FLUSH VALVE AT END OF EACH SUPPLY LINE TUBE. INSTALL INSIDE 9" PURPLE SUBTERRANEAN EMITTER BOX.
3/I-1	NOT SHOWN	DRIP EMITTER	RAINBIRD PC-T-05-1032, HUNTER HE-050-T, OR EQUAL	1/2" PRESSURE COMPENSATING 5 GPH THREADED DRIP EMITTER, 5 PER TREE, 1 PER ALL OTHER PLANTS, INSTALL ON THREADED END OF FLEXIBLE HOSE OR PVC RISER, 4' MAXIMUM LENGTH FROM LATERAL SUPPLY LINE.

SUPPLY LINE PIPE (PVC SCH 40 PURPLE) SIZING CHART

NUMBER OF EMITTERS (5 GPH)	1-84	84-168	167-264	265-360	361-600	601-780	781-1320	1321-2160
PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"

SUPPLY LINE TUBING (POLYETHYLENE) SIZING CHART

	NUMBER OF EMITTERS (5 GPH)	1-48	49-90			
	TUBING SIZE	1/2"	3/4"			

IRRIGATION SCHEDULE -- NORTH ZONE

IRRIGATION	WATER TRUCK TANK SIZE	SYSTEM FLOW RATE (GPM)	WATERING INTERVAL: DAYS PER WEEK / TRUCK							
ZONE	(GALLONS)		NOV - FEB	MAR	APR, OCT	MAY, JUN, AUG	JUL	SEP		
NORTH	2,000	123	1	3	4	6	7	5		

WATER USE IS ANTICIPATED TO BE APPROXIMATELY 332,180 GALLONS/YEAR (APRIL-OCTOBER)

IRRIGATION SCHEDULE -- CENTRAL ZONE

IRRIGATION		SYSTEM FLOW RATE (GPM)	WATERING INTERVAL: DAYS PER WEEK / TRUCK						
ZONE	(GALLONS)		NOV - FEB	MAR	APR, OCT	MAY, SEP	JUN, JUL	AUG	
CENTRAL	2,000	121	1	3	4	5	7	6	

WATER USE IS ANTICIPATED TO BE APPROXIMATELY 331,880 GALLONS/YEAR (APRIL-OCTOBER)

IRRIGATION SCHEDULE -- SOUTH ZONE

IRRIGATION ZONE	WATER TRUCK TANK SIZE	SYSTEM FLOW RATE (GPM)	WATERING INTERVAL: DAYS PER WEEK / TRUCK						
	(GALLONS)		NOV - FEB	MAR	APR, OCT	MAY, SEP	JUN, JUL	AUG	
CENTRAL	2,000	120	1	3	4	5	7	6	

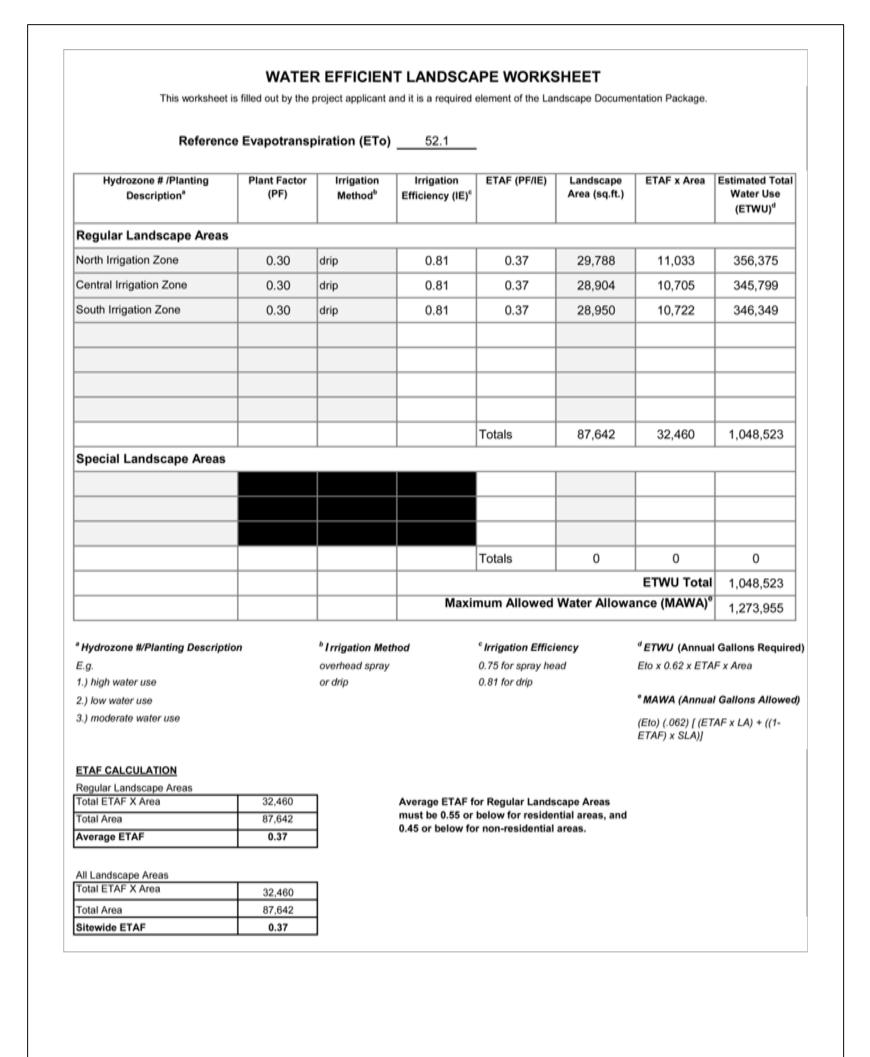
WATER USE IS ANTICIPATED TO BE APPROXIMATELY 331,880 GALLONS/YEAR (APRIL-OCTOBER)

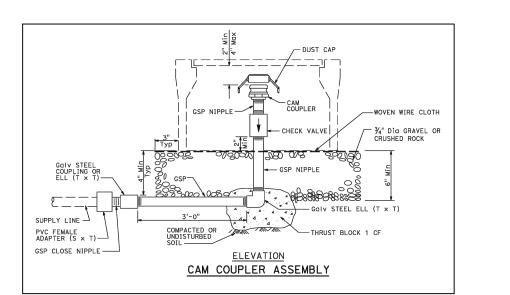
IRRIGATION SCHEDULE NOTES

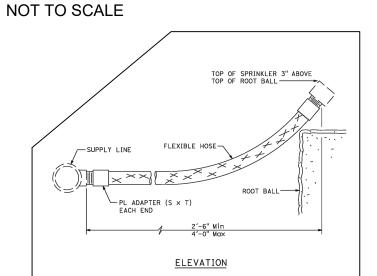
- 1. THIS PROJECT WILL BE WATERED BY A WATER TRUCK THAT WILL ATTACH TO A CAM COUPLING. THE PROJECT DESIGN ASSUMES A 2,000 GALLON TANK WATER TRUCK AND IS DESIGNED FOR A MAXIMUM 50 PSI AT THE POINT OF CONNECTION. THE FLOW OF THE PIPE AT THE NORTH POINT OF CONNECTION IS 123.33 GPM, AT THE CENTRAL POINT OF CONNECTION IS 121.0 GPM, AND AT THE SOUTH POINT OF CONNECTION IS 119.75 GPM. FOR ALL THREE ZONES, A 2,000 GALLON TANK WOULD BE EMPTIED IN ABOUT 16-17 MINUTES
- 2. WATERING TIMES ARE BASED ON DAILY APPLICATION RATES (IN INCHES) BASED ON AVERAGE EVAPOTRANSPIRATION RATES FOR VACAVILLE/DIXON; DUE TO UNFORESEEN SITE CONDITIONS AND WEATHER, THE IRRIGATION SYSTEM RUN TIME MAY NEED TO BE ADJUSTED AS NECESSARY TO ENSURE THAT PROPER MOISTURE IS MAINTAINED IN THE LANDSCAPE.
- 3. THE IRRIGATION SCHEDULE SHALL BE SCALED BACK BY 20% 30% EACH YEAR OVER THE 3 YEAR ESTABLISHMENT PERIOD TO ALLOW FOR COMPLETE SHUTOFF OF IRRIGATION BY YEAR 3-5. PLANTS SHALL BE OBSERVED FOR DROUGHT STRESS MULTIPLE TIMES DURING THE IRRIGATION SEASON AFTER REDUCTION IN APPLIED WATER. SHOULD DROUGHT STRESS BE OBSERVED, THE IRRIGATION SCHEDULE SHALL BE ADJUSTED ACCORDINGLY

EMITTER QUANTITIES (SEE PLANTING PLANS)

PLANT TYPE	QUANTITY OF EMITTERS
TREE	5
SHRUB	1
HERBACEOUS	1

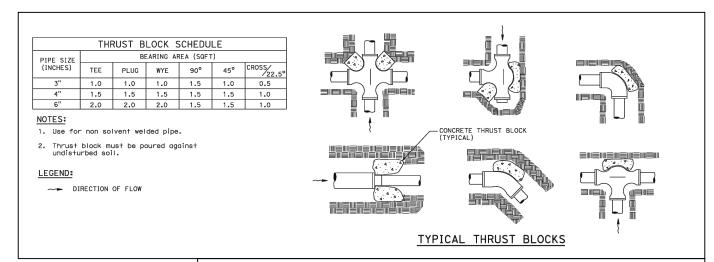


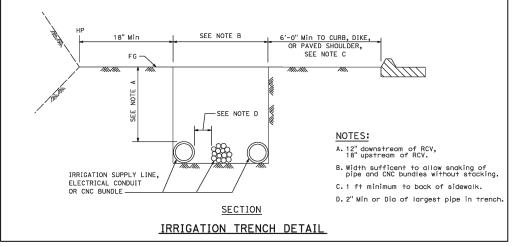




CAM COUPLER ASSEMBLY







IRRIGATION THRUST BLOCKS & TRENCHING

NOT TO SCALE

GENERAL IRRIGATION NOTES

- SEE TECHNICAL SPECIFICATIONS AND GENERAL NOTES FOR ADDITIONAL INFORMATION TO CONSIDER IN IRRIGATION SYSTEM INSTALLATION INCLUDING INFRASTRUCTURE AND UTILITIES PROTECTION AND REPAIR INFORMATION.
- IRRIGATION MAINLINE AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY TO CONVEY INSTALLATION INTENT WITH GRAPHIC CLARITY. THE CONTRACTOR SHALL NOT INSTALL THE IRRIGATION SYSTEM AS DIAGRAMMATICALLY SHOWN IF OBSTRUCTIONS, INFRASTRUCTURE, GRADE CHANGES, OR OTHER BARRIERS EXIST IN THE FIELD THAT MIGHT NOT HAVE BEEN FORESEEN, CONSIDERED, OR IN EXISTENCE DURING IRRIGATION DESIGN. NOTIFY OWNER'S REPRESENTATIVE IF THE INSTALLATION OF THE SYSTEM IS NOT FEASIBLE AS DIAGRAMMATICALLY SHOWN PRIOR TO PROCEEDING. IF CONFLICTS ARE NOT REPORTED TO THE OWNER'S REPRESENTATIVE, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY CHANGES REQUIRED TO MAKE THE SYSTEM FULLY FUNCTIONAL AT NO ADDITIONAL COST TO OWNER.
- 3. THIS IRRIGATION SYSTEM IS DESIGNED TO UTILIZE A WATER TRUCK AS THE POINT OF CONNECTION. SEE IRRIGATION SCHEDULE NOTES.
- 4. CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- FOLLOW ALL LOCAL CODES WHEN INSTALLING IRRIGATION SYSTEM. FOLLOW MANUFACTURER'S SPECIFICATIONS DURING INSTALLATION. NOTIFY OWNER'S REPRESENTATIVE OF ANY CODE CONFLICTS WITH THE DESIGN PRIOR TO STARTING WORK.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW. THE CONTRACTOR SHALL INSTALL MATERIALS AND EQUIPMENT TO PROVIDE THE MOST EFFICIENT AND OPTIMUM OPERATING SYSTEM. FIELD ADJUSTMENTS MAY BE REQUIRED.
- 7. THE CONTRACTOR SHALL USE COMMON TRENCHES WHEREVER POSSIBLE. COMMON TRENCHES SHALL BE LOCATED WITHIN IRRIGATED AREAS WHEREVER POSSIBLE. TRENCHES SHALL BE LOCATED ALONG FENCES. EDGES OF DRIVEWAYS, OR TOPS OF DITCHES. TRENCHES SHALL BE LOCATED 12" FROM SIDEWALKS, TRAILS, OR WALLS UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL PRESSURE AND LEAK TEST IRRIGATION LINES PRIOR TO BACKFILLING TRENCHES. THE CONTRACTOR SHALL MAKE ANY ADJUSTMENTS REQUIRED TO SYSTEM TO ENSURE OPERABILITY PRIOR TO **BACKFILLING TRENCHES.**
- 9. SLEEVES SHALL BE INSTALLED UNDER ENTRYWAY DRIVEWAYS PRIOR TO DRIVEWAY CONSTRUCTION. IN THE EVENT SLEEVES ARE NOT INSTALLED CORRECTLY AND DAMAGE OCCURS TO THE DRIVEWAY, CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL WORK REQUIRED TO MITIGATE THE DAMAGE AT NO ADDITIONAL COST TO OWNER.
- 10. ALL IRRIGATION COMPONENTS SHALL BE PURPLE IN COLOR WHEN AVAILABLE. THE CONTRACTOR SHALL INFORM THE LANDSCAPE CONSTRUCTION INSPECTOR IF PURPLE-COLORED COMPONENTS ARE NOT AVAILABLE PRIOR TO PURCHASING AND INSTALLING COMPONENTS.
- 11. THE CONTRACTOR SHALL WARRANTY ALL IRRIGATION WORK FOR A PERIOD OF 1 YEAR.
- 12. PRIOR TO TRENCHING, CALL UNDERGROUND SERVICE ALERT, (800) 642-2444 FOR NORTHERN CALIFORNIA.
- 13. THIS CALIFORNIA NATIVE PLANTING PROJECT IS NOT SUBJECT TO THE COUNTY'S WATER EFFICIENT LANDSCAPE ORDINANCE; HOWEVER, THIS DESIGN MEETS THE REQUIREMENTS OF THE MAXIMUM APPLIED WATER ALLOWANCE.

PLANT PROGRAM, NOTES AND DETAILS







0,0	NON	
200	LANDSCAPE ARCHITECT: P WELLER	

STREETSC

BY

RESOURCES

>

ENERG

NEXTERA

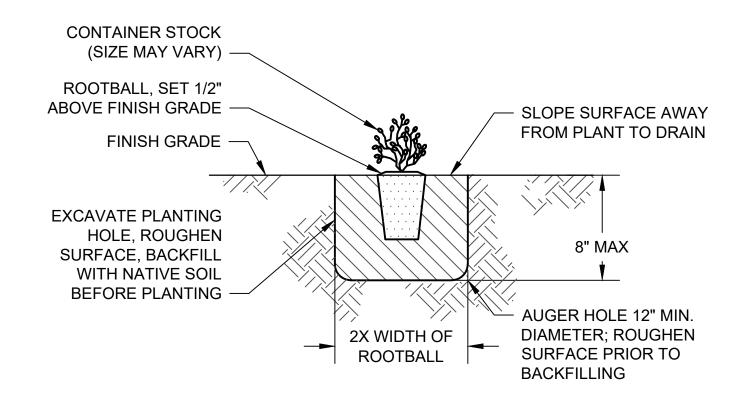
GENERAL PLANTING NOTES

- SEE TECHNICAL SPECIFICATIONS AND GENERAL NOTES FOR ADDITIONAL INFORMATION TO CONSIDER IN PLANTING INSTALLATION INCLUDING INFRASTRUCTURE AND UTILITIES PROTECTION AND REPAIR INFORMATION.
- 2. PLANTS SELECTED ARE CALIFORNIA NATIVE AND SMALLER IN SIZE BECAUSE WATER SERVICE IS NOT AVAILABLE AT THE SITE AND WILL BE TRUCKED IN FOR IRRIGATION PURPOSES. SMALLER PLANT MATERIAL ADAPTED TO SURVIVE WITHOUT IRRIGATION ONCE ESTABLISHED HAS BEEN PROPOSED INSTEAD. THE SMALLER PLANT MATERIAL WILL GROW TO A MATURE SIZE JUST AS QUICKLY.
- CONTRACTOR SHALL MAINTAIN ALL PLANTING WORK FOR A PERIOD OF 180 CONTINUOUS CALENDAR DAYS (PLANT MAINTENANCE PERIOD). THE 180 DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY FOLLOWING THE FINAL ACCEPTANCE OF THE INSTALLATION. ALL SITE PREPARATION AND SOIL AMENDMENTS SHALL BE COMPLETED AND APPROVED BY THE RESTORATION ECOLOGIST PRIOR TO INITIATING PLANTING.
- 4. ALL CONTAINER PLANTS MUST BE PLANTED WITHIN 3 WORKING DAYS FOLLOWING DELIVERY TO THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND PROTECTING ALL PLANTS AND MATERIALS STORED ON-SITE.
- 5. PLANTING IS RECOMMENDED FOR OCTOBER AND NOVEMBER. PLANTING SHALL ONLY OCCUR WHEN ENVIRONMENTAL CONDITIONS ARE FAVORABLE FOR SUCH ACTIVITIES, AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND BASED ON STANDARD HORTICULTURAL PRACTICES. PLANTING SHALL NOT TAKE PLACE IF TEMPERATURES ARE UNSEASONABLY HIGH OR IF THE SITE IS EXCESSIVELY WET OR MUDDY.
- 6. CONTAINER PLANTS SHALL BE PLANTED PER DETAIL(S), AND SHALL BE WATERED IN THOROUGHLY IMMEDIATELY AFTER BEING PLANTED.
- 7. APPLY 4 INCH LAYER OF MULCH BETWEEN PLANTS THROUGHOUT IRRIGATED PLANTING AREA.
- 8. PLANT MATERIAL HAS BEEN SELECTED AND IS INTENDED TO SURVIVE WITHOUT SUPPLEMENTAL WATER AFTER A PERIOD OF THREE YEARS OR LESS. THE CONTRACTOR SHALL PROVIDE SUPPLEMENTAL WATER TO PLANTS DURING PERIODS WHERE RAINFALL DOES NOT PROVIDE ADEQUATE WATER FOR PLANTING SUCCESS AND ESTABLISHMENT. SEE IRRIGATION SCHEDULE ON IRRIGATION PLAN. SUPPLEMENTAL WATER SHALL BE PROVIDED FOR A PERIOD OF UP TO THREE YEARS FROM TIME OF PLANTING. THE SUPPLEMENTAL WATER SHALL BE PROVIDED FROM A TEMPORARY IRRIGATION SYSTEM. IF A TEMPORARY IRRIGATION SYSTEM IS SELECTED BY THE OWNER REPRESENTATIVE, THE DESIGN AND INSTALLATION, AND THE EVENTUAL DECOMMISSIONING AND REMOVAL, OF THE SYSTEM WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. THE LOW WATER USE PLANT SELECTION AND APPROACH TO SUPPLEMENTAL WATER SATISFIES THE REQUIREMENTS OF THE STATE OF CALIFORNIA'S MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
- 9. LANDSCAPE PLANTINGS WILL BE MAINTAINED TO ALLOW FOR VISUAL ACCESS FROM ROADWAY TO PREVENT CRIME. THE LANDSCAPE WILL BE MAINTAINED TO ELIMINATE WEEDS, DEBRIS, AND UNDESIRABLE MATERIALS.

CORBY PLANT PROGRAM **AVERAGE** PLANT SPECIES NAME GROWTH 1 YEAR 5 YEAR MATURE PLANTING QUANTITY **PLANTING SPACING** PROPAGULE/ | HEIGHT (FT) | HEIGHT (FT) | NOTES % OF RATE (FT) AREA (FEET PLANTING DETAIL WATER USE CONTAINER PLAN VIEW PLANT ON-CENTER) REFERENCE BOTANICAL **EVERGREEN?** SYMBOL ZONE COMMON PER WUCOLS PALETTE SIZE JUGLANS HINDSII NORTHERN CALIFORNIA BLACK WALNUT NO MEDIUM 39% JUG HIN TREE 1/P-1 PLATANUS RACEMOSA CALIFORNIA SYCAMORE MEDIUM 25% NO TP4 PLA RAC QUERCUS LOBATA VALLEY OAK TP4 2-3 QUE LOB LOW 36% NO CEANOTHUS OLIGANTHUS HAIRY CEANOTHUS 1-GAL 8-10 LOW 10% YES WESTERN REDBUD **CERCIS OCCIDENTALIS** 10-20 LOW 5% NO 1-GAL FRANGULA CALIFORNICA SHRUB 1/P-1 CALIFORNIA COFFEEBERRY LOW 10% YES 1-GAL HETEROMELES ARBUTIFOLIA TOYON LOW 15% YES TP4 132 1-2 10-20 PRUNUS ILICIFOLIA HOLLY LEAF CHERRY 87641 SF LOW 5% YES 1-GAL **ASCLEPIAS FASCICULARIS** NARROW LEAF MILKWEED LOW 10% YES DEEPOT DIPLACUS AURANTICUS ORANGE BUSH MONKEY FLOWER LOW 5% 345 YES DEEPOT PLANT IN CLUSTERS **EPILOBIUM CANUM** CALIFORNIA FUCHSIA LOW 10% NO DEEPOT OF 5-7, 3-4' 685 **HERBACEOUS** 2/P-1 ERIOGONUM FASCICULATUM CALIFORNIA BUCKWHEAT LOW 10% YES DEEPOT 1-2 1-2 SPACING MUHLENBERGIA RIGENS DEER GRASS LOW 5% YES **DEEPOT** WITHIN CLUSTERS **HUMMINGBIRD SAGE** SALVIA SPATHACEA LOW 10% YES **DEEPOT** STIPA PULCHRA PURPLE NEEDLE GRASS LOW 5% DEEPOT 345 1-2 1-2 YES

PLANTING PROGRAM NOTES

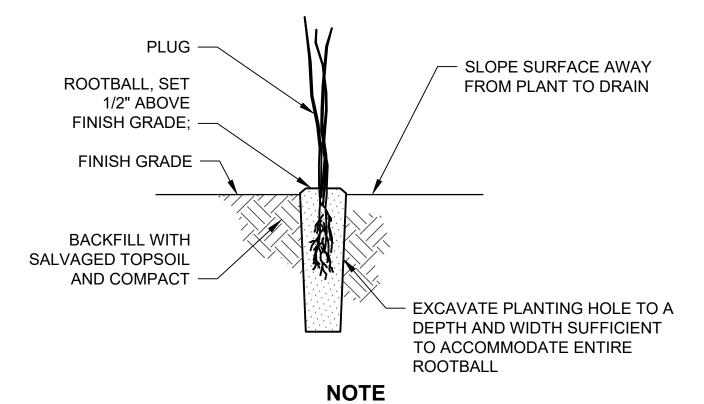
- PLANTS INDICATED TO BE INSTALLED IN CLUSTERS MAY BE RANDOMLY PLACED PER THE ENGINEER'S GUIDANCE; TOTAL SPECIES QUANTITIES WILL REMAIN THE SAME.
- 2. QUANTITIES SHOWN ARE TOTAL INDIVIDUALS, NOT TOTAL CLUSTERS
- 3. ALL PLANTING LOCATIONS WILL BE PIN FLAGGED PRIOR TO PLANTING USING UNIQUE FLAGS FOR EACH SPECIES.



1. PROVIDE WEED AND MULCH FREE ZONE AROUND PLANTING SITE ACCORDING TO THE SPECIFICATIONS.

NOTE

1-GALLON AND TREEPOT 4 PLANTING NOT TO SCALE (P-1)



1. PROVIDE WEED AND MULCH FREE ZONE AROUND PLANTING SITE ACCORDING TO THE SPECIFICATIONS.

DEEPOT PLANTING NOT TO SCALE

PLANT PROGRAM, NOTES AND DETAILS \



