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Attachment 6

Revised Section 3.13, Visual Resources

3.13 Visual Resources

This section describes the visual resources present in the vicinity of the Potentia-Viridi Battery Energy Storage System (BESS) Project (Project) as well as the potential impacts to visual resources that may result from construction, operation, maintenance, and decommissioning of the Project. Section 3.13.1 describes the existing environment that could be affected, including regional and local visual resources. Section 3.13.2 provides an overview of the regulatory setting related to visual resources. Section 3.13.3 identifies potential environmental impacts that may result from Project construction, operation, maintenance, and decommissioning. Section 3.13.4 discusses cumulative effects. Section 3.13.5 identifies mitigation measures that should be considered during Project construction, operation, maintenance, and decommissioning. Section 3.13.6 presents laws, ordinances, regulations, and standards (LORS) applicable to visual resources. Section 3.13.7 identifies regulatory agency contacts and Section 3.13.8 describes permits required for the Project related to visual resources. Section 3.13.9 provides references used to develop this section.

3.13.1 Affected Environment

3.13.1.1 Regional Setting

The Project site and gen-tie route area are adjacent to Pacific Gas and Electric (PG&E's) Tesla Substation. In addition to the PG&E Tesla Substation, the Project site and gen-tie route are surrounded by undeveloped grasslands, pasture, rural roads, a railroad line, multiple high-voltage transmission lines, and scattered low density residential. The zones and land use designations of the Project site and surrounding area are predominantly Agriculture (A). The nearest residence is approximately 1,500 feet southeast of the Project site and 560 feet south of the proposed gen-tie line. A large wind farm occupies the ridgelines and the upper slopes approximately 3 miles west of the Project site. The area surrounding the Project site is also crisscrossed with overhead transmission lines and associated lattice steel towers that serve the wind farm and the adjacent PG&E Tesla Substation. Other surrounding infrastructure includes Patterson Pass Road and the Southern Pacific railroad, which runs southeast to northwest near the Project site's southern border. The Alameda County/San Joaquin County line is approximately 0.6 miles east of the Project site and approximately 0.5 miles east of the proposed gen-tie line. The City of Tracy is approximately 2.5 miles to the east of the Project site in neighboring San Joaquin County.

Topography

The Project site is situated within the Diablo Mountain Range. The Project site lies on the east facing slopes of the range that extend from the Altamont Pass area at the ridgeline down to the San Joaquin Valley to the east. Generally, the terrain increases in elevation from east to west climbing from the valley bottom near the City of Tracy (approximately 20 feet AMSL) to the ridgeline near Altamont Pass at an elevation of approximately 800 feet AMSL. Slope also increases from east to west while ascending towards the pass with the steepest slopes generally near the ridgeline or on the upper third of the slope.

Vegetation

The Project site and surrounding area contain California annual grassland vegetation typical of the Diablo Mountain Range around Altamont Pass. Vegetation communities are dominated by non-native species, including the non-native soft chess (*Bromus hordeaceus*) and ripgut brome (*Bromus diandrus*) as dominant species. Shortpod mustard (*Hirschfeldia incana*) also occurs in varying densities throughout the grassland. Scattered trees and brush

are present in isolated patches along creeks or wet drainages. Developed sites such as homes and ranches in the surrounding area include landscaping with a mix of shade trees and ornamental vegetation.

3.13.1.2 Project Site

The Project would be sited within Assessor's Parcel Number (APN) 99B-7890-002-04 located at 17257 Patterson Pass Road in unincorporated eastern Alameda County, California, southwest of I-580 and I-205 (see Figure 2-1, Regional Map and Figure 2-3, Project Site Aerial, in Chapter 2, Project Description). Development of the BESS facility would occur ~~on about~~ within a 70 acres leased area of APN 99B-7890-002-04, which currently consists of fallowed annual grasslands suitable for grazing. Of the approximately 70-acre lease area, approximately 58.8 acres would be permanently disturbed for development of the BESS facility. The gen-tie line would extend southeast from the Project substation, crossing Patterson Pass Rd, and then proceed east to the Point of Interconnection (POI) at the Tesla Substation. The Project's gen-tie line would be sited on APNs 99B-7890-2-4, 99B-7890-2-6, and 99B-7885-12. As shown on Figure 2-3, Project Site Aerial, a gen-tie study area of approximately 32 acres was evaluated. Out of the 32 acres evaluated, only 1.9 acres are expected to be permanently disturbed for installation of the transmission and interconnecting facilities, with 6.7 acres of temporary disturbance (Table 2-4). A total of 60.7 acres within the approximately 102-acre project area would be permanently disturbed as part of Project implementation.

~~Development associated with the BESS facility would occur on approximately 70 acres of APN 99B-7890-002-04 that currently consists of vacant agricultural farmland used for cattle grazing and natural topography including small rolling hills. The Project's proposed gen-tie line would extend southeast from the Project substation across Patterson Pass Road and vacant natural land to the PG&E Tesla Substation. Elevation on the Project site ranges from approximately 400 feet AMSL at Patterson Pass Road to approximately 470 feet AMSL at the highest point on the hill to the west. Development associated with the BESS facility would occur on a low hill or rise that is located on the east side of APN 99B-7890-002-04. The Project's gen-tie line would be sited on APNs 99B-7890-2-4, 99B-7890-2-6, and 99B-7885-12.~~ As discussed above, the Project site contains California annual grassland vegetation typical of the Diablo Mountain Range around Altamont Pass. There are no trees, significant geologic features, or other distinguishing features present on or adjacent to the Project site. Bushy brown shrubs line the Project-site's post-and-wire fencing adjacent to Patterson Pass Road.

Lighting

The landscape surrounding the Project is primarily agricultural land use and therefore has limited sources of artificial light at nighttime. The nighttime viewing conditions are influenced by existing lighting from rural residents, the PG&E Tesla Substation, and red safety lights related to wind turbines visible along the horizon to the west. No street lighting exists along nearby highways or local roadways; however, intermittent/temporary lighting from cars and trucks are present along nearby highways (i.e., I-580 and I-205) and local roadways, including Patterson Pass Road.

Project Visibility and Viewshed

The Project viewshed is defined as the general area from which the Project would be visible. For the purpose of describing a Project's visual setting and assessing potential visual impacts, the viewshed can be divided into distance zones of foreground, middle ground, and background views. The foreground is defined as the distance between the viewer and 0.25 to 0.5 miles; landscape detail is most noticeable, and objects generally appear most prominent when seen in the foreground. The middle ground is 0.5 to 3 miles from the viewer, and the background extends beyond 3 to 5 miles from the viewer (FHWA 2015). Objects in the middle ground are typically

distinguishable but not at a detailed level. Objects in the background are typically only distinguishable if they are large, contrast in color from the surrounding landscape or extend above the horizon.

In the analysis of the Project, emphasis is placed on the potential effects on foreground viewshed conditions, although consideration is also given to the potential effects on the more distant views. Project visibility includes publicly accessible locations, such as along nearby roads and highways.

Scenic Resources

Objects of aesthetic significance (i.e., scenic resources) within 5 miles of the Project site include scenic roadways, scenic highways, and recreation areas. These resources are illustrated in Figure 3.13-1, Scenic Resources. I-580 is an officially designated state scenic highway from south of the I-205 interchange to State Route 152 and is an eligible state scenic highway from west of the I-205 interchange to the City of San Leandro (Caltrans 2024). The designated alignment of I-580 is approximately 1.5 miles northeast of Project site and approximately 1.6 miles northeast of the proposed gen-tie line at its nearest points. The eligible alignment of I-580 is approximately 1.7 miles north of the Project site and approximately 2 miles north of the proposed gen-tie line at its nearest points. I-580 is also categorized as one of the County's Scenic Freeways and Expressways in the Alameda County General Plan Scenic Route Element (Scenic Route Element) (Alameda County 1994a). Due to distance and intervening topography, the Project site is not currently visible from the eligible or designated alignments of I-580; however, the proposed gen tie line may be partially visible from the designated alignment of I-580 due to the height of the gen-tie line.

Patterson Pass Road (adjacent to the Project site to the east) is mapped as a Major Rural Road and qualifies as a Scenic Rural-Recreation Route per the Scenic Route Element (Alameda County 1994a). Both the Project and proposed gen-tie line would be visible from approximately 0.50 miles of Patterson Pass Road. The gen-tie line would be visible from a further distance on Patterson Pass Road,

Recreation areas within a 5-mile radius of the Project site include the Bethany State Reservoir Recreational Area (approximately 4.3 miles northwest) and the Carnegie State Vehicular Recreation Area (approximately 5 miles south). Due to intervening distance and topography, the Project and proposed gen-tie line would not be visible from these recreation areas. There are no other areas recognized for their aesthetic, botanical, or ecological value within a 5-mile radius of the Project site. Furthermore, no man-made features that are unique or represent significant innovation are present within this radius.

Scenic Vistas

Scenic vistas are generally interpreted as long-range public views of a specific scenic feature (e.g., open space lands, mountain ridges, bay, or ocean views). Public views are those that can be seen from vantage points that are publicly accessible, such as streets, highways, parks, and vista points. The East County Area Plan (ECAP) designates visually sensitive ridgelines, including those of Pleasanton, Main, and Sunol Ridges west of Pleasanton; ridgelines of Schafer, Shell, Skyline, Oak and Divide Ridges west of Dublin and the ridgelines above Doolan Canyon east of Dublin; ridgelines above Collier Canyon and Vasco Road and the ridgelines surrounding Brushy Peak north of Livermore; ridgelines above the vineyards south of Livermore; and ridgelines above Happy Valley south of Pleasanton (Alameda County 2000). The Project and proposed gen-tie line would be located southeast of the Altamont Pass towards the San Joaquin County border and would therefore be outside of the viewshed of these ridgelines. The property is not located on a major visually sensitive ridgeline, nor in the vicinity of any of these designated visually sensitive ridgelines.

The ECAP also designates viewsheds, which include the aforementioned major ridgelines, in addition to Brushy Peak, Donlan Peak, Mount Diablo, and Cresta Blanca near Arroyo Road south of Livermore (Alameda County 2000). The Project and proposed gen-tie line would not be located on or near these viewsheds.

As discussed above, Paterson Pass Road is a Scenic Rural-Recreation Route (i.e., a type of scenic route or corridor). Per the Scenic Route Element (Alameda County 1994a):

> Views from scenic routes will comprise essentially all of the remainder of the county beyond the limits of the scenic corridor: the corridor is intended to establish a framework for the observation of the views beyond. Therefore, in all areas in the county extending beyond the scenic route corridors, scenic qualities should be preserved through retaining the general character of natural slopes and natural formations, and through preservation and enhancement of water areas, watercourses, vegetation, and wildlife habitats. Development of lands adjacent to scenic route corridors should not obstruct views of scenic areas and development should be visually compatible with the natural scenic qualities.

Furthermore, "In both urban and rural areas, normally permitted uses of land should be allowed in scenic corridors, except that panoramic views and vistas should be preserved and enhanced…" (Alameda County 1994a). Views from Patterson Pass Road include the PG&E Tesla Substation, transmission lines and support structures, agricultural grassland areas, and hillside areas, some of which include wind turbines. For the purposes of this analysis, and in accordance with the Scenic Route Element, views from Patterson Pass Road are considered a scenic vista.

Visual Setting and Representative Views

A set of photographs were taken to document representative views of the Project site and vicinity from Patterson Pass Road. Patterson Pass Road is not a heavily trafficked roadway but, as discussed above, is recognized as a Scenic Rural-Recreation Route in the Scenic Route Element. Patterson Pass Road does not include any sidewalks and is not traversed by a high number of pedestrians, as such, the majority of viewers accessing Patterson Pass Road are motorists. The following section describes the visual character of these representative photographs. The viewpoint locations are shown in Figure 3.13-2, KOP Locations, and the accompanying photographs are included in Figure 3.13-3A through Figure 3.13-3C, Existing Conditions – KOP1, KOP2, and KOP3, respectively.

Patterson Pass Road (Looking Southwest)

This viewshed from Patterson Pass Road shown in Figure 3.13-3A is representative of views available to travelers on Patterson Pass Road looking southwest towards the Project site. Views in the foreground include the paved roadway, post and wire fencing, yellow, white, black, and blue signage, and a metal-gated gravel roadway leading west onto the Project site. The landscape is dominated by tan, non-native grasses and is devoid of trees. Small brown shrubs line the roadway south of the gate. Overhead transmission lines and associated grey lattice steel towers are visible in the foreground and middle ground. White and grey wind turbines are visible dotting the prominent ridgeline of the hillside area in the background to the west, as well as the lower-lying foothills in the middle ground to the northwest. The viewshed is dominated by man-made features including overhead transmission lines and associated grey lattice steel towers, post and wire fencing, and yellow and blue signage.

Patterson Pass Road (Looking North)

This viewshed from Patterson Pass Road shown in Figure 3.13-3B is representative of views available to travelers on Patterson Pass Road looking north towards the Project site. Views in the foreground include the adjacent asphalt roadway lined with brown shrubs, post and wire fencing, the backing of a roadway sign, and the gently sloping topography of the Project site. The landscape is dominated by tan, non-native grasses and is devoid of trees. Overhead transmission lines and associated grey lattice steel towers are visible in middle ground to the north. The primary feature of the viewshed is tan non-native grasses on the hills that slope gently upwards from the viewpoint.

Patterson Pass Road (looking Northeast)

This viewshed from Patterson Pass Road shown in Figure 3.13-3C is representative of views available to travelers on Patterson Pass Road looking northeast towards the Tesla Substation. Views in the foreground include the paved roadway, and post and wire fencing. A radio tower, overhead transmission lines and associated grey lattice steel towers, and the Tesla Substation are visible in the middle ground and appear as a cluster of metal projections extending above the horizon. The landscape is dominated by non-native grasses with a few sparse trees on the east side of Patterson Pass Road. The lower-lying foothills are in the middle ground to the north and east.

Private Gravel Road (looking South)

This viewshed from the private gravel road located along the northern boundary of the Project site shown in Figure 3.133D is representative of views available to the neighboring property owner to the North. Views in the foreground include the gravel roadway with tan grasses and shrubs on flat terrain, extending towards a low-lying foothill in the midground. Overhead transmission lines and associated grey lattice steel towers, are visible in the foreground, middle ground and distance which appear as linear metal projections extending above the horizon.

3.13.2 Regulatory Setting

Federal, state, and local laws, ordinances, regulations, and standards (LORS) related to visual resources were reviewed for applicability to the Project. These are detailed in Section 3.13.6, Laws, Ordinances, Regulations, and Standards.

3.13.3 Impact Analysis

3.13.3.1 Methodology

Viewers and Exposure

In general, the types of viewers present within the viewshed of the Project site are classified as local residents and travelers (e.g., motorists, bicyclists). The following discussion summarizes the composition of the groups identified within the viewshed of the Project and their characteristics that are relevant to the visual assessment.

Local Residents

The local resident viewer group consists of people who live within the viewshed of the Project. Residences within the Project viewshed are found along Patterson Pass Road to the east, Midway Road to the east, the frontage road south of the PG&E Tesla Substation, and near I-580 and I-205 northeast of the Project site. The nearest residence

is located on the frontage road south of the PG&E Tesla Substation, which is also owned by the same landowner leasing the area for the Project's gen-tie line and is approximately 1,500 feet southeast of the Project site and 560 feet south of the proposed gen-tie line. The next closest residence is approximately 3,500 feet east of the Project site and 2,300 feet east of the proposed gen-tie line.

Local residents may be more sensitive to changes in their specific views and may have adverse reactions to views of the proposed Project facilities. The existing landscape already includes the PG&E Tesla Substation and numerous transmission towers and lines and, as a result, the addition of the Project would not be as significant a change as it would if the landscape had no development. For example, residents with a view across the open grasslands within the Project viewshed who have views of the PG&E Tesla Substation and multiple transmission towers and lines may be less sensitive to landscape changes than those with solely a view of open grasslands.

Travelers

Travelers passing through an area typically view the landscape at roadway speeds from motor vehicles on their way to work or other destinations. Although the roadways in the Project-site vicinity do not include sidewalks or bike lanes, travelers can also include bicyclists and pedestrians. Travelers are typically engaged in various types of business or personal travel. Commuters do not tend to stop along their travel routes, have a relatively narrow field of view because they are focused on road and traffic conditions, and are destination-oriented. Passengers in commuter vehicles would have greater opportunities for prolonged offroad views toward landscape features and, accordingly, may have greater perception of changes in the visual environment. Travelers are typically moving, have a relatively narrow field of view, and are destination-oriented. Generally, drivers in this group are focused on driving and on the road and traffic conditions but do have the opportunity to observe roadside scenery. However, as the Project stie is adjacent to Patterson Pass Road (a Scenic Rural-Recreation Route) and within 2 miles of I-580 (a designated scenic highway) it is also assumed that some travelers are not destination oriented, but rather are utilizing these roadways as recreationists for the scenic quality of the views. These types of recreationist travelers would be particularly sensitive to visual changes as result of Project implementation.

Key Observation Points

According to 20 CCR Div. 2 Ch. 5 App. B, a Key Observation Point (KOP) is "a fixed position in a publicly accessible location where a public view of the project is analyzed and/or evaluated in the landscape. *Objects of aesthetic significance are the primary focus in the KOP selection"* (*emphasis added*). During December 2023 and January 2024, the Project site was evaluated from a variety of locations and viewing distances. KOPs were established to provide a representative cross-section of affected landscapes in the visual study area for which visual simulations (views of the existing landscape with Project components added) would be prepared. These locations were selected based on the location existing scenic resources in the area (i.e., "objects of aesthetic significance"), the Project's viewshed, visual exposure, and viewer group. This analysis focuses on the largest viewer groups that would be exposed to public views, which would include travelers and residents.

As shown in Figure 3.13-2, a total of three KOPs were ultimately selected for preparing visual simulations of the Project. As discussed above in Section 3.13.1.2, the closest scenic resource to the Project site is Patterson Pass Road, which is designated by Alameda County as a Scenic Rural-Recreation Route. As such, all KOPs were selected along this roadway: KOP1, located along Patterson Pass Road to the northeast of the Project site representing a southwest viewshed, KOP2, located to the south of the Project site representing a north viewshed and KOP3, located along Patterson Pass Road south of the proposed gen-tie route representing a northeast viewshed of the PG&E Tesla Substation. The three KOPs represent views of local travelers and residents. Due to intervening distance

and topography, the Project site and proposed Project features would not be visible or would barely be visible from I-580 and recreation areas within 5 miles of the Project site. Therefore, no KOPs were selected from within these resource areas.

Photographs and Simulations

Existing Conditions Photographs of Key Observation Points

High-resolution existing conditions photographs taken from KOPs 1 through ~~4~~3 are provided in Figures 3.13-3A through Figure 3.13-~~3C~~3D. The capture time, date, and other technical details of these photographs are provided in Table 3.13-1.

Table 13.3-1. Existing Conditions Photographs of Key Observation Points

Figure No.	Capture Time	Capture Date	Camera Type	Lens Focal Length*	Direction	Distance to Project Site[1]	Weather
3.13-3A	9:09 A.M.	December 21, 2023	Apple iPhone SE (2nd generation)	28mm (35mm equivalent	Facing southwest	0.19 miles	Clear, sunny
3.13-3B	10:16 A.M.	December 21, 2023	Apple iPhone SE (2nd generation)	28mm (35mm equivalent	Facing north	0.10 miles	Clear, sunny
3.13-3C	11:46 A.M.	January 18, 2024	Apple iPhone 12	26mm (35mm equivalent	Facing northeast	0.10 miles	Partially cloudy
3.13-3D	8:00 A.M.	October 30, 2024	Apple iPhone 12	26mm (35mm equivalent	Facing south	0.20 miles	Partially cloudy

Notes:
* Image was cropped to simulate a 35 mm lens focal length.
1 Approximate distance to the nearest Project component.

Photographic Simulations of Key Observation Points

To provide a basis for evaluating the visual effect of the Project on these views, visual simulations of the Project were produced to illustrate the "after" visual conditions from each of the ~~three~~ four KOPs. The three-dimensional (3D) photo simulations were created by combining site photographs and true scale 3D models for the Project. The existing conditions photographs (provided in Figures 3.13-3A through Figure 3.13-3D~~C~~) were used as a background plate with the 3d models rendered on top. The Exchangeable Image File Format (EXIF) info (metadata) of the digital photos were used to accurately locate the camera in the real-world coordinate space. The metadata also provided the photo's 35mm equivalent focal length. This data was applied to the camera in the 3D scene to providing an exact match. Using the provided topography, a 3D triangulated irregular network (TIN) surface was created for the existing terrain. This 3D surface was used to camera-match the background photos to the terrain model. The proposed facilities were modeled based on proposed Project components including the Battery Energy Storage System (BESS) enclosures and associated external electrical equipment, such as medium voltage transformers and power conversion systems, gen-tie line, perimeter fencing, access roads, landscaping, stormwater areas, laydown area, lighting, and Project substation. The proposed finished surfaces were derived from the Civil grading plan prepared for the Project. Sun system, software that simulates sunlight, was added to the 3D scene to illuminate the models and cast realistic shadows to match the background photographs. Once all of the models were placed into the 3D scene, each view was rendered to a high-resolution image. Foreground vegetation was composited in front of the 3D rendering to simulate reseeding of graded slopes at 1-year of maturity. Simulated views for each of

the ~~three~~ four KOPs are shown in Figures 3.13-4A, 3.13-4B, ~~and~~ 3.13-4C, and 3.13-4D, Photographic Simulation – KOP1, KOP2, ~~and~~ KOP3, and KOP 4, respectively.

3.13.3.2 Project Appearance

Detailed descriptions of the Project components are provided in Chapter 2, Project Description. Table 3.13-2 identifies the main above-ground Project components and their approximate dimensions, materials, and finishes. Component finishes would be dulled metallic or painted with dark or light grey matte paint not typically associated with the generation of substantial glare. Figure 2-5 provides a scaled 3D rendering of the proposed Project with all components labeled for identification.

Slopes along the Project's access roads and BESS facility would be reseeded with a native grassland seed mix, and the site would be routinely maintained and kept free of weeds, vegetation, and trash. A Temporary Impact Revegetation and Habitat Restoration Plan has been prepared for the Project (Appendix 1L.) Implementation of the Revegetation and Habitat Restoration plan requires removal of non-naïve and invasive vegetation prior to reseeding to ensure slopes maintain a high-quality native grassland that mimics pre-impact hillside conditions.

Table 3.13-2. Project Site Components

Project Component	Approximate Acreages and Dimensions	Materials	Finishes
BESS Yard	**13.3 acres**		
BESS Enclosures	20 feet long, 8 feet wide, 10 feet tall	Steel	Light to dark grey
Power Conversion Systems (PCS) Enclosures	22 feet long, 7 feet wide, 8 feet tall	Steel	Light to dark grey
Project Substation	**5.5 acres**		
Transformers and Lightening Arresters	50 feet tall (40-foot transformers and 10-foot lightening arresters)	Steel	Light to dark grey
Gen-Tie Line	**2,884 feet long**		
Tubular Steel Poles	110 to 199 feet tall	Steel	Light to dark grey
500 kV Gen-Tie Circuit	2 x 1590 kcmil ACSR "Falcon" conductor, approximately 0.5 miles	Aluminum, steel, no coating	Light to dark grey
Laydown Areas/O&M Building	**15.2 acres**		
Laydown Yard 1	75,935 square feet	Gravel	Exposed gravel
Laydown Yard 2	10,890 square feet	Gravel	Exposed gravel
Operations and Maintenance Buildings (to be sited within the laydown yard	(3) 100 feet long, ~~50~~ 48 feet wide, ~~30~~ 24 feet tall	Steel Frame construction with insulated metal wall panels on a concrete slab	Steel Frame construction with insulated metal wall panels on a concrete slab
Fresh Water Cistern (10,000 gallon)	11.75 feet diameter, 11.75 feet tall	Fiberglass or plastic on a concrete slab	Light to dark grey

Fire Water Storage Tank (30,000 gallon)	24 feet diameter, 10 feet tall	Fiberglass or steel on a concrete slab	Light to dark grey
Stormwater Areas	**9.3 acres**		
Stormwater Detention/Retention Basin 1	34,215 square feet	Shallow earth and rock basin	Exposed soil and rock
Stormwater Detention/Retention Basin 2	46,413 square feet	Shallow earth and rock basin	Exposed soil and rock
Stormwater Outfall	26,136 square feet	36-inch corrugated metal pipe or bioswale/ditch and clean rip-rap	Galvanized steel or aluminum, exposed soil and stone
Other Above-Ground Components			
Security Fencing	Up to 9 feet tall; 8-foot-tall chain link topped with 1 foot of barbed wire	Metal chain link topped with barbed wire	Light to dark grey
Security Camera	10 feet tall	Wood or metal pole	Grey or brown

Note – The wastewater holding tank is not included as they would be located below ground and would not be visible to viewers.

Project Lighting

Construction of the Project would generally occur during daytime hours. However, at limited times some construction activities may be required or finished at night while electrical demand is low, and these activities would require lighting for safety. Temporary portable lighting would be used to illuminate work areas if nighttime construction activities are required. The laydown yard may also be lit for security during construction. Permanent, operational lighting would only be in areas where it is required for safety, security, or operations. As described in the attached Lighting Plan, Llow-elevation (less than 14 feet) controlled security lighting would be installed at the Project substation and around the BESS yard. Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation area and points of ingress/egress. Portable lighting may be used occasionally and temporarily for maintenance activities during operations, such as emergency work that must occur at night. It is not anticipated that any new structure lighting would be installed as part of the proposed gen-tie line, with the exception of aviation lighting and/or marking that may be required for some structures. Aviation lighting, if required, would consist of either red flashing lights, medium-intensity white flashing lights, high-intensity white flashing lights or dual lighting consisting of red lights for nighttime and medium-intensity white lights for daytime (FAA 2020).

Water Vapor Plumes

There are no Project components that would produce visible water vapor plumes.

3.13.3.3 Visual Impact Assessment

A set of visual simulations, presented in Figures 3.13-4A, 3.13-4B, and 3.13-4C, 3.13-4D were prepared to document the Project-related visual change that would occur at ~~three~~ four KOP locations to provide the basis for evaluating potential visual effects associated with the Project from these key public views. The locations of the KOPs are illustrated in Figure 3.13-2, while the existing conditions photographs are provided in Figures 3.13-3A, 3.13-3B, ~~and~~ 3.13-3C and 3.13-3D.

This section provides a description of the Project-related change and an evaluation of potential visual effects on key public views, primarily as represented by the set of ~~three~~ four visual simulations.

KOP1, Patterson Pass Road (Looking Southwest)

The simulated Project conditions for this viewshed are shown in Figure 3.13-4A. Under proposed Project conditions, the immediate foreground of the roadway and gated entrance would remain unchanged. Although grading would be required, the undeveloped, graded slopes would be reseeded to mimic existing grassland conditions. The approximately 9.5-feet tall BESS enclosures within the northwestern BESS yard are visible in the middle ground, along with the approximately 40-foot-tall transformers with 10-foot-tall lightning arresters within the centralized, open-air Project substation. BESS enclosures appear as light grey rectangular structures running horizontally across the midpoint of the landscape, sitting below the distant ridgeline. Transformers and lightening arresters appear as grey tubular columns extending from the within the BESS enclosure components to above the distant ridgeline. The approximately 90-foot to 185-foot-tall gen-tie line and associated tubular support poles are visible running towards the PG&E Tesla Substation. As shown in Figure 3.13-4A, surrounding hillside views available from this KOP would not be blocked or obstructed by proposed Project components. Existing and proposed gen-tie lines and associated support structures would continue to be the dominant component within the viewshed.

KOP 2, Patterson Pass Road (Looking North)

The simulated Project conditions for this viewshed are shown in Figure 3.13-4B. Under proposed Project conditions, the immediate foreground of the roadway and post-and-wire fencing would remain unchanged. The undeveloped, graded slopes would be reseeded to mimic existing grassland conditions. The approximately 9.5-feet tall BESS enclosures and 7.2-feet tall PCS enclosures within the southeastern BESS yard are visible in the middle ground, along with the centralized, open-air Project substation consisting of approximately 40-foottall transformers with 10-foot-tall lightning arresters. BESS enclosures appear as light grey rectangular structures running horizontally across the midpoint of the landscape, BESS enclosures in the southern portion extending above the horizon, and BESS enclosures in the northern portion of the Project site sitting below the golden hills in the background. Transformers and lightening arresters appear as grey tubular columns extending from the within the BESS enclosure components to above the horizon. The approximately 90-foot to 185-foot-tall gen-tie line is visible to the east of the Project substation, running towards the PG&E Tesla Substation. As shown in Figure 3.13-4B, surrounding views available from this KOP would not be blocked or obstructed by proposed Project components. Existing and proposed gen-tie lines and associated support structures would continue to be the dominant component within the viewshed.

KOP 3, Patterson Pass Road (looking Northeast)

The simulated Project conditions for this viewshed are shown in Figure 3.13-4C. Under proposed Project conditions, the immediate foreground of the asphalt roadway and post-and-wire fencing would remain unchanged. The approximately 90-foot-to 185-foot-tall gen-tie line is visible spanning Patterson Pass Road, running east of the Project substation towards the PG&E Tesla Substation. The proposed BESS enclosures and Project substation are not visible from this KOP. The Tesla Substation and associated lines and towers are visible in the middle ground. As shown in Figure 3.13-4C, surrounding views available from this KOP would not be blocked or obstructed by proposed Project components.

KOP 4, Private Gravel Road (Looking South)

The simulated Project conditions for this viewshed are shown in Figure 3.13-4D. Under proposed Project conditions, the immediate foreground of the gravel roadway and native grass and shrubs would remain unchanged. Although grading would be required, the undeveloped, graded slopes in the mid-ground would be reseeded to mimic existing grassland conditions. The top 1/3 of the approximately 9.5-feet tall BESS enclosures within the northwestern BESS yard are visible in the middle ground, along with the approximately 40-foot-tall transformers with 10-foot-tall lightning arresters within the centralized, open-air Project substation. BESS enclosures appear as light grey rectangular structures running horizontally across the midpoint of the landscape, sitting below the distant ridgeline. Transformers and lightening arresters appear as grey tubular columns extending from the within the BESS enclosure components to above the distant ridgeline. The approximately 90-foot to 185-foot-tall gen-tie line and associated tubular support poles are visible running from the center of the viewshed to the East towards the PG&E Tesla Substation. As shown in Figure 3.13-4D, distant hillside views available from this KOP would not be blocked by proposed Project components. Existing and proposed gen-tie lines and associated support structures would continue to be the dominant component within the viewshed.

3.13.3.4 Impact Evaluation Criteria

The significance criteria used to evaluate the Project impacts to visual resources are based on Appendix G of the State California Environmental Quality Act (CEQA) Guidelines. According to Appendix G of the State CEQA Guidelines, a significant impact related to visual resources would occur if the Project would:

A. Have a substantial adverse effect on a scenic vista.
B. Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
C. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.
D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.13.3.5 Impact Evaluation

3.13a Would the Project have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact. For the purposes of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. As discussed in Section 3.13.1, Environmental Setting, Patterson Pass Road is a Scenic-Rural Recreation Route and public views along Patterson Pass Road are considered a scenic vista (Alameda County 1994a). According to the Scenic Route Element "Development of lands adjacent to scenic route corridors should not obstruct views of scenic areas and development should be visually compatible with the natural scenic qualities." Although the Project would introduce utility infrastructure and other above-ground Project components onto an undeveloped site, travelers along Patterson Pass Road would only have intermittent views of the Project site for a short durations and the proposed Project components would not block or obstruct views of the surrounding agricultural lands or hillside areas (as illustrated in Figures 3.13-3A, 3.13-3B, ~~and~~ 3.13-3C, and 3.13-4D). The BESS and PCS enclosures would be low profile in nature (i.e., less than 10-feet tall), while taller equipment required for the Project substation (i.e., the 40-foot-tall transformers with 10-foot lightening arresters) would be concentrated toward the central interior of the

Project site. Three O&M buildings at a maximum height of 24 feet would be clustered together in the northwest quadrant of the Project site to limit visibility from Patterson Pass Road and residences east of the PG&E Tesla Substation. The tallest Project components would be the approximately 90-foot to 185-foot-tall support poles associated with the gen-tie line; however, these components would only run a short distance (approximately 0.5 miles) to the adjacent PG&E Tesla Substation and would have a relatively thin profile that would not result in substantial view blockage or obstruction for travelers and residents along Patterson Pass Road. Furthermore, the Project components would be similar in terms of height, bulk, and scale to existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines.

Grading and recontouring of natural slopes and hillsides would be kept to a minimum. The finishes of materials used as exterior surfaces included dulled metallic components that are not typically associated with the generation of substantial glare, further information on the materials used in the exterior of Project components is listed in Table 3.13-2 above

Mitigation Measure MM-VIS-2 would require ~~T~~temporarily disturbed areas on the permitter of the Project site ~~would~~ be revegetated with a native grassland seed mix to blend with the surrounding landscape. According to the Open Space Element of the Alameda County General Plan, wherever feasible, power utility lines should be consolidated to prevent further severance of open-space lands. By siting the Project adjacent to the existing PG&E Tesla substation, the Project would consolidate utility lines in order to avoid further severance of open-space lands. For these reasons, the Project would not have a substantial adverse effect on a scenic vista, and impacts would be less than significant. Mitigation Measure MM-VIS-2 would reduce visual impacts related to project construction to less than significant. ~~No mitigation would be required~~.

3.13b Would the Project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less-than-Significant Impact. As discussed in Section 3.13.1, Environmental Setting, I-580 is an officially designated state scenic highway from south of the I-205 interchange to State Route 152 and is an eligible state scenic highway from west of the I-205 interchange to the City of San Leandro (Caltrans 2024). The designated alignment of I-580 is approximately 1.5 miles northeast of Project site and approximately 1.6 miles northeast of the proposed gen-tie line at its nearest points. The eligible alignment of I-580 is approximately 1.7 miles north of the Project site and approximately 2 miles north of the proposed gen-tie line at its nearest points. I-580 is also categorized as one of the County's Scenic Freeways and Expressways in the Scenic Route Element (Alameda County 1994a). Due to distance and intervening topography, the Project site is not anticipated to be visible from the eligible or designated alignments of I-580; however, the proposed gen tie line may be partially visible from the designated alignment of I-580 due to the height of the gen tie line. Patterson Pass Road (adjacent to the Project site to the east) is mapped as a Major Rural Road and qualifies as a Scenic Rural-Recreation Route per the Scenic Route Element (Alameda County 1994a). All Project-site components, including the proposed gen-tie line, would be fully or partially visible from various locations along Patterson Pass Road.

There are no rock outcroppings, trees, or historic buildings on or adjacent to the Project site. Recreation areas potentially visible from a state scenic highway (i.e., I-580) and within a 5-mile radius of the Project site include the Bethany State Reservoir Recreational Area (approximately 4.3 miles northwest of the Project site) and the Carnegie State Vehicular Recreation Area (approximately 5 miles south of the Project site). However, due to intervening distance and topography, the Project and proposed gen-tie line would not be visible from these recreation areas and the Project would not require any off-site improvements that would affect these resource areas. There are no

other areas recognized for their aesthetic, botanical, or ecological value within a 5-mile radius of the Project site or a 1-mile radius of the proposed gen-tie line. Furthermore, no man-made features that are unique or represent significant innovation are present within these radii. As such, none of these scenic resources would be damaged as a result of Project implementation.

According to the Alameda County General Plan Open Space Element, natural ridgelines and slopes in excess of 25% in grade should be left as open space to eliminate mass grading. The Project would require minimal grading of sloped areas in excess of 25% due to the natural rolling topography of the site. However, the Project site is not in the vicinity of any of ECAP-designated visually sensitive ridgelines (see discussion of applicable visually sensitive ridgelines in Section 3.13.1, Environmental Setting).

Regarding on-site hillside areas, the grading plan would generally follow the existing contours of the site and graded slopes adjacent to the development footprint would be reseeded to mimic existing vegetated conditions, as simulated in Figures 3.13-4A through 3.13-4C. Access roads would be located and designed to keep grading to a minimum. According to the Scenic Route Element, alteration to natural or artificial land contours should not be permitted without a grading permit issued by the local jurisdiction as a means of preserving and enhancing the natural topography and vegetation in developable areas. Preliminary grading plans and final grading plans are required per ACMC Sections 15.36.240 and 15.36.250, respectively. Compliance with these regulations would help ensure that grading required for the Project would not substantially damage the existing topography and that the Project adhere to applicable ACMC requirements, thereby helping to preserve the visual integrity of the Project site's hillside areas.

As discussed above in the discussion of potential scenic vista impacts (Impact Evaluation Criteria 3.13a), although the Project would introduce utility infrastructure onto an undeveloped site, the proposed Project components would not block or obstruct views of the surrounding agricultural lands or hillside areas as viewed from Patterson Pass Road (see Figures 3.13-4A, 3.13-4B, 3.13-4C, and 3.13-4D) for surrounding views of the Project site under simulated Project conditions). Furthermore, the Project components would be similar in terms of height, bulk, and scale to existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines. By siting the Project adjacent to the existing PG&E Tesla substation, the Project would consolidate utility lines in order to avoid further severance of open-space lands, in accordance with principles set forth in the Open Space Element of the Alameda County General Plan.

For the reasons discussed above, the Project would not substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, and impacts would be less than significant. No mitigation would be required.

3.13c In non-urbanized areas, would the 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). If in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?

The Project site is in a non-urbanized area. Therefore, this analysis considers whether the Project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Construction

Less-than-Significant Impact. Construction activities related to Project implementation would be temporary in nature and include views of construction equipment, staging areas, and facility and gen-tie construction activities. The Project is anticipated to be built over an approximately 17-month period from the onset of site preparation activities anticipated to begin in December 2026 through testing and commissioning of the facility anticipated to commence in April 2028. As individual construction phases are completed, the amount of equipment would be reduced and moved to other areas of the Project site during later phases. As such, the visual characteristics of construction would be spread out to different locations within a large area. Construction activities would be temporarily visible to those traveling along Patterson Pass Road but would not substantially degrade the existing visual character of the landscape due to existing, similar development within the Project area. As such, impacts related to construction would be less than significant and no mitigation would be required.

Operation

Less-than-Significant Impact with Mitigation. The Project would introduce utility infrastructure and other associated Project components onto an undeveloped site. Thus, implementation of the Project would represent a change in the existing visual character of the Project site and its surroundings. Potential viewers would include travelers and residents. Recreationist travelers along Patterson Pass Road and nearby residents would have the highest viewer sensitivity. However, as discussed above (see analyses provided under Impact Evaluation Criterion 3.13a and 3.13b) and below, the Project would be compatible with existing surrounding development and would not substantially block or obstruct views of surrounding agricultural lands and hillsides.

As previously discussed, Patterson Pass Road adjacent to the Project site qualifies as a Scenic Rural-Recreation Route. According to the Scenic Route Element (Alameda County 1994a):

> In both urban and rural areas, normally permitted uses of land should be allowed in scenic corridors, except that panoramic views and vistas should be preserved and enhanced through supplementing normal zoning regulations with special height, area, and side-yard regulations; through providing architectural and site design review; through prohibition and removal of billboards, signs not relevant to the main use of the property, obtrusive signs, automobile wrecking and junk yards, and similar unsightly development or use of land.

The Scenic Route Element also includes additional development standards related to structure height and grading (see Section 3.13.6.3, Local for detailed development standards). For example, according to the Scenic Route Element, proposed structures over 35 feet (except for utility poles and lines) should be reviewed by the local jurisdiction for approval to ensure that such structured will not conflict with any view from a scenic route. Furthermore, in corridors along scenic routes with "outstanding distant views," no building structure of more than one story in height should be permitted where it would obstruct views (Alameda County 1994a). In addition to

development standards, the Scenic Route Element also include general principles for development Projects, including principles related to overhead lines and towers within scenic corridors (see Section 3.13.6.3, Local, for a detailed list of general principles).

Through the California Energy Commission's opt-in certification process, the Project is not subject to "normal zoning regulations" or other special height, area, and side-yard regulations for development projects within Agricultural districts. However, the Project would not include any billboards, signs not relevant to the main use of the property, obtrusive signs, automobile wrecking and junk yards, and similar "unsightly" development or use of land. Although the Project would include proposed structures over 35 feet~~, the Project would not include any bulky or large-scale habitable building structures~~. The most numerous Project site components would be the BESS and PCS enclosures, which would be low profile (i.e., less than 10-feet tall) and finished in light-to-dark grey steel coating. Taller on-site equipment required for the Project substation (i.e., the light-to-dark grey 40-foot-tall transformers with 10-foot lightening arresters) and three O&M buildings with a maximum height of 24 feet tall would be set back from Patterson Pass Road and concentrated toward the central interior and northwest quadrant of the Project site. The tallest Project components would be the approximately 90-foot to 185-foot-tall support poles associated with the gen-tie line; however, due to the proposed siting of the Project, only five new tubular steel support poles would be required to run the gen-tie line the short distance (approximately 0.5 miles) across Patterson Pass Road and vacant land to the adjacent PG&E Tesla Substation.

To accommodate the Project, PG&E would be responsible for the required upgrades to the Tesla Substation from the point of change of ownership (POCO) to the Substation. Improvements to be completed by PG&E include, but are not limited to, installation of a gen-tie line and gen-tie line terminal equipment on Substation property and expanding the 500kV BAAH Bay to accommodate the interconnection. All improvements made by PG&E would occur within the existing Tesla Substation and would be similar in scale, mass and color to existing substation equipment.

As shown in Figures 3.13-4A through 3.13-4D~~C~~, all proposed Project components, including the 90-foot to 185-foot gen-tie poles, would be compatible in terms of height, bulk, and scale to existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines. As such, proposed Project structures would not conflict with existing views from a scenic route. Implementation of MM-VIS-2 requires temporarily impacted slopes to be reseeded with a native grass seed mix to ensure existing visual character is not degraded. Furthermore, due to the low-profile BESS and PCS enclosures, the clustering of O&M buildings, the open-air-design of the Project substation, and the thin profile of the gen-tie line, the Project would not result in any substantial view blockages or obstructions.

Due to the proposed use of light-grey steel finishes, Project site components may have the potential to induce glare, which could detract from the existing visual character and quality of the Project site and its surroundings (see the analysis provided below under Impact Evaluation Criteria 3.13d for further discussion regarding potential light and glare impacts). As such, implementation of Mitigation Measure (MM-)VIS-1 is required. As set forth in Section 3.13.5, Mitigation Measures, below, MM-VIS-1 requires the Applicant to prepare and implement a Surface Treatment Plan for new aboveground structural elements associated with the Project substation, BESS and PCS enclosures, and gen-tie line. The Surface Treatment Plan would require that the finishes on all new transmission and other structures with metal surfaces to be non-reflective/non-specular as feasible. The Surface Treatment Plan would also address any non-steel structural elements associated with Project components. Color finishes would be selected according to their ability to reduce the aesthetic impact associated with contrast with the surrounding landscape.

For the reasons discussed above, and with implementation of MM-VIS-1, the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts would be less than significant with mitigation incorporated for operational activities.

Decommissioning

Less-than-Significant Impact. The Project's BESS facility is anticipated to have an approximately 25-year lifespan. At the end of the facility's useful life, the Project would undergo decommissioning in accordance with an approved Decommissioning Plan. As part of the decommissioning activities, all site improvements that are no longer in use and cannot be repurposed will be removed from the Project site and the lands and associated easement areas would be restored to a substantially similar condition in which they existed. Since the site would be restored to a condition similar to pre-Project activities, impacts would be less than significant, and no mitigation would be required for decommissioning activities.

3.13d Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-Significant Impact with Mitigation. New light sources have the potential to increase ambient nighttime illumination levels and result in spillover light onto adjacent properties. These effects, referred to as "light trespass" have the potential to interfere with certain functions including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. Certain land uses, such as residential uses, are recognized as light-sensitive receptors because they are typically occupied by persons who have an expectation for privacy during evening hours and are sensitive to disturbance by bright light sources. Although there are no residential uses adjacent to the Project site, the nearest residence is located on the frontage road south of the PG&E Tesla Substation, which is also owned by the same landowner leasing the area for the Project's gen-tie line and is approximately 1,500 feet southeast of the Project site and 560 feet south of the proposed gen-tie line. The next closest residence is approximately 3,500 feet east of the Project site and 2,300 feet east of the proposed gen-tie line. Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours when artificial light is directed at, or reflected toward, a sensitive receptor. Travelers and residents are considered glare sensitive as the presence of glare could interfere with vision and/or result in a nuisance.

Construction

Less-than-Significant Impact. Construction of the Project would generally occur during daytime hours. However, at limited times some construction activities may be required or finished at night while electrical demand is low, and these activities would require lighting for safety. Any required lighting during construction would be limited to individual work areas and would be temporary in nature. If temporary lighting is needed, portable light standards would be placed along the perimeter of the work area or construction laydown area, as necessary. The light standards would be shielded, resulting in light being directed downward and inward (toward the work or laydown area). The laydown yard may also be lit for security; however, lighting would be directed on-site and away from potentially sensitive receptors (i.e., travelers and nearby residents). All lighting will be shielded and directed downward to minimize the potential for glare, spillover onto adjacent properties, and skyglow. Levels of individual lighting sources would comply with recommendations of the Illuminating Engineering Society to ensure lighting is no brighter than necessary.

No daytime or nighttime views within the Project area would be significantly impacted as part of construction activities; therefore, impacts related to light and glare would be less than significant and no mitigation would be required.

Operation

Less-than-Significant Impact with Mitigation. Permanent, operational lighting would only be in areas where it is required for safety, security, or operations. Low-elevation (i.e., less than 14 feet) controlled security lighting would be installed at the Project substation and around the BESS yard, in accordance with applicable governmental requirements listed in Section 3.13.6.2, State, including requirements set forth in the California Building Code (Title 24, Part 1), California Electrical Code (Title 24, Part 3), and California Energy Code (Title 24 Part 6). Permanent motion-sensitive, directional security lights would be installed to provide adequate illumination around the substation area and points of ingress/egress. Portable lighting may be used occasionally and temporarily for maintenance activities during operations, such as emergency work that must occur at night. ~~Care would be taken to prevent undue light pollution from the nighttime security lighting.~~ Although Alameda County does not have codes and/or regulations applicable to lighting and glare, all Project access road and BESS yard lighting will be shielded and directed downward to minimize the potential for glare, spillover onto adjacent properties, and skyglow. ~~All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto nearby properties, compliant with applicable codes and regulations~~.

MM-VIS-3 requires a Project-specific conceptual lighting plan for the BESS yard. An Outdoor Light Control and Management Plan is provided as Appendix X, Conceptual Lighting Plan–BESS Yard. Mounted fixture height would not exceed 20 feet in height as measured from finish grade to the bottom of the light fixture.

The Project does not propose installing any new structure lighting as part of the proposed gen-tie line, with the exception of aviation lighting and/or marking that may be required for some structures. Upon completion of final design, if necessary, the Applicant would file with the Federal Aviation Administration (FAA) for official study and determination of lighting and/or marking requirements for these structures. Aviation lights are manufactured with focused beacons that direct light upward and outward without illuminating nearby areas directly below the lights, and no visible reflected light would be visible from the ground surface. Any aviation lighting required for the Project would be consistent with similar, existing aviation lighting in the vicinity.

Due to the proposed use of light-grey steel finishes, Project site components may have the potential to induce glare, which could result in a safety concern or nuisance to travelers and residents. As such, implementation MM-VIS-1 is required. As set forth in Section 3.13.5, Mitigation Measure MM-VIS-1, below, requires the Applicant to prepare and implement a Surface Treatment Plan for new aboveground structural elements associated with the Project substation, BESS and PCS enclosures, and gen-tie line. The Surface Treatment Plan would require that the finishes on all new transmission and other structures with metal surfaces will be non-reflective/non-specular. The Surface Treatment Plan would also address any non-steel structural elements associated with Project components. Color finishes would be selected according to their ability to reduce the aesthetic impact associated with contrast with the surrounding landscape.

For the reasons discussed above, and with implementation of MM-VIS-1, the Project operations would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant with mitigation incorporated.

Decommissioning

Less-than-Significant Impact. The Project's BESS facility is anticipated to have an approximately 25-year lifespan. At the end of the facility's useful life, the Project would undergo decommissioning in accordance with an approved Decommissioning Plan. As part of the decommissioning activities, all site improvements that are no longer in use and cannot be repurposed will be removed from the Project site and the lands and associated easement areas would be restored to a substantially similar condition in which they existed. Since the site would be restored to a condition similar to pre-Project activities, impacts related to light and glare would be less than significant and no mitigation would be required for decommissioning activities.

3.13.4 Cumulative Effects

Less-than-Significant Impact with Mitigation. The cumulative scope includes projects that would introduce new industrial or residential uses into agricultural and undeveloped landscapes encountered by sensitive viewers (residents and travelers) who would have exposure to multiple impacted viewsheds within the Project region. The cumulative projects detailed in Chapter 3, Environmental Analysis, Table 3.1, Cumulative Projects, have the potential to result in cumulative impacts to aesthetic resources when considered together with the Project. The proposed Project would not have a significant, adverse effect on a scenic vista, nor would it substantially damage scenic resources. The visual simulations prepared for the Project demonstrate that implementation would result in less than significant impacts resulting from light and glare and would not substantially degrade the existing visual character or quality of public views of the site and its surroundings with the incorporation of MM-VIS-1, MM-VIS-2, and MM-VIS-3.

The existing industrial appearance within the viewshed of the PG&E Tesla substation, from which multiple lattice transmission towers of varying heights extend with the transmission lines visible against the sky, dominates the foreground. Wind turbines associated with the Altamont Pass Wind Resources Area are also visible. The City of Tracy includes not only residential development but also industrial and commercial developments. This development has resulted in the degradation of the largely agricultural and undeveloped landscape. The implementation of the proposed Project, when added to the impacts of past, present, and future industrial development within a rural landscape, has the potential to result in potentially significant cumulative impacts to visual resources. Implementation of MM-VIS-1, MM-VIS-2, and MM-VIS-3 would be implemented to reduce Project contributions to cumulative impacts, reducing the impact to less than significant. Additionally, due to the Project location and surrounding terrain and site-specific nature in which light and glare is experienced, the Project's less-than-significant impact related to light and glare could not combine with impacts from other facilities. All projects would be required to comply with Title 24 BUG requirements, which would reduce the potential for light trespass, as well as applicable federal, state, and local laws and ordinances related to visual resources. Therefore, the Project's impact to visual resources would not cause or contribute to a significant adverse cumulative impact with the incorporation of mitigation.

3.13.5 Mitigation Measures

MM-VIS-1 Surface Treatment Plan. Prior to the issuance of building and grading permits, the Applicant shall prepare and submit to the CEC a Surface Treatment Plan for new aboveground structural elements associated with the Project substation, BESS and PCS enclosures, and gen-tie lines. The Surface Treatment Plan shall require the following be implemented as feasible to reduce impacts associated with color contrast and light and glare:

- Use and maintain, as feasible, non-reflective materials, finishes, and surface treatments.
- Maintain painted, treated, stained, or coated surfaces properly.
- Minimize lighting, as feasible, and direct lights properly to eliminate light spill and trespass off site.

MM-VIS-2 Revegetation of Temporarily Impacted Areas. Temporarily impacted vegetation communities will be mitigated in place at a 1:1 ratio using in-kind or higher value vegetation communities. For all temporary vegetation disturbance areas within the project site, the applicant shall implement the Temporary Impact Revegetation and Habitat Restoration Plan utilizing native plant species upon completion of final grading or disturbance, including the application of appropriate soil amendments and irrigation as necessary to ensure successful establishment. Temporary impact revegetation areas will be subject to weed and invasive plant control, trash removal, erosion control, and seeding as necessary in accordance with the Temporary Impacts Revegetation Plan.

MM-VIS-3 Outdoor Lighting Control and Management Plan. Prior to final occupancy, the project proponent shall prepare an outdoor lighting plan to demonstrate to CEC Staff that Project operational lighting complies with the applicable provisions of the Title 24: California Building Standards Code, and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not be exposed or extend below the shields.

3.13.6 Laws, Ordinances, Regulations, and Standards

This section lists and discusses the visual resources-related LORS that apply to the Project. Table 3.13-3 summarizes the LORS relevant to the Project.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
State	California Environmental Quality Act (CEQA)	Requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible	Throughout this Opt-In Application	The Project would comply with CEQA, as required by the California Energy Commission's Opt-In Application process.
State	Title 24, Part 1: California Building Code and Title 24, Part 3: California Electrical Code	Stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-17	Project lighting would comply with minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress, as required by state law.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
State	Title 24, Part 6: California Energy Code	Stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-17	Project lighting would comply with California Energy Code Section 130.2 related to outdoor lighting controls and luminaire cutoff requirements, as well as California Energy Code Section 140.7, establishing outdoor lighting power density allowances in terms of watts per area.
State	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.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12, 3.13-13, and 3.13-14	As discussed under Impact Evaluation Criteria 3.13b, the Project would not substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
Local	Alameda County General Plan, Scenic Route Element Principles	Provide for Normal Uses of Land and Protect Against Unsightly Features: In both urban and rural areas, normally permitted uses of land should be allowed in scenic corridors, except that panoramic views and vistas should be preserved and enhanced through supplementing normal zoning regulations with special height, area, and side-yard regulations; through providing architectural and site design review; through prohibition and removal of billboards, signs not relevant to the main use of the property, obtrusive signs, automobile wrecking and junk yards, and similar unsightly development or use of land. Design and location of all signs should be	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-14, and 3.13-15	Through the California Energy Commission's Opt-In Application process, the Project is not subject to "normal zoning regulations" or other special height, area, and side-yard regulations for development projects within Agricultural districts. However, the Project would not include any billboards, signs not relevant to the main use of the property, obtrusive signs, automobile wrecking and junk yards, and similar "unsightly" development or use of land.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		regulated to prevent conglomerations of unsightly signs along roadsides.		
		Locate Transmission Towers and Lines Outside of Scenic Route Corridors When Feasible: New overhead transmission towers and lines should not be located within scenic corridors when it is feasible to locate them elsewhere.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-14 and 3.13-15	The proposed 500-kV above-ground gen-tie line is required to transmit electrical energy to and from the Project substation to the existing Tesla PG&E Substation. The gen-tie line would need to cross Patterson Pass Road (a Scenic-Rural Recreation Route) in order to connect to the PG&E Tesla Substation. As such, it is not feasible to locate the gen-tie line outside of the scenic corridor. However, the Project was sited adjacent to the existing PG&E Tesla Substation to reduce the required length of the gen-tie line.
		Underground Utility Distribution Lines When Feasible; Make Overhead Lines Inconspicuous: New, relocated, or existing utility distribution lines should be placed underground whenever feasible. When it is not feasible to place lines underground, they should be located so as to be inconspicuous from the scenic route. Poles of an improved design should be used wherever possible. Combined or adjacent rights - of - way and common poles should be used wherever feasible.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-15	It is not feasible to locate the proposed gen-tie line underground. However, the Project was sited adjacent to the existing PG&E Tesla Substation to reduce the required length of the gen-tie line, thus reducing visual impacts. The five tubular support poles would have a thin profile and would be visually compatible with existing steel-lattice transmission towers currently located in the Project-vicinity.
		Use Landscaping to Increase Scenic Qualities of Scenic Route Corridors: Landscaping should be designed and maintained in scenic route corridors to provide added visual interest, to frame	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	Graded slopes adjacent to the Project development footprint would be reseeded to mimic existing grassland conditions. A Temporary Impact Revegetation and Restoration Plan (Appendix 1L) has been prepared for review and approval by the CEC.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		scenic views, and to screen unsightly views.		
		Preserve and Enhance Natural Scenic Qualities in Areas Beyond the Scenic Corridor: Views from scenic routes will comprise essentially all of the remainder of the county beyond the limits of the scenic corridor: the corridor is intended to establish a framework for the observation of the views beyond. Therefore, in all areas in the county extending beyond the scenic route corridors, scenic qualities should be preserved through retaining the general character of natural slopes and natural formations, and through preservation and enhancement of water areas, watercourses, vegetation and wildlife habitats. Development of lands adjacent to scenic route corridors should not obstruct views of scenic areas and development should be visually compatible with the natural scenic qualities.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12, 3.13-13, 3.13-14, and 3.13-15	Although the Project would introduce utility infrastructure and other above-ground Project components onto an undeveloped site, the proposed Project components would not block or obstruct views of the surrounding agricultural lands or hillside areas. Furthermore, the Project components would be similar in terms of height, bulk, and scale to existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines. Thus, the Project would not have a substantial adverse effect on a scenic vista.
		Provide for Normal Uses of Land but Limit Overhead Utilities and Outdoor Advertising Structures: In both developed and undeveloped areas, outdoor advertising structures, utility and communication towers, poles, and wires should be located only where they will not detract from significant scenic views. All other structures and use of land should be permitted as specified in the local zoning	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12, 3.13-13, 3.13-14, and 3.13-15	Through the California Energy Commission's Opt-In Application process, the Project is not subject to "normal zoning regulations" or other special height, area, and side-yard regulations for development projects within Agricultural districts. However, as discussed above, the Project would not have a substantial adverse effect on a scenic vista.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		ordinance as supplemented by special height regulations.		
Local	Alameda County General Plan, Scenic Route Element, Development Standards	In all zoning districts where the allowable height limit exceeds 35 feet, each proposed structure over 35 feet, except utility poles and lines, should be reviewed by the local jurisdiction for approval to ensure that such structure will not conflict with any view from any scenic route.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12, 3.13-13, and 3.13-15	Although the Project would include proposed structures over 35 feet, the Project would not include any bulky or large-scale habitable building structures. All proposed Project components would be compatible in terms of height, bulk, and scale to existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines. As such, proposed Project structures would not conflict with existing views from a scenic route.
		Alteration to natural or artificial land contours should not be permitted without a grading permit issued by the local jurisdiction as a means of preserving and enhancing the natural topography and vegetation in developable areas. Mass grading should not be permitted. The following criteria should be applied in the review of grading permits in developable areas: ▪ As a means of preserving natural ridge skylines within the county, no major ridgeline should be altered to the extent that an artificial ridgeline results. ▪ Access roads should be located and designed to keep grading to a minimum.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12, 3.13-13, and 3.13-14	Graded hillside areas adjacent to the development footprint would be reseeded to mimic existing grassland conditions. The Applicant has prepared a Temporary Impacts Revegetation and Restoration Plan (Appendix 1L) to help ensure that grading required for the Project would not substantially damage the existing topography, thereby helping to preserve the visual integrity of the Project site's hillside areas.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		▪ Natural ground contours in slope areas over 10% should not be altered more than 5% overall, except in such slope areas where large stands of mature vegetation, scenic natural formations or natural watercourses exist, where grading should be limited so as to preserve the natural features. ▪ Any contour altered by grading should be restored by means of land sculpturing in such a manner as to minimize run-off and erosion problems, and should be planted with low maintenance, fire resistant plant materials that are compatible with the existing environment.		
		In corridors along scenic routes with outstanding distant views above the roadbed, no building structure of more than one story in height should be permitted where it would obstruct views, excepting within and immediately adjacent to central business district locations. On lots where the building structure is higher than the roadbed in corridors along routes with outstanding distant views, the combined width of side yard should equal or exceed the width of the building structure as measured parallel to the roadbed.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-15	Although the Project would include proposed structures over one story in height, the Project would not include any bulky or large-scale habitable building structures. The most numerous Project site components would be the BESS and PCS enclosures, which would be low profile (i.e., less than 10 feet tall). Taller on-site equipment required for the Project substation (i.e., the 40-foot-tall transformers with 10-foot lightening arresters) would be set back from Patterson Pass Road and concentrated toward the central interior of the Project site. The tallest Project components would be the approximately 90-foot to 185-foot-tall support poles associated with the gen-tie line;

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
				however, due to the proposed siting of the Project, only five new tubular steel support poles would be required to run the gen-tie line the short distance (approximately 0.5 miles) across Patterson Pass Road and vacant land to the adjacent PG&E Tesla Substation.
Local	Alameda County General Plan, Open Space Element Principles	Include Natural Ridgelines and Slope Areas: Natural ridgelines, and slopes in excess of 25% in grade, should be left as open space to eliminate mass grading.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-13	The Project site would require minimal grading of any sloped areas in excess of 25%. However, the Project site is not in the vicinity of any of ECAP-designated visually sensitive ridgelines. Regarding on-site hillside areas, the grading plan would generally follow the existing contours of the site and graded slopes adjacent to the development footprint would be reseeded to mimic existing vegetated conditions. Access roads would be located and designed to keep grading to a minimum.
		Consolidate and Locate Utility Lines to Avoid Scenic Areas: Wherever feasible, power and pipe utility lines should be consolidated to prevent further severance of open space lands. Utility lines and aqueducts in open space areas should be located so as to avoid areas of outstanding beauty.	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-12 and 3.13-13	By siting the Project adjacent to the existing PG&E Tesla substation, the Project would consolidate utility lines in order to avoid further severance of open-space lands.
Local	Alameda County General Plan, “Sensitive Viewsheds” ECAP Policies	Policy 106: Structures may not be located on ridgelines or hilltops or where they will project above a ridgeline or hilltop as viewed from public roads, trails, parks and other public viewpoints unless there is no other site on the parcel for the structure or on a contiguous parcel in common ownership on or	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-13	The Project site is not in the vicinity of any of ECAP-designated visually sensitive ridgelines. Regarding on-site hillside areas, the grading plan would generally follow the existing contours of the site and graded slopes adjacent to the development footprint would be reseeded to mimic existing vegetated conditions. Access

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		subsequent to the date this ordinance becomes effective. New parcels may not be created that have no building site other than a ridgeline or hilltop, or that would cause a structure to protrude above a ridgeline or hilltop, unless there is no other possible configuration.		roads would be located and designed to keep grading to a minimum.
		Policy 108: To the extent possible, including by clustering if necessary, structures shall be located on that part of a parcel or on contiguous parcels in common ownership on or subsequent to the date this ordinance becomes effective, where the development is least visible to persons on public roads, trails, parks and other public viewpoints. This policy does not apply to agricultural structures to the extent it is necessary for agricultural purposes that they be located in more visible areas.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-15	Project development would be set back from Patterson Pass Road and clustered toward the interior of the Project site. Access roads would be located and designed to keep grading to a minimum. The Project would be sited adjacent to the PG&E Tesla Substation to reduce visual impacts associated with the proposed gen-tie line.
		Policy 114: The County shall require the use of landscaping in both rural and urban areas to enhance the scenic quality of the area and to screen undesirable views. Choice of plants should be based on compatibility with surrounding vegetation, drought - tolerance, and suitability to site conditions; and in rural areas, habitat value and fire retardance.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	Graded slopes adjacent to the development footprint would be reseeded to mimic existing grassland conditions. A Temporary Impacts Revegetation and Restoration Plan (Appendix 1L) has been prepared to help ensure that grading required for the Project would not substantially damage the existing topography, thereby helping to preserve the visual integrity of the Project site's hillside areas.
		Policy 115: In all cases appropriate building materials, landscaping and screening shall be required to minimize the visual impact of	3.13.3.4, Impact Evaluation Criteria; pgs. 3.13-	The Project components would be clustered towards the interior of the Project site and would be similar in terms of height, bulk, and scale to

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		development. Development shall blend with and be subordinate to the environment and character of the area where located, so as to be as unobtrusive as possible and not detract from the natural, open space or visual qualities of the area. To the maximum extent practicable, all exterior lighting must be located, designed and shielded so as to confine direct rays to the parcel where the lighting is located.	12, 3.13-13, 3.13-15, and 3.13-17	existing infrastructure visible in the Project-site vicinity, such as nearby steel-lattice transmission towers, the adjacent PG&E Tesla Substation, and distant wind turbines. Permanent, operational lighting would only be in areas where it is required for safety, security, or operations. Low-elevation (i.e., less than 14 feet) controlled security lighting would be installed at the Project substation and around the BESS yard, in accordance with applicable governmental requirements. Care would be taken to prevent undue light pollution from the nighttime security lighting. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto nearby properties, compliant with applicable codes and regulations. Required implementation of MM-VIS-1 would reduce potential glare impacts to a less than significant level.
		Policy 116: To the maximum extent possible, development shall be located and designed to conform with rather than change natural landforms. The alteration of natural topography vegetation, and other characteristics by grading, excavating, filling or other development activity shall be minimized. To the extent feasible, access roads shall be consolidated and located where they are least visible from public view points.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	The grading plan would generally follow the existing contours of the site and graded slopes adjacent to the development footprint would be reseeded to mimic existing vegetated conditions. Access roads would be located and designed to keep grading to a minimum.

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
		Policy 117: The County shall require that where grading is necessary, the off‐site visibility of cut and fill slopes and drainage improvements is minimized. Graded slopes shall be designed to simulate natural contours and support vegetation to blend with surrounding undisturbed slopes.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	(See response provided above for ECAP Policy 116.)
		Policy 118: The County shall require that grading avoid areas containing large stands of mature, healthy vegetation, scenic natural formations, or natural watercourses.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	Although the Project includes non-native grasslands, there are no large stands of mature, healthy vegetation (e.g., mature trees). Graded slopes adjacent to the development footprint would be reseeded to mimic existing grassland conditions. A Temporary Impacts Revegetation and Restoration Plan (Appendix 1L) has been prepared to help ensure that grading required for the Project would not substantially damage the existing topography, thereby helping to preserve the visual integrity of the Project site's hillside areas.
		Policy 119: The County shall require that access roads be sited and designed to minimize grading.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-13	Access roads would be sited and designed to minimize grading.
		Policy 120: The County shall require that utility lines be placed underground whenever feasible. When located above ground, utility lines and supporting structures shall be sited to minimize their visual impact.	3.13.3.4, Impact Evaluation Criteria; pg. 3.13-15	The Project would be sited adjacent to the PG&E Tesla Substation to reduce the required length of the proposed gen-tie line. Only five new tubular steel support poles would be required to run the gen-tie line the short distance (approximately 0.5 miles) across Patterson Pass Road and vacant land to the adjacent PG&E Tesla Substation.
Local	Alameda County	Policy 215: The County shall manage development and	3.13.3.4, Impact	As discussed under Impact Evaluation Criteria 3.13b, the

Table 3.13-3. LORS Applicable to Visual Resources

Jurisdiction	LORS	Applicability	Opt-In Application Reference	Project Conformity
	General Plan, "Scenic Highways" ECAP Policies	conservation of land within East County scenic highway corridors to maintain and enhance scenic values.	Evaluation Criteria; pgs. 3.13-12, 3.13-13, and 3.13-14	Project would not substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway, and impacts would be less than significant.

Sources: Alameda County 1994a, 1994b, 2000.

3.13.6.1 Federal LORS

There are no federal regulations specific to visual resource protection that are applicable to the Project.

3.13.6.2 State LORS

California Environmental Quality Act

CEQA requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of the Project and to reduce environmental impacts to the extent feasible. Appendix G of the State CEQA Guidelines includes criteria for evaluating potential impacts related to aesthetics.

California Code of Regulations

Title 24: California Building Standards Code

Title 24, California Building Standards Code, consists of regulations to control building standards throughout the state. The following components of Title 24 include standards related to lighting.

Title 24, Part 1: California Building Code/Title 24, Part 3: California Electrical Code

The California Building Code (Title 24, Part 1) and the California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for pedestrian pathways, circulation ways, parking lots, and paths of egress.

Title 24, Part 6: California Energy Code

The California Energy Code (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems, with the aim of reducing energy consumption through efficient and effective use of lighting equipment. California Energy Code Section 130.2 sets forth requirements for outdoor lighting controls and luminaire cutoff requirements. All outdoor luminaires of 6,200 initial luminaire lumens or greater shall comply with backlight, uplight, and glare (BUG) in accordance with ANSI/IES TM-15-20, Annex A requirements in accordance with Title 24, Part 11, Section 5.106.8. This requirement does not apply to streetlights for the public right of way, signs, temporary outdoor lighting, or building façade lighting.

California Energy Code Section 140.7 establishes outdoor lighting power density allowances in terms of watts per area for lighting sources other than signage. The lighting allowances are provided by the Lighting Zone, as defined in California Energy Code Section 10-114 of the California Energy Code. Under Section 10-114, all rural areas within California are designated as Lighting Zone 1 ("Low" Ambient Lighting Illumination).

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. I-580 is an officially designated state scenic highway from south of the I-205 interchange to State Route 152 and is eligible state scenic highway from west of the I-205 interchange to the City of San Leandro (Caltrans 2024).

3.13.6.3 Local LORS

Alameda County Municipal Code

Chapter 17.64 - Water Efficient Landscape Ordinance

The purpose of the regulations set forth in this Alameda County Municipal Code (ACMC) Chapter 17.64 is to establish a structure for planning, designing, installing, maintaining, and managing water efficient landscapes in new construction and rehabilitated projects and establish provisions for water management practices and water waste prevention for existing landscapes. Chapter 17.64 is applicable to the Project, which would increase the area of irrigated landscape by an amount equal to or greater than 2,500 square feet. Requirements include submittal of a landscape design plan (ACMC Section 17.64.090), irrigation design plan (ACMC Section 17.64.100), and grading design plan (ACMC Section 17.64.110).

Alameda County Grading Ordinance

The purpose of ACMC Chapter 15.36 is to regulate grading work on private property within the unincorporated area of Alameda County in order to safeguard life, limb, health, property, and public welfare; to protect creeks, watercourses, and other drainage facilities from illicit discharges of surface runoff generated in or draining through the permit work area; and to ensure that the construction and eventual use of a graded site is in accordance with the Alameda County General Plan, ECAP, and all applicable ordinances (ACMC Section 15.36.020). In accordance with ACMC Section 15.36.040, the Project would be subject to a valid grading permit obtained from the Director of Public Works. The permit application requires both preliminary grading plans and final grading plans in accordance with ACMC Sections 15.36.240 and 15.36.250, respectively.

Alameda County General Plan

Scenic Route Element

The Scenic Route Element of the Alameda County General Plan (Scenic Route Element) provides a continuous, countywide scenic route system and is intended to serve as a guide for local jurisdictions for development of city-scale scenic route systems and as a guide for development to protect and enhance the scenic values along designated scenic routes (Alameda County 1994a). The Scenic Route Element identifies scenic freeways and

expressways as traversing or connecting areas of major scenic, recreational, or cultural attractions, and as distinct from two other major types of scenic routes (scenic thoroughfares and rural-recreation routes). Scenic routes are defined to consist of three elements: the right-of-way, the scenic corridor, and areas extending beyond the corridor. The corridor is defined as those properties, along and up to 1,000 feet beyond the right-of-way, that either (1) should be acquired for protection, or (2) for which development controls should be applied to preserve and enhance nearby views or maintain unobstructed distant views along the route in rural areas with high scenic qualities. More specifically, scenic corridors are defined as those areas where "Development controls should be applied to preserve and enhance scenic qualities, restrict unsightly use of land, control height of structures, and provide site design and architectural guidance along the entire scenic corridor" (Alameda County 1994a). For the areas extending beyond scenic corridors (i.e., beyond 1,000 feet from the right-of-way), the Scenic Route Element also requires basic development controls: in the undeveloped parts of the county, project review should address grading, removal of vegetation, streambeds, landscaping, utility and communication towers, poles and lines, and outdoor advertising signs or structures. The area surrounding the Project site area includes one state-designated scenic highway, I-580, which is also categorized as one of the County's Scenic Freeways and Expressways. In addition, Patterson Road (adjacent to the Project site) is mapped as a Major Rural Road and qualifies as a Scenic Rural-Recreation Route (Alameda County 1994a).

The Scenic Route Element provides the following principles for Scenic Route Corridors that may apply to the Project. The principles are organized loosely under five headings: the system, the rights-of-way, the corridors, the corridors and the remainder or balance of the County, and areas beyond the corridors.

Provide for Normal Uses of Land and Protect Against Unsightly Features: In both urban and rural areas, normally permitted uses of land should be allowed in scenic corridors, except that panoramic views and vistas should be preserved and enhanced through supplementing normal zoning regulations with special height, area, and side-yard regulations; through providing architectural and site design review; through prohibition and removal of billboards, signs not relevant to the main use of the property, obtrusive signs, automobile wrecking and junk yards, and similar unsightly development or use of land. Design and location of all signs should be regulated to prevent conglomerations of unsightly signs along roadsides.

Locate Transmission Towers and Lines Outside of Scenic Route Corridors When Feasible: New overhead transmission towers and lines should not be located within scenic corridors when it is feasible to locate them elsewhere.

Underground Utility Distribution Lines When Feasible; Make Overhead Lines Inconspicuous: New, relocated or existing utility distribution lines should be placed underground whenever feasible. When it is not feasible to place lines underground, they should be located so as to be inconspicuous from the scenic route. Poles of an improved design should be used wherever possible. Combined or adjacent rights-of-way and common poles should be used wherever feasible.

Use Landscaping to Increase Scenic Qualities of Scenic Route Corridors: Landscaping should be designed and maintained in scenic route corridors to provide added visual interest, to frame scenic views, and to screen unsightly views.

Preserve and Enhance Natural Scenic Qualities in Areas Beyond the Scenic Corridor: Views from scenic routes will comprise essentially all of the remainder of the county beyond the limits of the scenic corridor: the corridor is intended to establish a framework for the observation of the views beyond. Therefore, in all areas in the county extending beyond the scenic route corridors, scenic qualities should be preserved through retaining the general character of natural slopes and natural formations, and through preservation and enhancement of water areas,

watercourses, vegetation and wildlife habitats. Development of lands adjacent to scenic route corridors should not obstruct views of scenic areas and development should be visually compatible with the natural scenic qualities.

Provide for Normal Uses of Land but Limit Overhead Utilities and Outdoor Advertising Structures: In both developed and undeveloped areas, outdoor advertising structures, utility and communication towers, poles, and wires should be located only where they will not detract from significant scenic views. All other structures and use of land should be permitted as specified in the local zoning ordinance as supplemented by special height regulations.

Lastly, the Scenic Route Element establishes development standards that may apply to Project.

- In all zoning districts where the allowable height limit exceeds 35 feet, each proposed structure over 35 feet, except utility poles and lines, should be reviewed by the local jurisdiction for approval to ensure that such structure will not conflict with any view from any scenic route.
- Alteration to natural or artificial land contours should not be permitted without a grading permit issued by the local jurisdiction as a means of preserving and enhancing the natural topography and vegetation in developable areas. Mass grading should not be permitted. The following criteria should be applied in the review of grading permits in developable areas:
  - As a means of preserving natural ridge skylines within the county, no major ridgeline should be altered to the extent that an artificial ridgeline results.
  - Access roads should be located and designed to keep grading to a minimum.
  - Natural ground contours in slope areas over 10% should not be altered more than 5% overall, except in such slope areas where large stands of mature vegetation, scenic natural formations or natural watercourses exist, where grading should be limited so as to preserve the natural features.
  - Any contour altered by grading should be restored by means of land sculpturing in such a manner as to minimize run-off and erosion problems, and should be planted with low maintenance, fire resistant plant materials that are compatible with the existing environment.
- In corridors along scenic routes with outstanding distant views above the roadbed, no building structure of more than one story in height should be permitted where it would obstruct views, excepting within and immediately adjacent to central business district locations. On lots where the building structure is higher than the roadbed in corridors along routes with outstanding distant views, the combined width of side yard should equal or exceed the width of the building structure as measured parallel to the roadbed.

Open Space Element

The following principles from the Open Space Element of the General Plan (Open Space Element) may apply to the Project (Alameda County 1994b).

Include Natural Ridgelines and Slope Areas: Natural ridgelines, and slopes in excess of 25% in grade, should be left as open space to eliminate mass grading.

Consolidate and Locate Utility Lines to Avoid Scenic Areas: Wherever feasible, power and pipe utility lines should be consolidated to prevent further severance of open space lands. Utility lines and aqueducts in open space areas should be located so as to avoid areas of outstanding beauty.

East County Area Plan

The Project site falls within Alameda County East County Area Plan (ECAP). The following goals and policies of the ECAP may be applicable to the Project. Goals in the ECAP are intended to be general statements of a condition Alameda County wants to achieve, and the associated policies are the focused statements of how Alameda County will achieve these goals (Alameda County 2000).

Sensitive Viewsheds

Goal: To preserve unique visual resources and protect sensitive viewsheds.

Policy 106. Structures may not be located on ridgelines or hilltops or where they will project above a ridgeline or hilltop as viewed from public roads, trails, parks and other public viewpoints unless there is no other site on the parcel for the structure or on a contiguous parcel in common ownership on or subsequent to the date this ordinance becomes effective. New parcels may not be created that have no building site other than a ridgeline or hilltop, or that would cause a structure to protrude above a ridgeline or hilltop, unless there is no other possible configuration.

Policy 108. To the extent possible, including by clustering if necessary, structures shall be located on that part of a parcel or on contiguous parcels in common ownership on or subsequent to the date this ordinance becomes effective, where the development is least visible to persons on public roads, trails, parks and other public viewpoints. This policy does not apply to agricultural structures to the extent it is necessary for agricultural purposes that they be located in more visible areas.

Policy 114. The County shall require the use of landscaping in both rural and urban areas to enhance the scenic quality of the area and to screen undesirable views. Choice of plants should be based on compatibility with surrounding vegetation, drought-tolerance, and suitability to site conditions; and in rural areas, habitat value and fire retardance.

Policy 115. In all cases appropriate building materials, landscaping and screening shall be required to minimize the visual impact of development. Development shall blend with and be subordinate to the environment and character of the area where located, so as to be as unobtrusive as possible and not detract from the natural, open space or visual qualities of the area. To the maximum extent practicable, all exterior lighting must be located, designed and shielded so as to confine direct rays to the parcel where the lighting is located.

Policy 116. To the maximum extent possible, development shall be located and designed to conform with rather than change natural landforms. The alteration of natural topography vegetation, and other characteristics by grading, excavating, filling or other development activity shall be minimized. To the extent feasible, access roads shall be consolidated and located where they are least visible from public view points.

Policy 117. The County shall require that where grading is necessary, the off-site visibility of cut and fill slopes and drainage improvements is minimized. Graded slopes shall be designed to simulate natural contours and support vegetation to blend with surrounding undisturbed slopes.

Policy 118. The County shall require that grading avoid areas containing large stands of mature, healthy vegetation, scenic natural formations, or natural watercourses.

Policy 119. The County shall require that access roads be sited and designed to minimize grading.

Policy 120. The County shall require that utility lines be placed underground whenever feasible. When located above ground, utility lines and supporting structures shall be sited to minimize their visual impact.

Scenic Highways

Goal: To preserve and enhance views within scenic corridors.

Policy 215. The County shall manage development and conservation of land within East County scenic highway corridors to maintain and enhance scenic values.

3.13.7 Agencies and Agency Contacts

There are no agencies with jurisdiction to issue permits or approvals, or to enforce identified LORS related to visual resources. No agencies were contacted during preparation of this visual resources evaluation.

3.13.8 Permits and Permit Schedule

No permits related to visual resources would be required for the Project.

3.13.9 References

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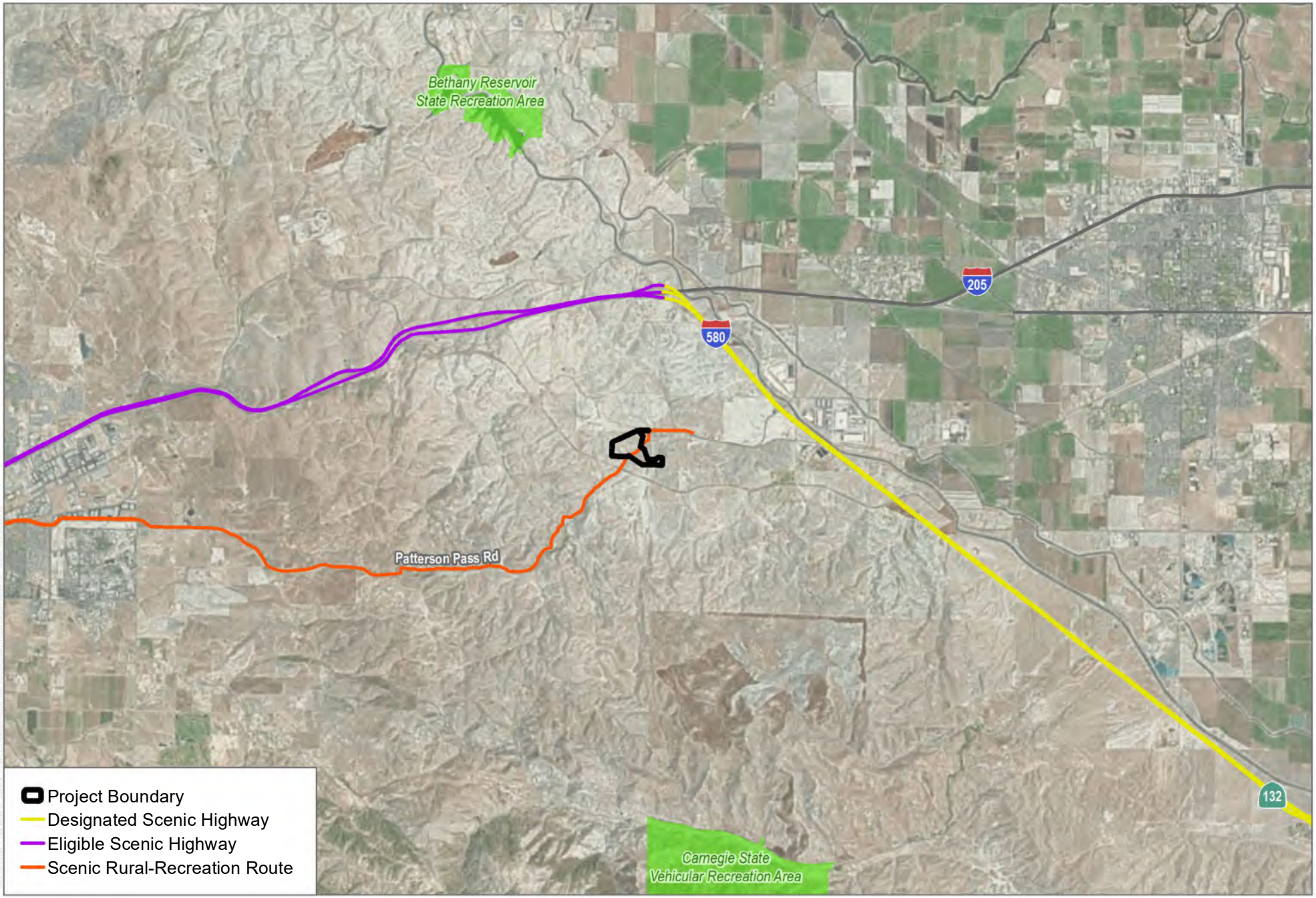

SOURCE: Bing Maps (accessed 2024); Open Streets Map 2019

DUDEK

0 3,950 7,900 Feet

FIGURE 3.13-1

Scenic Resources

Potentia-Viridi BESS Project

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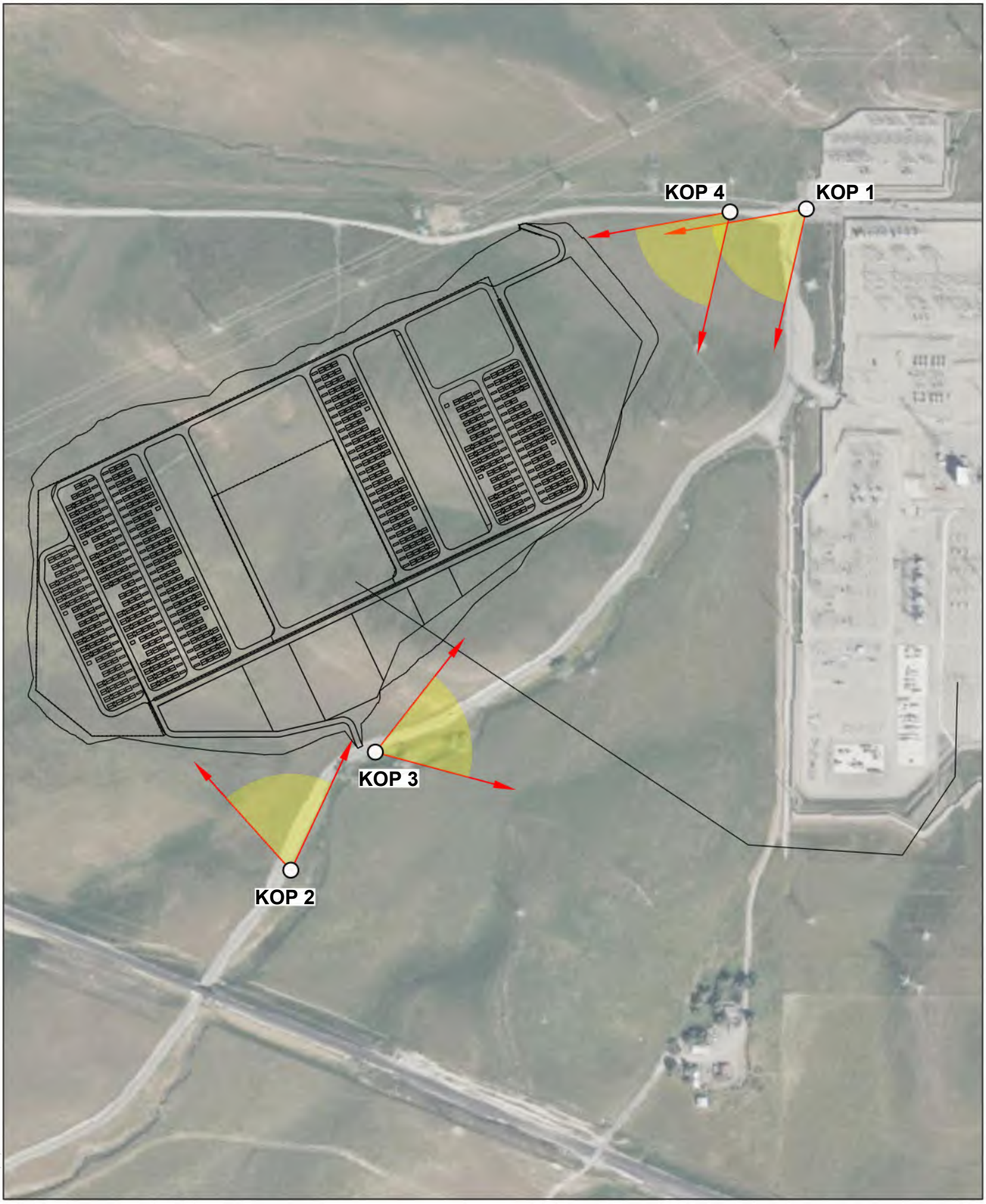

FIGURE 3.**13-2**

KOP Locations

Potentia-Viridi BESS Project

DUDEK

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Figure 3.13-3A

Existing Conditions - KOP1, Patterson Pass Road (Looking Southwest)

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Figure 3.13-3B

Existing Conditions - KOP2, Patterson Pass Road (Looking North)

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SOURCE: Dudek 2024

Figure 3.13-3C

Existing Conditions – KOP 3, Patterson Pass Road (Looking Northeast)

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SOURCE: Dudek 2024

Figure 3.13-3D

Existing Conditions – KOP 4, Patterson Pass Road (Looking Southwest)

DUDEK

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Figure 3.13-4A

Photographic Simulation - KOP1, Patterson Pass Road (Looking Southwest)

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Figure 4.13-4B

Photographic Simulation - KOP2, Patterson Pass Road (Looking North)

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Figure 4.13-4C

Photographic Simulation - KOP3, Patterson Pass Road (Looking Northeast)

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Figure 4.13-4D

Photographic Simulation - KOP4, Patterson Pass Road (Looking Southwest)

INTENTIONALLY LEFT BLANK