

SDG&E NCCP Pre-Activity Study Report Text Form

eTS Number	25459	Task Tracker Number	
Proposed Project Name	Sycamore to Peñasquitos 230 Kilovolt Transmission Line Project		
DPSS			

EXECUTIVE SUMMARY

San Diego Gas & Electric (SDG&E) is proposing to construct the Sycamore to Peñasquitos 230 Kilovolt (kV) Transmission Line Project (Project), a new transmission line that would connect the existing SDG&E Sycamore Canyon and Peñasquitos Substations. The approximately 14-mile transmission line was identified in the Project’s Final Environmental Impact Report (FEIR) as the Environmentally Superior Alternative (Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead) (California Public Utilities Commission [CPUC] 2016). The Project is located in the City of San Diego; Marine Corps Air Station (MCAS) Miramar; and unincorporated communities of Carmel Valley, Mira Mesa, and Scripps Ranch in San Diego County, California. The Project consists of three main components:

- 1) Construction of approximately 0.74 mile of new 230 kV overhead and underground transmission line and relocated 138 kV power line between the existing Sycamore Canyon Substation and a trail originating at Stonebridge Parkway;
- 2) Construction of approximately 11.45 miles of 230 kV underground transmission line in existing roads and bridges; and
- 3) Installation of approximately 2.2 miles of new 230 kV transmission line and all-dielectric self-supporting (ADSS) communication cable on existing 230 kV tubular steel poles from Carrol Canyon Road to Peñasquitos Substation and construction of one new cable pole near Carrol Canyon Road and the I-805.

All work for the Project will be located primarily within the existing SDG&E right-of-way (ROW) or within the franchise position within existing public roadways.

All work for the Project associated with replacement, consolidation, and upgrading facilities within the existing SDG&E ROW is considered “Operations and Maintenance” (O&M) of existing facilities. Work associated with the installation of new facilities in a location where there are not existing facilities is considered “new facilities.” Therefore, all work for the Project is considered O&M of existing facilities, except for the installation of underground transmission line and structure CC MM CP (see Appendix B: Project Mapbook).

As required by the SDG&E Subregional Natural Communities Conservation Plan (NCCP; SDG&E 1995a and 1995b) and the Project’s FEIR, SDG&E contracted Chambers Group, Inc. (Chambers Group) to complete a Pre-activity Survey Report (PSR) for the Project. The PSR survey effort (survey effort) included a review of all proposed Project impact areas and the habitats immediately surrounding those impact areas (Biological Study Area [BSA]) in order to determine Project-related impacts to sensitive habitat types and potential impacts to NCCP-covered plant and wildlife species. For the purposes of the survey effort, the Project was divided into two Segments: Segment A consists of the portion of the Project under the jurisdiction of MCAS Miramar and Segment B consists of the remainder of the Project located off of MCAS Miramar land. One PSR was prepared for each Segment. This PSR analyzes Segment B for potential impacts to natural areas. Segment A is analyzed in a separate MCAS Miramar PSR included as Appendix A. However, a summary of total impacts for the Project described in this PSR (Segment B) and the MCAS Miramar PSR (Segment A) are shown below in Table 1.

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Table 1: Total Anticipated Impact Summary Table

Type of Impact		Area Impacted (sq. ft.)		
		Within a Preserve	Outside of a Preserve	Total
Temporary	Total Anticipated Temporary Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	248	60,774	61,022
	Total Anticipated Temporary Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	83,524	3,736,993	3,820,517
	Total Anticipated Temporary impacts	83,772	3,797,767	3,881,539
Permanent	Total Anticipated Permanent Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	0	18,289	18,289
	Total Anticipated Permanent Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	0	22,057	22,057
	Total Anticipated Permanent Impacts	0	40,346	40,346

In addition, the underground portion of Segment B, located between project components CC MM CP and P05 CP, is not expected to occur within natural areas, as construction activities are proposed to occur entirely within developed, existing roadways; therefore, the underground portion of Segment B between CC MM CP and P05 CP is not evaluated in this PSR.

Impacts were categorized into two groups: permanent impacts and temporary impacts and are summarized in Table 2 below. Anticipated permanent impacts for Segment B were calculated by combining the anticipated permanent impacts from new structures and permanent work areas. Anticipated temporary impacts for Segment B were calculated by combining the anticipated temporary impacts from: stringing sites, staging yards, and structure installation/replacement and other work areas.

Impacts to sensitive habitat types will be mitigated according to specifications outlined in Table 7.4 of the SDG&E NCCP and the Project’s FEIR, which in some cases may require mitigation above and beyond what is required by SDG&E’s NCCP. Permanent impacts to sensitive habitats within a Preserve for both O&M of existing facilities and installation of new facilities are mitigated at a 2:1 ratio through credits from the SDG&E mitigation bank. No permanent impacts to sensitive habitats within a Preserve are anticipated as a result of the Project (Segments A and B); therefore, no mitigation credit drawdown for impacts to sensitive habitats within a Preserve is anticipated as a result of project-related permanent impacts.

Temporary impacts to sensitive habitat types will be mitigated through a Project-specific Habitat Restoration Plan based on the requirements found in the SDG&E Enhancement and Monitoring Program described in Section 7.2 of the NCCP and the Project’s FEIR. While Table 7.4 of the SDG&E NCCP would not require mitigation for less than 500 square feet of temporary impacts to sensitive habitats within a Preserve, the Project’s FEIR does require mitigation for these impacts. Accordingly, SDG&E will mitigate for all temporary impacts to sensitive habitat types located within a Preserve in accordance with the Project-specific Habitat Restoration Plan.

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Similarly, under the SDG&E NCCP, permanent impacts from O&M of existing facilities outside a Preserve would not require mitigation. However, in compliance with the Project’s FEIR, mitigation for permanent impacts associated with construction of new facilities and from O&M of existing facilities (included in Table 2) will be treated the same and mitigated at a 1:1 ratio through credits from the SDG&E mitigation bank.

Table 2: Segment B Anticipated Impact and Mitigation Summary Table

Type of Impact		Area Impacted (sq. ft.)		
		Within a Preserve	Outside of a Preserve	Total
Temporary	Total Anticipated Temporary Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	248	37,871	38,119
	Total Anticipated Temporary Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	83,524	3,639,628	3,723,152
	Total Anticipated Temporary impacts	83,772	3,677,499	3,761,271 (86.35 acres)
Permanent	Anticipated Permanent Impacts to Sensitive Vegetation Communities Related to Construction of New facilities	0	2,380	2,380
	Anticipated Permanent Impacts to Sensitive Vegetation Communities Related to <i>O&M of Existing facilities</i>	0	10,231	10,231
	Total Anticipated Permanent Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	0	12,611	12,611
	Total Anticipated Permanent Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	0	17,316	17,316
	Total Anticipated Permanent Impacts	0	29,927	29,927 (0.69 acre)

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SECTION 1.0 – INTRODUCTION

1.1 PROJECT DESCRIPTION

The Project includes the construction and operation of a 230 kV transmission line between the existing Sycamore Canyon and Peñasquitos substations. The Project route consists of approximately 14 miles traversing through developed residential and commercial areas as well as undeveloped areas and includes the following components:

- 1) Construction of approximately 0.74 mile of new 230 kV overhead and underground transmission line and relocated 138 kV power line between the existing Sycamore Canyon Substation and a trail originating at Stonebridge Parkway;
- 2) Construction of approximately 11.45 miles of 230 kV underground transmission line in existing roads and bridges;
- 3) Installation of approximately 2.2 miles of new 230 kV transmission line and all-dielectric self-supporting (ADSS) communication cable on existing 230 kV tubular steel poles from Carrol Canyon Road to Peñasquitos Substation and construction of one new cable pole near Carrol Canyon Road and the I-805.

SECTION 2.0 – PROJECT LOCATION

The Project alignment extends from the Peñasquitos Substation in the west to the Sycamore Canyon Substation on MCAS Miramar in the east, in San Diego County, California. The Project begins as an overhead alignment at the Peñasquitos Substation in the west and heads southwest through a mix of commercial development and open space until Carroll Canyon Road. At Carroll Canyon Road, the Project takes a turn east and follows Carroll Canyon Road as an underground alignment alongside Poway Creek. The underground alignment continues to meander east through commercial development, crosses Interstate-15 (I-15), follows Pomerado Road and Stonebridge Parkway, and returns to an overhead position as it enters MCAS Miramar land where it transitions underground before terminating at the Sycamore Canyon Substation (Appendix B). The Project is located in the United States Geological Survey (USGS) Del Mar and Poway 7.5-minute quadrangles.

In addition to military land (MCAS Miramar), the Project is surrounded by a mix of public and private land use including commercial development, office buildings, community parks, a golf driving range, a mining facility, residential development, and open space within Carroll Canyon and Scripps Ranch. The location of the Project primarily through developed areas has significantly minimized impacts to habitat and sensitive vegetation communities.

SECTION 3.0 – WORK DESCRIPTION

New poles will be H-frame or cable poles fabricated of dulled galvanized steel. Cable poles will be installed with either concrete micropile or pier foundations. Overhead conductor would be aluminum-clad, steel-supported wire. Construction activities include the installation of one new 230 kV steel cable pole, replacement of one existing wood H-frame structure with a new double-circuit 230kV tubular steel pole, replacement of one existing wood structure with a 230-kV cable pole, replacement of one existing 138kV wood H-frame with new steel 138 kV H-frame structure, installation of approximately 2.8 miles of new 230 kV overhead line on existing structures and new poles, and installation of approximately 11.5 miles of new underground line. The majority of new transmission line facilities would be located within existing SDG&E ROW or within franchise position within existing public roadways. Wherever possible, activities will occur within existing paved or unpaved access roads or other previously disturbed areas.

3.1 WORK SITES

Work sites for pole installation, overhead work, and deepwell drilling will be contained within the area immediately surrounding the pole as shown on the Appendix B mapbook. Photographs of current conditions at each Project work site

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are located in Appendix C: Site Photographs. Work sites have been designed to minimize ground disturbance in natural areas to the extent feasible.

3.1.1 Staging Yards

The inclusion of staging yards in the Project design is necessary for storing and preparing materials and equipment for Project activities. In addition to the use of existing SDG&E substations for material and equipment staging, the Project will include approximately 12 staging yards: Carmel Valley, Evergreen Nursery, Stonebridge, Stowe, Site 1A, Site 1B, Site 2, Site 3, Site 4A, Site 4B, Site 4C, and Site 5.

The work area for the Carmel Valley Staging Yard is approximately 311,454 sq. ft. (7.15 acres). The site is located within a disturbed parcel north of the intersection of Camino Del Sur and Carmel Valley Road, in the city of San Diego. The yard can be accessed directly from Camino Del Sur to the west.

The work area for the Evergreen Nursery Staging Yard is approximately 1,196,158 sq. ft. (27.46 acres). The site is located within a developed commercial nursery north of Carmel Valley Road and east of Via Albertura, in the city of San Diego. The yard can be accessed directly from Carmel Valley Road to the south.

The work area for the Stonebridge Staging Yard is approximately 172,933 sq. ft. (3.97 acres). The site is located within a previously disturbed lot between Stonebridge Parkway and the Sycamore Canyon Substation, in the incorporated community of Scripps Ranch. The yard can be accessed directly from Stonebridge Parkway to the north.

The work area for the Stowe Staging Yard is approximately 154,638 sq. ft. (3.55 acres). The site is located within a previously disturbed lot between Stowe Drive and Crosthwaite Circle, in the city of Poway. The yard can be accessed directly from Stowe Drive to the south.

The work area for the Site 1A Staging Yard is approximately 62,291 sq. ft. (1.43 acres). The site is located within a previously disturbed lot west of Black Mountain Road, in the city of San Diego. The yard can be accessed from existing access roads off Black Mountain Road to the east.

The work area for the Site 1B Staging Yard is approximately 129,373 sq. ft. (2.97 acres). The site is located within a previously disturbed lot west of Black Mountain Road, in the city of San Diego. The yard can be accessed from existing access roads off Black Mountain Road to the east.

The work area for the Site 2 Staging Yard is approximately 54,450 sq. ft. (1.25 acres). The site is located within Carroll Canyon Road west of the intersection of Carroll Canyon Road and Camino Ruiz, in the city of San Diego. The yard can be accessed directly from Carroll Canyon Road.

The work area for the Site 3 Staging Yard is approximately 114,127 sq. ft. (2.62 acres). The site is located within an active excavation area northwest of Trade Place, in the city of San Diego. The yard can be accessed from an existing access road off Carroll Canyon Road to the west.

The work area for the Site 4A Staging Yard is approximately 86,249 sq. ft. (1.98 acres). The site is located within a previously disturbed lot southwest of Summers Ridge Road, in the incorporated community of Sorrento Valley. The yard can be accessed from a developed parking lot to the east, which is accessed from Summers Ridge Road to the north.

The work area for the Site 4B Staging Yard is approximately 50,530 sq. ft. (1.16 acres). The site is located within a developed parking south of Summers Ridge Road, in the incorporated community of Sorrento Valley. The yard can be accessed directly from Summers Ridge Road to the north.

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The work area for the Site 4C Staging Yard is approximately 263,974 sq. ft. (6.06 acres). The site is located within a previously disturbed lot northeast of Summers Ridge Road, in the incorporated community of Sorrento Valley. The yard can be accessed directly from a paved driveway off Summers Ridge Road to the south.

The work area for Staging Yard 5 is approximately 31,799 sq. ft. (0.73 acres). The site is located east of Nancy Ridge Road and south of Sorrento Canyon Golf Center. The site is located within a previously disturbed lot in the incorporated community of Sorrento Valley. The yard can be accessed directly from Nancy Ridge Drive to the west.

The size and shape of staging areas may be irregular and modified depending on specific material storage needs, safe and adequate work spaces, vehicle access, and avoidance of natural resources. Some staging yards may also be used as Incidental Landing Areas (ILAs) for helicopter work, if necessary. These staging yards that may have helicopter activity include, Stowe, Stonebridge, Carmel Valley, Penasquitos Substation, and Mission Substation. Work within staging yards, including equipment staging and vehicle turnaround areas, is anticipated to be conducted within previously disturbed and developed areas.

3.1.2 Substations

Minor modifications will be performed to the Peñasquitos and Mission substations to allow for connection of the new 230 kV transmission line. These substations will also be used for equipment staging for the Project. Work to be performed in the Sycamore Canyon Substation is described in Appendix A.

The work area for the Mission Substation is approximately 378,972 sq. ft. (8.70 acres). The site is within the existing Mission Substation east of Interstate 805 and north of Friars Road, in the city of San Diego. The yard can be accessed from an existing access road off Friars Road to the south.

The work area for the Peñasquitos Substation is approximately 570,200 sq. ft. (13.09 acres). The site is within the existing Peñasquitos Substation west of East Ocean Air Drive, in the city of San Diego. The yard can be accessed from an existing access road off East Ocean Air Drive to the east.

Work within substations, including modification activities, equipment staging, and vehicle turnaround areas, is anticipated to be conducted within previously disturbed and developed areas.

3.1.3 Stringing Sites

To facilitate the re-conductoring of the new transmission line along Segment B, approximately 5 stringing sites of various dimensions will be utilized. Stringing sites, where feasible, will be confined to previously disturbed areas within the ROW and along or adjacent to Project access roads. Segment B will require use of approximately 5 stringing sites. Two of these sites will be contained entirely within the Peñasquitos Substation work area. The remaining 3 stringing sites will require a total work area of approximately 45,366 sq. ft. (1.04 acres). Vehicles, equipment, and personnel will remain within the SDG&E ROW, existing paved or unpaved access roads, or previously disturbed areas to the greatest extent possible. For the purpose of tracking potential impacts for this PSR, the five stringing sites are numbered 1-5 from west to east, beginning at the Peñasquitos Substation (Appendix B).

3.1.4 Guard Structures

Temporary guard structure installation will occur in locations within the overhead alignment where stringing work will cross existing facilities, such as other utilities and roadways, to assure minimum clearances are maintained while conductors are being pulled. Different types of guard structures may be used, depending on the site conditions. Bucket trucks are often utilized as guard structures during stringing activities. Where wooden poles are used as guard structures, installation requires the temporary use of approximately 36 sq. ft. of area for a single-pole guard structure and approximately 72 sq. ft. of area for an H-frame guard structure. The temporary work area is located in the

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immediate vicinity of the guard structure location. No permanent impacts would result from the utilization of guard structures. Approximately 18 wooden guard structures will be utilized on Segment B at locations where the transmission line crosses public roads. These 18 guard structures will require a total work area of approximately 24,152 sq. ft. (0.55 acre). The guard structures are necessary to provide for safety while conductor is pulled through the line. For the purpose of tracking potential impacts for this PSR, the 18 guard structures are numbered 1-18 from west to east, beginning at the Peñasquitos Substation (Appendix B).

3.2 ACCESS

Project-related activities will remain within the existing SDG&E ROW easements wherever feasible. All sites/pole locations are expected to be accessible by vehicle on paved or unpaved SDG&E-maintained access roads. Road re-establishment and/or vegetation clearing may be necessary to improve some existing access roads and to re-establish unmaintained access roads. No new access roads are anticipated to be established.

3.3 CONSTRUCTION METHODS

Two distinct types of poles will be used for the Project: engineered dull galvanized steel poles used with micropile foundations and engineered dull galvanized steel poles used with pier foundations. Work areas for each type of pole will vary but will be confined to the previously disturbed areas around the base of the existing poles to the greatest extent possible in order to provide a safe and adequate workspace.

3.3.1 Micropile Foundation Poles

Micropile foundations will be used where there is rocky substrate that is difficult to dig in and the use of blasting or rock blasters may be required. Micropile foundations will also be used where access and space is limited. Micropile foundation poles are heavy-duty engineered steel poles installed using a micropile foundation, which uses a series of level work platforms from which small micropiles (or small, individual foundations) are installed. A steel cap and micropile anchor bolt ring are installed above the micropile foundation to act as the base foundation for an engineered steel pole. Micropile foundations consist of several small-diameter, drilled, grouted, and reinforced foundations that are arranged in a circular pattern. Micropiles would be approximately 6 to 8 inches in diameter and installed 10 to 40 feet deep. Each foundation would have 4 to 16 micropiles in a circle that would be 4 to 10 feet in diameter.

3.3.2 Pier Foundation Poles

Concrete pier foundation poles will typically be installed 20 to 40 feet deep; however, depending on soil conditions, holes may need to be deeper. Unstable soil may require use of steel casings (6 to 11 feet in diameter) to stabilize the excavated hole. A rebar cage is then lowered into the hole and an anchor bolt cage is inserted within the rebar cage. The hole is then filled with concrete, with the exposed final foundation remaining approximately 1 to 2 feet above the ground surface level. The new engineered steel pole is then bolted to the foundation. New steel single-pole concrete will be approximately 72 to 96 inches in diameter at the base and will be made of dull galvanized steel.

3.3.3 Retaining Walls

Retaining walls are required when the work pad elevation is higher than the existing surrounding terrain. In this circumstance, the retaining wall and the structure work pad (or a portion thereof) would remain in place following construction and become a permanent project feature. Retaining walls are designed with a mechanically stabilized earth retaining wall approach. To construct the wall, alternating layers of compacted soil and stabilizing geogrid fabric will be installed in vertical pattern, with the fabrics layers being attached to the wall surface to stabilize the wall structure. To finish the wall face, a matrix of stone blocks would be attached. The locations of the retaining walls are shown in Appendix B: Project Mapbook.

3.3.4 Deepwell Drilling Areas

Along the west side of Segment B, there is potential for alternating current (AC) electrical induction impacts on nearby coated metallic gas pipelines. To mitigate these impacts, SDG&E will need to implement an AC mitigation system that will reduce the potential AC interference effects to safe levels for pipeline integrity and public and personnel safety. This system involves the installation of six deepwell anodes along Segment B.

The deepwell work areas will be centered around the proposed deepwell, and will be used for equipment, vehicles and materials during deepwell installation. The deepwell work areas will be located within a combination of disturbed area and bare ground areas without vegetation, and developed/ paved areas. No native vegetation removal or grading will be required.

To initiate deepwell installation, SDG&E will first drill a pilot hole that would be approximately 10 to 12 inches in diameter, to a depth of approximately 32 feet. A well drilling truck will then be used to add a drill pipe and drill to the designed depth of approximately 150 feet, with a diameter of approximately 8 to 10 inches in diameter. The drilled hole will be pumped with water to clear it, and a tank will be used to capture any cuttings and water for disposal. Once the hole is completed and cleaned, a grounding cable will be installed within the hole, along with a grounding rod. After grounding rod and cable installation, low resistance backfill will be pumped into the hole to fill it. The hole will be topped off with permanent bentonite clay to seal it. The deepwell will then be connected to the steady state decoupler (SSD) pedestal using a #2 stranded copper cable. The pedestal will be connected to the pipeline with an exothermic weld. The connection from the deepwell to the SSD pedestal, and ultimately the pipeline, will require an open trench approximately 12 inches in width and five feet in depth. A minimum distance of 10 feet will be maintained between the pipeline and the deepwell. Anticipated construction equipment for deepwell installation includes a backhoe, mini excavator, well digging truck and water truck.

SECTION 4.0 – HABITAT EVALUATION

4.1 VEGETATION COMMUNITIES

The BSA supports a variety of vegetation communities. Each vegetation community description corresponds to the habitats described in the SDG&E NCCP. The following 5 vegetation communities were observed to occur within the Segment B BSA during the pre-activity survey: bare ground, chaparral, coastal sage scrub, disturbed, and landscape/ornamental. Vegetation communities observed within the BSA and the plants that typically occur within those communities are described below. Photographs of the vegetation communities at each Segment B work site are provided as Appendix C.

4.1.1 Bare Ground

Areas characterized as bare ground include areas with exposed soils, rocky substrate, access roads, and disturbed areas devoid of plant cover. Areas within the Segment B BSA that are considered bare ground are existing access roads or previously graded areas.

4.1.2 Chaparral

Chaparral habitat consists of woody, evergreen, leathery-leaved, medium to tall shrubs that are adapted to occasional fires (Gray and Bramlet 1992). Dominant plant species observed within the Segment B BSA included chamise (*Adenostoma fasciculatum*), Ramona lilac (*Ceanothus tomentosus*), black sage (*Salvia melifera*), mission manzanita (*Xylococcus bicolor*), and scrub oak (*Quercus* sp.).

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4.1.3 Coastal Sage Scrub

Coastal sage scrub habitat consists of drought-deciduous, low, soft-leaved shrubs and herbs which are often gray-green in color (e.g., sagebrush, buckwheat, sage). Plant species in this community are typically facultative, drought tolerant, and are most active during winter and spring months. Diegan coastal sage scrub is usually found on xeric slopes or clay dominant soils. This habitat regularly occupies gentle to steep slopes with shallow or heavy soils mostly at elevations below 3,000 ft. above mean sea level (amsl). Within the Segment B BSA, both natural and restored coastal sage scrub habitat occur, characterized by dominant plant species including California sagebrush (*Artemisia californica*), coastal California buckwheat (*Eriogonum fasciculatum* var. *fasciculatum*), coyote bush (*Baccharis pilularis*), laurel sumac (*Malosma laurina*), lemonade berry (*Rhus integrifolia*), four-wing salt scale (*Atriplex canescens*), and bush sunflower (*Encelia californica*).

4.1.4 Disturbed

Disturbed land, at the time a specific project is analyzed or the pre-activity survey is conducted, refers to any land on which the native vegetation has been significantly altered by agriculture, construction, or other anthropogenic activities, and the species composition and site conditions are not characteristic of the disturbed phase of a particular vegetation community (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, roadsides, material storage areas, or abandoned fields, and is often dominated by non-native species. Within the Segment B BSA, disturbed areas are primarily dominated by non-native species, including various combinations of tocalote (*Centaurea melitensis*), short-pod mustard (*Hirschfeldia incana*), riggut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), Russian thistle (*Salsola australis*), slender wild oat (*Avena fatua*), redstem stork's bill (*Erodium cicutarium*), and Australian saltbush (*Atriplex semibaccata*). Scattered individuals or remnants of native coastal sage scrub species may occur including California buckwheat, California sagebrush, broom baccharis (*Baccharis sarothroides*) and deerweed (*Acmispon glaber*).

4.1.5 Landscape/Ornamental

Landscape/ornamental is a NCCP-vegetation community consisting of areas dominated by non-native species planted for landscaping and generally occurs in residential neighborhoods, commercial properties, or along roadsides. This habitat can be found within the residential and commercial portions of the Segment B BSA. Landscape/ornamental associated species observed during the survey included several acacia (*Acacia* spp.), Peruvian pepper tree (*Schinus molle*), Canarian sea lavender (*Limonium perezii*), Western sycamore (*Platanus racemosa*), eucalyptus (*Eucalyptus* spp.), bottlebrush (*Callistemon citrinus*), rosemary (*Rosmarinus officinalis*), and English ivy (*Hedera helix*).

SECTION 5.0 – SENSITIVE BIOLOGICAL RESOURCES

A series of site visits and focused surveys were performed to determine the presence or absence of sensitive resources on or in the vicinity of the Project (CPUC 2016; BBS 2014 and 2015; Chambers Group 2016a-g and 2017). Per the NCCP and FEIR, a pre-activity survey was conducted to confirm that site conditions have not changed, and to assess the potential for impacts to sensitive species as a result of Project-related activities. Chambers Group biologists Christina Congedo and Corinne Klein conducted a pre-activity survey of the Segment B BSA on August 9, 2016 between the hours of 0700 and 1730. Weather conditions during the survey included temperatures of 79 to 84 degrees Fahrenheit, wind speeds of 0 to 5 miles per hour, and cloud cover of 0 to 15 percent.

The entire Project is located within the designated boundaries of the SDG&E Subregional NCCP. The SDG&E NCCP outlines avoidance and minimization measures as well as standard operational procedures which have been incorporated as part of the Project. Prior to the survey effort, Chambers Group conducted a review of current databases within one mile of the Project (literature review). A total of 17 NCCP-covered plant species and 19 NCCP-covered wildlife species have been documented within one mile of Segment B according to the California Natural Diversity Database (CNDDDB) (California Department of Fish and Wildlife [CDFW] 2016) and California Native Plant Society Electronic

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Inventory (CNPSEI 2016) and/or were observed during protocol-level focused plant and wildlife surveys conducted for the Project (CPUC 2016; BBS 2014 and 2015; Chambers Group 2016a-g and 2017). In addition, one NCCP-covered plant species that was not documented within one mile of the Project, one SDG&E Low-Effect Habitat Conservation Plan (HCP)-covered wildlife species, and seven special-status wildlife species that are not NCCP-covered have specific survey requirements per the Final EIR (CPUC 2016). These species are further discussed below. The results of focused surveys conducted for special-status plant species, Riverside fairy shrimp (*Streptocephalus woottoni*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), Quino checkerspot butterfly (*Euphydryas editha quino*), burrowing owl (*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Poliioptila californica californica*) are included in focused survey reports prepared (Busby Biological Services 2014 and 2015; Chambers Group 2016a-g, 2017).

5.1 SDG&E NCCP-COVERED PLANT SPECIES

Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) is a perennial shrub in the Ericaceae family. This species is typically found growing in coastal chaparral habitat. There is no coastal chaparral habitat for the Del Mar manzanita in the BSA. This conspicuous shrub species can be identified without the presence of flowers; therefore, it can be identified outside its blooming period. This species was not observed during the focused plant surveys (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, Del Mar manzanita is not expected to occur within the BSA and no impacts to this species are anticipated.

Wart-stemmed ceanothus (*Ceanothus verrucosus*) is a perennial shrub in the Rhamnaceae family, associated with dry hills and mesas in chaparral habitat. This conspicuous shrub species can be identified without the presence of flowers; therefore, it can be identified outside its blooming period. This species was observed within the BSA, northwest of the Evergreen Nursery Staging Yard, during the 2015 focused plant surveys (Busby Biological Services 2015). This species was not observed in any other portion of the BSA during focused plant surveys (Busby Biological Services 2014 and Chambers Group 2017) or during the pre-activity survey. There is no coastal chaparral habitat for wart-stemmed ceanothus within the Segment B impact area. Therefore, wart-stemmed ceanothus is considered present in the BSA, but is not expected to occur within the impact area and no impacts to this species are anticipated.

Del Mar Mesa sandaster (*Corethrogyne filaginifolia* var. *linifolia*) is a perennial herb in the Asteraceae family that blooms between May and September. This species is found in openings in coastal scrub and chaparral habitats. There is coastal scrub habitat in the vicinity of the BSA for this species; however, Del Mar Mesa sandaster was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Del Mar Mesa sandaster is not expected to occur within the BSA and no impacts to this species are anticipated.

Lakeside ceanothus (*Ceanothus cyaneus*) is a perennial shrub in the Rhamnaceae family that blooms between April and June. This species is usually found growing on slopes and ridges in chaparral and closed cone pine forest habitats at elevations between 148 feet and 3445 feet. This conspicuous shrub species can be identified without the presence of flowers; therefore, it can be identified outside its blooming period. There is suitable chaparral habitat in the vicinity of Segment B; however, this species was not observed during the focused plant surveys (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Lakeside ceanothus is not expected to occur within the BSA and no impacts to this species are anticipated.

Thread-leaved brodiaea (*Brodiaea filifolia*) is a perennial bulbiferous herb in the Themidaceae family that blooms between March and June. This species is federally threatened, state endangered and identified as a California rare plant 1b.1. This species is found growing in clay soils within grassland and vernal pool habitats at elevations between 82 and 2,822 feet. Clay soils are mapped within the BSA and suitable grassland habitat for thread-leaved brodiaea was observed within the BSA; however, this species was not observed in the BSA during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-

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activity survey. Therefore, thread-leaved brodiaea is not expected to occur within the BSA and no impacts to this species are anticipated.

Orcutt's brodiaea (*Brodiaea orcuttii*) is a perennial bulbiferous herb in the Themidaceae family that blooms between May and July. This species is associated with vernal pools, meadows, and swales that occur in mesic, clay, sometimes serpentine habitats, including closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland. Orcutt's brodiaea can be found at elevations between 98 and 5,560 feet. There is marginally suitable habitat for this species in the vicinity of Segment B in road ruts along the access roads. Orcutt's brodiaea was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, Orcutt's brodiaea is not expected to occur within the BSA and no impacts to this species are anticipated.

San Diego barrel cactus (*Ferocactus viridescens*) is a perennial stem succulent in the Cactaceae family that blooms between May and June. This barrel cactus species grows in sandy and rocky areas within chaparral, coastal sage scrub, vernal pools, and valley and foothill grassland habitats at elevations between 10 and 1,476 feet. This conspicuous cactus species can be identified without the presence of flowers; therefore, it can be identified outside its blooming period. This species was observed in chaparral habitat just north of a Project access road west of the Sycamore Canyon Substation during the 2015 focused plant surveys (Busby Biological Services 2015) and in coastal sage scrub habitat near structures E41 and GS1 during the pre-activity survey.

San Diego goldenstar (*Bloomeria clevelandii*) is a perennial herb (bulb) in the Themidaceae family that blooms between April and May. This species is typically found growing in coastal scrub, mesa grasslands, and freshwater wetlands below 328 feet. There are suitable coastal scrub habitats for the San Diego golden star in the BSA; however, this species was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, San Diego goldenstar is not expected to occur within the BSA and no impacts to this species are anticipated.

California orcutt grass (*Orcuttia californica*) is an annual herb in the Poaceae family that blooms between April and August. This species is found in vernal pools within valley grasslands, riparian and wetland habitats, typically at elevation below 2,297 feet. There is marginally suitable habitat for this species in the vicinity of Segment B in road ruts along the access roads. California orcutt grass was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, California orcutt grass is not expected to occur within the BSA and no impacts to this species are anticipated.

San Diego button celery (*Eryngium aristulatum* var. *parishii*) is an annual or perennial herb in the Apiaceae family that blooms between May and June. This species is found in vernal pools within valley grasslands, riparian, coastal sage scrub, and wetland habitats, typically at elevation below 2,313 feet. San Diego button celery was observed east of an access road for the Peñasquitos Substation, outside of impact areas, during the 2015 focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2015). This species was not observed in any other portion of the BSA during focused surveys conducted within the blooming period for this species (Busby Biological Services 2014 and Chambers Group 2017) or during the pre-activity survey. There is marginally suitable habitat for this species in the road ruts along the Project access roads. San Diego button celery is considered present within the BSA outside of impact areas, and has a low potential to occur within seasonally ponded areas and road ruts in the vicinity of Segment B.

San Diego mesa mint (*Pogogyne abramsii*) is an annual herb in the Lamiaceae family that blooms between May and June. This species is found in coastal mesa vernal pools within riparian, coastal sage scrub, chaparral, and wetland habitats, typically at elevation between 328 feet to 656 feet. There is marginally suitable habitat for this species in the vicinity of the Project in the road ruts along the access roads in Segment B. San Diego mesa mint was not observed

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during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, San Diego mesa mint is not expected to occur within the BSA and no impacts to this species are anticipated.

Palmer's goldenbush (*Ericameria palmeri* var. *palmeri*) is a conspicuous shrub found in the Asteraceae family that blooms between September and November. This species typically is found growing in coastal sage scrub habitats below 2,000 ft. elevation. Suitable coastal sage scrub habitat is present in the vicinity of the BSA; however, this species was not observed during the focused plant surveys (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during pre-activity survey. Not all areas of the Project were surveyed within the blooming period of this species; however, no shrubs containing the leaf structure of the goldenbush genus *Ericameria* were identified. Therefore, Palmer's goldenbush is not expected to occur within the BSA and no impacts to this species are anticipated.

San Diego thorn mint (*Acanthomintha ilicifolia*) is an herbaceous annual in the Lamiaceae family that blooms between April and June. This species is associated with vernal pools in chaparral, coastal sage scrub, grassland, and wetland habitats below 3,300 ft. elevation. There is marginally suitable habitat for this species in the vicinity of Segment B in the road ruts along the access roads. San Diego thornmint was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, San Diego thornmint is not expected to occur within the BSA and no impacts to this species are anticipated.

Short-leaved dudleya (*Dudleya brevifolia*) is a perennial herb in the Crassulaceae family that blooms between April and May. This deciduous succulent is usually found on bare sandstone terraces in chaparral and coastal sage scrub habitats. There are suitable bare areas within the coastal sage scrub habitat on the Project. This species was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, short-leaved dudleya is not expected to occur within the BSA and no impacts to this species are anticipated.

Spreading navarretia (*Navarretia fossalis*) is an annual herb in the Polemoniaceae family that blooms between April and June. This species is found in vernal pools and seasonally ponded ditches within riparian, shadscale scrub, and wetland habitats. There is marginally suitable habitat for this species in the vicinity of Segment B in the road ruts along the access roads. Spreading navarretia was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, spreading navarretia is not expected to occur within the BSA and no impacts to this species are anticipated.

Willow monardella (*Monardella viminea*) is a perennial herb in the Lamiaceae family that blooms between June and August. This species is caespitose, meaning it forms mats, dense tufts, or clumps. Willow monardella is an herb that is typically found growing in rocky washes and alluvial benches. There is no habitat (e.g., drainages or benches) in the BSA for willow monardella. Willow monardella was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, this species is not expected to occur within the BSA and no impacts to this species are anticipated.

Palmer's grapplinghook (*Harpagonella palmeri*) is an annual herb in the Boraginaceae family that blooms between March and May. This species is found growing on dry, semi-barren areas in chaparral, valley grasslands, and coastal sage scrub habitats below 3,280 feet. There is suitable chaparral and coastal sage scrub habitat for this species in the vicinity of the BSA. Palmer's grapplinghook was not observed during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2017) or during the pre-activity survey. Therefore, Palmer's grapplinghook is not expected to occur within the BSA and no impacts to this species are anticipated.

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Torrey pine (*Pinus torreyana*) is an evergreen tree in the Pinaceae family. This species is typically found growing in closed-cone pine forest and chaparral habitats. Although this species was not recorded in the CNDDDB within one mile of Segment B, three trees were observed adjacent to access roads for the Peñasquitos Substation (Busby Biological Services 2015), and five trees were observed near structure E44 during the pre-activity survey. These trees appear to have been planted.

5.2 SDG&E NCCP-COVERED WILDLIFE SPECIES

Riverside fairy shrimp prefer moderately deep vernal or ephemeral ponds situated within coastal sage scrub or grassland. It is found in seasonally astatic pools filled by winter/spring rains. It is endemic to western Riverside and San Diego counties in areas of tectonic swales/earth slump basins that form playas, which are underlain by basalt flow and clay soils. This species has been known to occur within the Santa Rosa Plateau, Skunk Hollow, Murrieta, and the Lake Elsinore back basin areas of Riverside County, and in scattered populations within Los Angeles County, Orange County, and in Baja California, Mexico. It is a filter feeder and is prey for a wide range of species including beetles, dragonflies, frogs, salamanders, shorebirds, and ducks. Urbanization, agricultural development, modified hydrology due to nearby road construction, and illegal trash dumping are threats to the species. Suitable habitat for the Riverside fairy shrimp occurs within the road ruts along the dirt access roads to various sites within the BSA. This species was not observed during the fairy shrimp focused surveys (Chambers Group 2016a and b) or pre-activity survey. Therefore, Riverside fairy shrimp is not expected to occur within the BSA and no impacts to this species are anticipated.

San Diego fairy shrimp are found within coastal mesa systems in Orange County (small population) and San Diego County, California, and Baja California, Mexico. In San Diego County, this species has been identified from Camp Pendleton inland to the Ramona area and south through Del Mar Mesa, Proctor Valley, and Otay Mesa. It is generally limited to high quality vernal pools but can also be found in man-made pools that have not been disturbed for several years. Although less common, fairy shrimp species have been identified along road ruts with hard-pan clay type soils. Fairy shrimp eggs (cysts) sink to the bottom of the pool environ, where they can withstand temperature extremes or pool drying and hatch in the future when conditions are more favorable. Cysts can stay dormant for years until conditions are right. Suitable habitat for the San Diego fairy shrimp occurs within the road ruts along the dirt access roads to various sites within the BSA. This species was observed along an access road on the east side of the Peñasquitos substation during a fairy shrimp focused survey conducted January 25, 2016 (Chambers Group 2016a).

Quino checkerspot butterfly, a subspecies of Edith's checkerspot, is a small brush-footed butterfly that flies once a year if environmental conditions are favorable for emergence from pupae. Like most *Euphydryas* sp., it has a small, approximately 2.5 to 4 cm wingspan and is checkered with black, red, and yellowish markings. This species is primarily associated with low elevation (sea level to 3,000 feet) open grasslands, vernal pools, and sunny openings within chaparral, coastal-sage scrub, and juniper woodlands. Colonies are found frequently near clay soils and soils that possess cryptogamic crusts. The primary larval host plant for Quino checkerspot butterfly is dot-seed plantain (*Plantago erecta*), but this species may also use other plantain (*Plantago*) species (e.g. *P. patagonica*, *ovata*, and *P. insularis*), Coulter's snapdragon (*Antirrhinum coulterianum*), bird's beak (*Cordylanthus rigidus*), Chinese houses (*Collinsia concolor*), and purple owls' clover (*Castilleja exserta*). Adult flight typically occurs between late January and mid-May, with peak activity generally in March and April. The flight period varies from year to year, depending upon the annual rainfall and other weather conditions. The eastern portion of Segment B, including the Stonebridge Staging Yard, is located within the United States Fish and Wildlife Service (USFWS)-mapped "Recommended Quino Survey Area" (USFWS 2014) and focused surveys were conducted for this species in the spring of 2016, per Mitigation Measure (MM) Biology-5 of the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP; CPUC 2016). Quino checkerspot butterfly was not detected during the focused surveys (Chambers Group 2016c) or pre-activity survey, and the disturbed condition of the Stonebridge Staging Yard is not expected to provide habitat for this species. Segment B does not fall within the SDG&E Low-effect HCP mapped area for Quino checkerspot butterfly (SDG&E 2007). Therefore, this species is not expected to occur and mitigation is not required for this species or habitat per the SDG&E Low-effect QCB HCP.

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Western Spadefoot (*Spea hammondi*) occurs on the coastal slope of California from the Great Valley area into Baja California, Mexico. It may be found in mixed woodland, grassland, coastal sage scrub, and chaparral habitats, and also in sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. This species can be found in habitats around 4,462 feet in elevation. It prefers lowlands of open areas or sparsely vegetated areas with sandy or gravelly soils. From January to May, it primarily breeds in temporary pools but may also breed in slow-moving sections of streams. However, its breeding activities are primarily associated with vernal pools formed by winter rains and underlying clay hardpans. There is suitable habitat for this species in coastal sage scrub, grassland and chaparral habitats. Suitable breeding habitat for the Western spadefoot can occur within Los Peñasquitos Creek and also within the road ruts along the dirt access roads to various sites within the BSA. This species was not observed during any focused or pre-activity surveys. There is moderate potential for this species to be present within the BSA.

San Diego coast horned lizard (*Phrynosoma coronatum blainvillii*) occurs from the Transverse Ranges in Kern, Los Angeles, Santa Barbara, and Ventura counties southward throughout the Peninsular Ranges of southern California to Baja California, Mexico, as far south as San Vicente. It is found in a wide variety of habitats, including coastal sage scrub, annual grasslands, chaparral, oak woodlands, riparian woodlands, and coniferous forests. It is perhaps most abundant in riparian and coastal sage scrub habitats on old alluvial fans of the southern California coastal plain. In foothill and mountain habitats that are covered with dense brush or other vegetation, the species is largely restricted to areas with pockets of open microhabitats. The key elements of these microhabitats are loose, fine, sandy soils; an abundance of native ants; open areas for basking; and low but relatively dense shrubs for refuge. The San Diego coast horned lizard was not observed during any focused or pre-activity surveys. There is suitable habitat for this species in coastal sage scrub, chaparral and grassland habitats within the BSA; therefore, there is high potential for this species to occur within the BSA.

Belding's orange-throated whiptail (*Aspidoscelis hyperythra beldingi*) occurs in Orange, Riverside, and San Diego counties west of the crest of the Peninsular Ranges, especially in areas with summer morning fog. This species also occurs in southwestern San Bernardino Co. near Colton. Suitable habitat includes chaparral and coastal sage scrub in areas with riparian woodlands and washes; this species may occur within weedy disturbed areas adjacent to these habitats as well. This species was not observed during any focused or pre-activity surveys. Suitable habitat for orange-throated whiptail in chaparral occurs within the BSA. Therefore, there is moderate potential for this species to occur within the BSA.

San Diego ringneck snake (*Diadophis punctatus similis*) is a subspecies found mainly in San Diego County along the coast and into the Peninsular Ranges, and in southwestern Riverside County. This species ranges south barely into northern Baja California, Mexico. This species is typically found under rocks, wood, and other places to hide. The San Diego ringneck snake prefers moist areas within meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands. Suitable habitat exists for this species throughout Segment B in grasslands and chaparral habitat. The San Diego ringneck snake was not observed during any focused or pre-activity surveys. There is a low potential for San Diego ringneck snake to occur within the BSA.

Two-striped garter snake (*Thamnophis hammondi*) is found in disjunct populations from the San Francisco area in California to northwest Baja California, Mexico. This species is found in or near permanent and intermittent freshwater habitats, including streams, rivers, ponds, and small lakes from sea level to around 8,000 feet. Oak woodlands, brushlands, sparse coniferous forests, and riparian forests may surround its freshwater habitat. This highly aquatic snake is most active at dusk or at night, but it may also forage by day. Its diet includes tadpoles, toads, frogs, small fish, earthworms, California newt (*Taricha torosa*) larvae, and aquatic eggs. Pockets of riparian areas with freshwater streams exist throughout the BSA, specifically near Guard Structure GS3 which is located approximately 80 feet south of Los Peñasquitos Creek. This species was not observed during any focused or pre-activity surveys. There is a moderate potential for two-striped garter snake to occur in the BSA; however, no impacts to riparian or freshwater habitat are anticipated.

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Rosy boa (*Charina trivirgata*) ranges from the Pacific coast to the Mojave and Colorado deserts, and can be found in a variety of habitats where a mix of brushy cover and rocky soils predominate. It is attracted to sources of water and forages for small mammals, reptiles, amphibians, and birds primarily at night. Like all colubrid snakes, it kills its prey by constriction before swallowing it whole. This species was not observed during any focused or pre-activity surveys. Suitable habitat for this species occurs throughout Segment B in coastal sage scrub and chaparral habitats. Therefore, there is high potential for this species to be present within the BSA.

Light-footed clapper rail (*Rallus longirostris levipes*) lives exclusively in salt marshes and builds floating nests in cordgrass and wrack that rise and fall with the tide. Light-footed clapper rails primarily feed upon invertebrates such as crabs, snails, mussels and insects but will feed upon fish, tadpoles, and plant matter. There is no suitable salt marsh habitat for the light-footed clapper rail in the BSA. This species was not observed during any focused or pre-activity surveys. Therefore, light-footed clapper rail is not expected to occur in the BSA and no impacts to this species are anticipated.

Western snowy plover (*Charadrius nivosus nivosus*) nests on barren to sparsely vegetated sand beaches, dry salt flats in lagoons, dredge spoils deposited on beach or dune habitats, levees and flats at salt-evaporation ponds, and in river bars. In California, most breeding occurs on dune-backed beaches, barrier beaches, and salt-evaporation ponds and infrequently on bluff-backed beaches. There are no beaches, suitable sparsely vegetated sandy areas, or other suitable habitat for western snowy plover in the BSA. The western snowy plover was not observed during any focused or pre-activity surveys. Therefore, western snowy plover is not expected to occur in the BSA and no impacts to this species are anticipated.

California least tern (*Sterna antillarum browni*) lives and breeds in shallow marine and estuarine shores. Nesting usually occurs in colonies on bare ground (sand or gravel) with sparse vegetation near the water in relatively undisturbed areas. Least terns feed upon small fish including, herrings, anchovies, silversides and shiner surfperch. There is no suitable shore habitat within the BSA for the California least tern. This species was not observed during any focused or pre-activity surveys. Therefore, California least tern is not expected to occur in the BSA and no impacts to this species are anticipated.

Burrowing owl lives in dry, open, native or non-native grasslands, deserts, and other arid environments with low-growing and low-density vegetation. This species may occupy golf courses, cemeteries, road rights-of way, airstrips, abandoned buildings, irrigation ditches, and vacant lots with holes or cracks suitable for use as burrows. Burrowing owl typically uses burrows made by mammals such as California ground squirrels (*Spermophilus beecheyi*), foxes, or badgers. When burrows are scarce, BUOW may use man-made structures such as openings beneath cement or asphalt pavement, pipes, culverts, and nest boxes. There is suitable foraging and breeding habitat within grassland and openings in scrub habitat within the BSA. One wintering burrowing owl was observed foraging at the Carmel Valley Road Staging Yard during focused wintering season surveys on December 10, 2015 (Chambers Group 2016d¹). No burrowing owls were detected during subsequent breeding season surveys (Chambers Group 2016d and 2016e) or during the pre-activity survey. There is a low potential for burrowing owl to occur in the BSA.

Least Bell's vireo typically nests in willows (*Salix* spp.) and other riparian trees/shrubs (typically three to six feet above the ground). This species requires densely vegetated riparian habitat along streams and rivers during the spring and summer months to breed, foraging in habitat adjacent to its nesting territory, which is typically riparian or chaparral; least Bell's vireos forage by gleaning insects from the leaves of trees and shrubs. Although there is suitable breeding habitat in the Los Peñasquitos Creek, this species was not observed during the focused least Bell's vireo surveys

¹ Surveys were conducted for the Carmel Valley Staging Yard independently in the wintering season of 2015/2016 and breeding season of 2016 when the staging yard was also proposed for use for the 230kV Artesian Substation Expansion project.

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(Chambers Group 2016f) or pre-activity survey. Therefore, least Bell's vireo is not expected to occur within the BSA and no impacts to this species are anticipated.

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*) is found from the lower southwestern United States south into Mexico; in California, it is found only in Orange and San Diego counties. Its preferred habitat includes coastal sage scrub interlaced with patches of cholla (*Cylindropuntia* spp.) and prickly pear (*Opuntia* spp.) cacti, which it uses almost exclusively for the construction of nests. San Diego cactus wrens establish resident territories and maintain them for life. The coastal cactus wren was not observed during any focused or pre-activity surveys. No suitable cholla or prickly pear patches occur within or adjacent to the BSA. Therefore, coastal cactus wren is not expected to occur in the BSA and no impacts to this species are anticipated.

Coastal California gnatcatcher is a permanent resident of Diegan, Riversidian, and Venturan sage scrub sub-associations found from sea level to 2,500 feet in elevation. The coastal California gnatcatcher was observed during focused surveys (BBS 2014 and Chambers Group 2016g) and the pre-activity survey in coastal sage scrub habitat near structures E39, E40, E41, E42, E43, E44, E46, E47, and E48.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) is a resident of southwest California on the slopes of the Transverse and Coast ranges from Los Angeles County south to Baja California Norte; it can also be found on San Martin Island. Habitats include broken sage scrub and chaparral; native grasslands with sparse shrubs; and rocky, brush laden hillsides and canyons with open patches. Suitable habitat exists for this species throughout Segment B in coastal sage scrub, chaparral, and grasslands habitat. The southern California rufous-crowned sparrow was observed during the focused surveys for coastal California gnatcatcher north and south of Stonebridge Parkway along the underground section of Segment B (BBS 2014 and Chambers Group 2016g).

Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) lives and nests in coastal salt marshes with dense pickleweed and feeds upon seeds, snails and spiders. The Belding's savannah sparrow was not observed during any focused or pre-activity surveys. There is no suitable coastal salt march habitat for the Belding's savannah sparrow in the vicinity of Segment B. Therefore, Belding's savannah sparrow is not expected to occur in the BSA and no impacts to this species are anticipated.

San Diego desert woodrat (*Neotoma lepida intermedia*) is found in a wide range of habitats including chaparral, coastal sage scrub, and desert scrub. Woodrats build dens called middens made of twigs, cactus joints, and other materials. These middens contain several nest chambers, food caches, and debris piles. No woodrats or woodrat middens were observed during any of the focused or pre-activity survey. There is moderate potential for woodrats to be located in the coastal sage scrub and chaparral habitats within the BSA.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) is found on the coastal slope from Kern County, California south into Baja California, Mexico between sea level and approximately 3,000 feet elevation. It occurs in a variety of habitats, but prefers intermediate canopy stages of shrub habitats, grasslands, and open shrub, along herbaceous and tree edges within coastal sage scrub habitats in southern California, as well as, agricultural lands. This species does not typically burrow, but sits in depressions called forms at the bases of shrubs by day. Suitable habitat for the San Diego black-tailed jackrabbit exists in the form of grassland within the BSA. This species was not observed during any focused or pre-activity survey. There is low potential for this species to be moderate present within the BSA.

5.3 OTHER SPECIAL-STATUS WILDLIFE SPECIES

Segment B was evaluated for special-status bat species during the survey effort per requirements of MMCRP MM-Biology 10: Mitigation for Special-Status Bat Species. Special-status bat species that have a potential to occur in the BSA (Busby Biological Services, Inc. 2014) include Mexican long-tongued bat (*Choeronycteris mexicana*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), western red bat

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(*Lasiurus blossevillii*), western mastiff bat (*Eumops perotis californicus*), and big free-tailed bat (*Nyctinomops macrotis*) (CPUC 2016). No NCCP-covered bat species are known to occur in the BSA. Trees within a 50-foot buffer of active work areas and structures with suitable special-status bat roosting habitat within a 100-foot buffer of active work areas (e.g., bridges) were assessed for maternal bat roosts. No special-status bat species or maternal bat roosts were found. Therefore, maternal roosts of special-status bat species are not expected to occur in the BSA and no impacts to these species are anticipated.

5.4 GENERAL WILDLIFE

The following 33 wildlife species were observed during the pre-activity survey and can be found below in Table 3: Wildlife Species Observed.

Table 3: Wildlife Species Observed

Scientific Name	Common Name
CLASS AVES	BIRDS
ACCIPITRIDAE <i>Buteo jamaicensis</i>	HAWKS, KITES, EAGLES red-tailed hawk
ODONTOPHORIDAE <i>Callipepla californica</i>	NEW WORLD QUAIL California quail
CHARADRIIDAE <i>Charadrius vociferus</i>	PLOVERS killdeer
COLUMBIDAE <i>Zenaida macroura</i>	PIGEONS & DOVES mourning dove
TROCHILIDAE <i>Calypte anna</i>	HUMMINGBIRDS Anna's hummingbird
PICIDAE <i>Melanerpes formicivorus</i>	WOODPECKERS acorn woodpecker
TYRANNIDAE <i>Empidonax difficilis</i> <i>Myiarchus cinerascens</i> <i>Sayornis nigricans</i> <i>Sayornis saya</i> <i>Tyrannus verticalis</i> <i>Tyrannus vociferans</i>	TYRANT FLYCATCHERS Pacific-slope flycatcher ash-throated flycatcher black phoebe Say's phoebe western kingbird Cassin's kingbird
ALAUDIDAE <i>Eremophila alpestris</i>	LARKS horned lark
CORVIDAE <i>Aphelocoma californica</i> <i>Corvus brachyrhynchos</i> <i>Corvus corax</i>	JAYS & CROWS California scrub-jay American crow common raven
AEGITHALIDAE <i>Psaltriparus minimus</i>	BUSHTITS Bushtit
TROGLODYTIDAE <i>Thryomanes bewickii</i> <i>Troglodytes aedon</i>	WRENS Bewick's wren house wren
SYLVIIDAE	OLD WORLD WARBLERS

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Scientific Name	Common Name
<i>Chamaea fasciata</i>	Wrentit
POLIOPTILIDAE	GNATCATCHERS
<i>Poliioptila californica</i>	California gnatcatcher
MIMIDAE	MOCKINGBIRDS, THRASHERS
<i>Mimus polyglottos</i>	northern mockingbird
<i>Toxostoma redivivum</i>	California thrasher
STURNIDAE	STARLINGS
<i>Sturnus vulgaris</i>	European starling
ICTERIDAE	BLACKBIRDS
<i>Icterus cucullatus</i>	hooded oriole
EMBERIZIDAE	EMBERIZIDS
<i>Melospiza melodia</i>	song sparrow
<i>Melozone crissalis</i>	California towhee
<i>Pipilo maculatus</i>	spotted towhee
<i>Ammodramus savannarum</i>	grasshopper sparrow
<i>Chondestes grammacus</i>	lark sparrow
FRINGILLIDAE	FINCHES
<i>Spinus psaltria</i>	lesser goldfinch
<i>Carpodacus mexicanus</i>	house finch
CLASS MAMMALIA	MAMMALS
LEPORIDAE	HARES & RABBITS
<i>Sylvilagus audubonii</i>	desert cottontail

SECTION 6.0 – REVIEWER RECOMMENDATIONS

The selection of the Approved Project route (Alternative 5) has significantly minimized ground disturbance within natural areas. Further, Project work areas have been designed to minimize ground disturbance and impacts to sensitive biological resources. Construction will be restricted to previously disturbed areas and bare ground to the extent feasible. Work areas will be clearly delineated and Best Management Practices will be installed to protect adjacent habitat. In addition, as required by the Project’s FEIR, SDG&E will implement the following applicable MMs and Applicant Proposed Measures (APMs) during construction to avoid and minimize impacts to biological resources within the BSA.

1. **MMCRP APM Biology-1:** Minimization of Impacts to Special-Status Plants. Implementation of the following measures will ensure impacts to special-status plant species remain less than significant:
 - Prior to construction, SDG&E shall retain a qualified biologist to conduct focused, special-status plant surveys during the spring and summer 2015 in suitable habitats where focused plant surveys were not previously conducted. 2014 in all habitats that may support the special-status plant species with a potential to occur in the Proposed Project Survey Area.
 - Locations of special-status plants shall be identified and inventoried.
 - The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species.

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- Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation, plant salvage, transplantation, or other appropriate methods as determined by the qualified biologist. Alternatively, if the special-status plant species in question is a SDG&E Subregional NCCP covered species, mitigation consistent with measures established in the NCCP and discussed in the SDG&E Subregional NCCP, above, shall be provided.
2. **MMCRP APM Biology-2:** SDG&E Subregional NCCP. The Project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The Project is located within the SDG&E Subregional NCCP coverage area. The SDG&E Subregional NCCP includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an Implementation Agreement with the USFWS and the CDFW, respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area. Pursuant to the SDG&E Subregional NCCP, SDG&E will conduct pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm will survey all Project impact areas and prepared a PSR outlining all anticipated impacts related to the Project. The Project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR will be submitted to the CDFW and USFWS for review. Prior to the commencement of construction, a verification survey will be conducted of the Project disturbance areas, as required by the SDG&E Subregional NCCP. Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously-delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-Construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement. Specific operating restrictions that are incorporated into the Project design to comply with the SDG&E Subregional NCCP include the following:
- Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1);
 - No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (7.1.1, 2);
 - Feeding of wildlife is not allowed (Section 7.1.1, 4);
 - No pets are allowed within the ROW (Section 7.1.1, 5);

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- Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7);
- Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8);
- Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9);
- Field crews shall refer all environmental issues, including wildlife relocation, dead, or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10);
- All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11);
- The Environmental Surveyor shall conduct pre-activity studies for all activities occurring in natural areas, and will complete a proactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13);
- The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14);
- The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25);
- In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10-foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28);
- The Environmental Surveyor shall conduct monitoring as recommended in the pre-activity study form (Section 7.1.4, 35);
- Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37 and 38);
- Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39);
- During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would recommend appropriate avoidance and minimization measures (Section 7.1.6, 50);
- Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52); and
- Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53).

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3. **MMCRP MM Biology-1a:** General Field Personnel Behavior Requirements. All field personnel shall abide by the following general behavior requirements:
- Vehicles must be kept on approved access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads. Vehicles shall be turned around in established or designated areas only;
 - No wildlife, including rattlesnakes, may be harmed, except to protect life and limb;
 - Firearms shall be prohibited except for those used by security personnel;
 - Feeding of wildlife shall not be allowed;
 - SDG&E personnel shall not bring pets to work areas in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations;
 - Parking or driving underneath oak trees shall not be allowed in order to protect root structures except in established traffic areas;
 - Plant or wildlife species shall not be collected for pets or any other reason;
 - Littering shall not be allowed. SDG&E shall not deposit or leave any food or waste in any work area;
 - Wildfires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, trucks shall carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care shall be exhibited when smoking in permitted areas. Smoking is not permitted within the City of San Diego Open Space; and
 - Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impact to a biologist(s) approved by the CPUC and the USFWS and CDFW. Other CPUC- and USFWS- or CDFW-biologists or experts in wildlife handling may need to be brought in for assistance with wildlife relocations.
4. **MMCRP MM Biology-1b:** Environmental Training Program. An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction. The training shall describe special-status plant and wildlife species and sensitive habitats that could occur within project work areas, protection afforded to these species and habitats, and avoidance and minimization measures required to avoid and/or minimize impacts from the project. Penalties for violations of environmental laws shall also be incorporated into the training session. Each crewmember shall be provided with an informational training handout and a decal to indicate that he/she has attended the training. The roles and responsibilities of CPUC-, USFWS-, and CDFW-approved biologist(s) and other environmental representatives shall be identified in the MMCRP and discussed during the training. All new construction personnel shall receive this training before beginning work on this project.

A copy of the training and training materials shall be provided to CPUC for review and approval at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC on a monthly basis. As needed, in-field training shall be provided to new on-site construction personnel by the

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environmental compliance supervisor or a qualified individual who shall be identified by SDG&E's Project Biologist, or initial training shall be recorded and replayed for new personnel.

5. **MMCRP MM Biology-1c:** Pre-Activity Surveys. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct a pre-activity survey for all activities occurring off of access roads in sensitive habitats. The pre-activity survey shall be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-activity survey shall be documented by the Qualified Biologist in a PSR. The PSR shall be submitted to the CPUC for review and approval prior to the start of construction, and the results shall be submitted to CDFW and USFWS as required by any regulatory permits or approvals. The PSR shall include the following:

- Type, location, and size of project;
- Date, time, weather, surrounding land uses;
- Evaluation of type and quality of habitat;
- Work description and methods which will be used to avoid or minimize ground disturbance, including biological monitoring during construction;
- Anticipated impacts and proposed mitigation; and
- Map of location of work area.

In those situations where the Qualified Biologist cannot make a definitive species identification, the Qualified Biologist shall make a determination based on the available evidence and professional expertise.

In order to ensure that habitats are not inadvertently impacted, the CPUC-, USFWS-, and CDFW-approved biologist shall flag boundaries of habitat which must be avoided. When necessary, the CPUC-, USFWS-, and CDFW-approved biologist shall also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment such as cranes, bucket trucks, augers, etc. When appropriate, the CPUC-, USFWS-, and CDFW-approved biologist shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project site-specific basis. Avoidance of habitat for thread-leaved brodiaea is prioritized over minimization and mitigation.

SDG&E shall maintain a library of special-status plant species locations, known to SDG&E, occurring within the project BSA. "Known" means a verified population either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency HCPs, pre-activity surveys, or biological surveys conducted for environmental compliance of the project. Plant inventories shall be consulted as part of pre-activity survey procedures.

6. **MMCRP MM Biology-1d:** Maintenance, Repair, and Construction of Facilities. SDG&E shall implement the following measures pertaining to maintenance, repair, and construction of facilities:
- a. Maintenance, repair and construction activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs;

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- b. Routine maintenance of all facilities shall include visual inspections on a regular basis, conducted from vehicles driven on the project access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot or from the air;
- c. Erosion shall be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion;
- d. Hydrologic impacts shall be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by use of Best Management Practices;
- e. When siting new facilities, every effort shall be made to cross wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian area.
- f. During repair or maintenance of facilities in a streambed, water may be temporarily diverted as long as the natural drainage patterns are restored after disturbance to minimize the impact of the disturbances and to help re-establish or enhance the native habitat. Erosion control during construction in a streambed in the form of intermittent check dams and culverts shall also be considered to prevent alteration to natural drainage pattern and prevent siltation;
- g. Impact to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines;
- h. During work on facilities, all trucks, tools, and equipment shall be kept on existing access roads or cleared areas, to the extent possible;
- i. The CPUC-, USFWS-, and CDFW-approved biologist shall approve of an activity prior to working in any natural area where disturbance to habitat may be unavoidable;
- j. Insulator washing shall be allowed from access roads if other applicable protocols in this MM are followed;
- k. Brush clearing around facilities for fire protection shall not be conducted from January 15 through August 31 (to avoid the general bird nesting season) without prior approval by the CPUC-, USFWS-, and CDFW-approved biologist. The CPUC-, USFWS-, and CDFW-approved biologist shall make sure that the habitat contains no active nests, burrows, or dens prior to clearing;
- l. In the event that a special-status plant species is located within the area required to be cleared for fire protection purposes, SDG&E shall notify the USFWS (for ESA-listed plants), and CDFW (for CESA-listed plants), in writing, of the plant's identity and location and of the proposed activity, which will result in a take of such plant. Notification shall occur ten working days prior to such activity, during which time USFWS or CDFW may remove such plant(s). If neither USFWS nor CDFW have removed such plant(s) with the ten working days following the notice, SDG&E may proceed to complete its fire clearing and cause a take of such plant(s) consistent with SDG&E's take coverage for the ESA- or CESA-listed plants. When fire clearing is necessary in instances other than around power poles, and the potential for impacts to special-status species exist, SDG&E shall follow the pre-activity survey and notification procedures in MM Biology-1c, above. Wire stringing shall be allowed year-round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and vehicles remain on access roads;
- m. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion control, planting or seeding with native hydroseed mix may be done on slopes;

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- n. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the CPUC-, USFWS-, and CDFW-approved biologist, or used immediately to fill eroded areas. Cleared vegetation shall be hauled to a permitted disposal location;
- o. The CPUC-, USFWS-, and CDFW-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitats. Whenever possible, trees in sensitive habitats such as native riparian, woodland, or scrub vegetation shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons);
- p. No new facilities and activities shall be planned that would disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads shall be allowed to continue in areas containing vernal pool habitat, provided no such habitat located within these roads would be impacted by project activities. New construction of overhead infrastructure which spans vernal pool habitats shall be allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools;
- q. If any previously unidentified dens, burrows, nests, or special-status plants are located on any project site after the pre-activity survey, the CPUC-, USFWS-, and CDFW-approved biologist shall be contacted. The CPUC-, USFWS- and CDFW-approved biologist shall determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc.;
- r. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct monitoring as recommended in the PSR. At completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall check to verify compliance, including observing that flagged areas have been avoided and that reclamation has been properly implemented. Also at completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall be responsible for removing all habitat flagging from the construction site;
- s. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct checks on mowing procedures to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than four inches;
- t. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected, or from which animals cannot be removed, shall be capped or otherwise covered at the end of each work day to avoid animal entrapment. Old piping or other supplies that have been left open shall not be capped until inspected and any species found in them allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by the CPUC-, USFWS- and CDFW-approved biologist. Refer to MM Biology-1a, Item 10 [referred to as Item J herein] for wildlife relocations;
- u. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall be called immediately to remove it if it cannot escape unimpeded;
- v. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities shall be controlled by regular

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watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour; and

- w. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey shall be conducted.

7. **MMCRP MM Biology-1g:** Survey Work Protocols. SDG&E shall implement the follow measures during survey work:

- a. Brush clearing for foot path or line-of-sight cutting shall not be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds;
- b. SDG&E survey personnel shall keep vehicles on existing access roads. No clearing of brush shall be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds; and
- c. Hiking off roads or paths for survey data collection shall be allowed year-round as long as other protocols are met.

8. **MMCRP MM Biology-3:** Weed Control Plan. SDG&E shall prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive, non-native species abatement. Developed land shall be excluded from weed control. Where SDG&E owns the property, the Weed Control Plan shall include specific weed abatement methods, practices, and treatment timing developed specifically for the Project area by qualified individuals with at least 5 years of weed control experience within San Diego County. The Weed Control Plan shall address control methods and issues controlling invasive non-native species within all vegetation communities and land cover types found along the Project alignment. On ROW easement on MCAS Miramar, the Weed Control Plan shall incorporate all appropriate and legal U.S. Marine Corps-stipulated regulations. The Weed Control Plan shall be submitted to MCAS Miramar for final authorization of weed control methods, practices, and timing prior to implementation of weed control on MCAS Miramar. The Weed Control Plan shall be submitted to the City of San Diego for final authorization of weed control methods, practices, and timing prior to implementation of any weed control within the City of San Diego MHPA. The Weed Control Plan shall include the following:

- A pre-construction weed inventory shall be conducted by surveying the entire ROW and areas immediately adjacent to the ROW where access permission is obtained, as well as at all ancillary facilities associated with the Project for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner, MCAS Miramar (for ROW on MCAS Miramar), or City of San Diego (for ROW within the City of San Diego MHPA) as being a priority for control, (2) are weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; <http://www.cal-ipc.org/ip/inventory/index.php>) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar), and (3) aid and promote the spread of wildfires in San Diego County.
- Prolific wildfire-promoting species such as brome grasses (*Bromus* sp.) shall be mapped but not targeted for control outside of Project impact areas. These populations shall be mapped and described according to density and area covered. These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for

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invasive weed populations included in the Weed Control Plan or required by MCAS Miramar or City of San Diego.

- Weed control treatments shall include all legally permitted methods to be used in the following prioritized order: preventative, manual, mechanical, and chemical.
- All treatments shall be applied with the authorization of the, MCAS Miramar and City of San Diego as appropriate.
- The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Advisor (PCA) and implemented by a Licensed Qualified Applicator.
- Where manual and/or mechanical methods are used, disposal of the plant debris will be within an approved landfill area within San Diego County.
- The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA for the Project, and with MCAS Miramar, and City of San Diego as appropriate, with the goal of controlling populations before they start producing seeds. For the lifespan of the project (i.e., as long as the project is physically present), long-term measures to control the introduction and spread of weeds in the project area shall be taken as follows:
 - From the time construction begins until 2 years after construction is complete, annual surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required in the survey areas described above. After this time, surveying for new invasive weed populations and monitoring of identified and treated populations shall be required at an interval of every two years.
- However, the treatment of weeds shall occur on a minimum annual basis, unless otherwise approved by the PCA, MCAS Miramar, and City of San Diego as appropriate.
 - During project construction and operation/maintenance, all seeds and straw materials shall be certified weed free, and all gravel and fill material shall also be certified weed free.
 - During project construction, vehicle and boot wash stations shall be provided.

9. **MMCRP MM Biology-6:** Compensatory Mitigation for Impacts to Habitat. SDG&E shall restore temporarily impacted areas to pre-construction conditions following construction according to the performance criteria described below and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas. Restoration of some vegetation communities in temporarily impacted areas may not be possible if those areas are subject to vegetation management to maintain proper clearance between transmission lines and vegetation, for example. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community. Restoration of temporarily impacted areas involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, maintaining (i.e., weeding, replacement planting, supplemental watering, etc.), and monitoring the restored area for a period of 5 years and or until year 5 success criteria are met. SDG&E shall prepare a Habitat Restoration Plan that shall be subject to approval by the CPUC, USFWS, CDFW, City of San Diego (for restoration within City of San Diego MHPA), and MCAS Miramar (for restoration on MCAS Miramar) prior to habitat impacts. Required mitigation ratios are provided by habitat type in Table 4.1-10. In cases where the impacts to sensitive vegetation communities occur in the City of San Diego MHPA, the mitigation shall also occur in the MHPA. The Habitat Restoration Plan shall also identify, if applicable, the potential for reintroduction and/or increasing

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MSCP-covered species populations within habitat restoration areas if those covered species were affected by the Project.

Table 4.1-10: Required Habitat Mitigation Ratios

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent ¹
Diegan Coastal Sage Scrub		
Diegan coastal sage scrub	1:1	1:1
Diegan coastal sage scrub in the MHPA	1:1	2:1
Diegan coastal sage scrub-Disturbed	1:1	1:1
Diegan coastal sage scrub-Disturbed in the MHPA	1:1	2:1
Diegan coastal sage scrub-Revegetated	1:1	1:1
Diegan coastal sage scrub-Revegetated in the MHPA	---	2:1
Coastal Sage Scrub		
Coastal sage-chaparral scrub	0.5:1	1:1
Coastal sage-chaparral scrub in the MHPA	1:1	2:1
Chaparral		
Chamise chaparral	0.5:1	1:1
Chamise chaparral in the MHPA	1:1	2:1
Chamise chaparral-disturbed	0.5:1	1:1
Chamise chaparral-disturbed in the MHPA	1:1	2:1
Scrub oak chaparral	1:1	1:1
Scrub oak chaparral in the MHPA	2:1	2:1
Southern mixed chaparral	0.5:1	1:1
Southern mixed chaparral in the MHPA	1:1	2:1
Southern mixed chaparral-disturbed	0.5:1	1:1
Southern mixed chaparral-disturbed in the MHPA	1:1	2:1
Grassland		
Native grassland	1:1	1:1
Native grassland in the MHPA	2:1	2:1
Non-native grassland	0.5:1	1:1
Non-native grassland in the MHPA	---	2:1
Freshwater Marsh		
Freshwater marsh	---	1:1

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Vernal Pool		
San Diego Mesa Vernal Pool	3:1	3:1
Riparian		
Southern riparian scrub	---	1:1
Mule fat scrub	---	1:1
Mulefat scrub in MHPA	---	2:1
Southern willow scrub	---	1:1
Southern willow scrub in MHPA	---	2:1
Tamarisk scrub in MHPA	---	2:1
Southern coast live oak riparian forest	---	1:1
Southern coast live oak riparian forest in MHPA	---	2:1

Notes

¹Mitigation ratios for permanent impacts are consistent with SDG&E’s NCCP; 1:1 for permanent impacts outside a preserve and 2:1 for permanent impacts inside a preserve.

The Restoration Plan shall include the following performance criteria:

- a. Percent cover and composition shall be similar to the conditions of a nearby reference site, defined as variation of no more than 10 percent absolute cover from the reference site cover and species composition condition;
- b. Maintenance and monitoring for restoration shall be for 5 years or until success criteria are met. Compensation planting areas shall be monitored eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and above;
- c. Compensation planting areas shall be monitored for invasive plants in the first 5 years following replanting. Invasive plant monitoring shall occur eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and 5. If invasive plants are found during the 5-year monitoring period, they shall be removed as necessary to support meeting the cover and vegetation composition success criteria;
- d. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met or unless otherwise approved by the CPUC; and
- e. Maintenance and monitoring shall be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration. Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken by an experienced, licensed Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration.

Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints or implementing the Habitat Management Plan after the allowed timeframe of 18 months following the initiation of any vegetation disturbing activities) shall be mitigated at a 5:1 ratio. Restoration of the unauthorized impacts

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shall be credited at a 1:1 ratio (i.e., mitigated by in-place habitat restoration); the remaining 4:1 shall be acquired and preserved off-site.

For areas where habitat restoration cannot meet mitigation requirements, as determined by the Habitat Restoration Specialist in coordination with CPUC, USFWS, CDFW, and MCAS Miramar (for restoration on MCAS Miramar), off-site purchase and dedication of habitat (or as otherwise prescribed by MCAS Miramar for restoration on MCAS Miramar) shall be provided at the mitigation ratios provided in Table 4.1-10.

Mitigation Parcels/Habitat Management Plans. All off-site mitigation parcels shall be approved by the CPUC, USFWS, CDFW and MCAS Miramar (as applicable) and must be acquired, or their acquisition must be assured. To demonstrate that such parcels will be acquired, SDG&E shall submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities for CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) review and approval. The Habitat Acquisition Plan shall include, but shall not be limited to:

- a. Legal descriptions and maps of all parcels to be acquired;
- b. Schedule that includes phasing relative to impacts;
- c. Documentation demonstrating that the mitigation parcel(s) provides high quality habitat roughly equivalent in composition to the habitats that would be impacted by the project and at appropriate acreages;
- d. Timing of conservation easement recording;
- e. Initiation of habitat management activities relative to acquisition; and
- f. Assurance mechanisms (e.g., performance bonds to assure adequate funding) for any parcels not actually acquired prior to vegetation disturbing activities.

A Habitat Management Plan shall be prepared by a biologist and approved by the CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by these agencies (as applicable) within 18 months of the initiation of any vegetation disturbing activities. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to:

- a. Adequate SDG&E funding for the preparation and implementation of the HMP;
- b. Legal descriptions of all mitigation parcels approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts);
- c. Baseline biological data for all mitigation parcels;
- d. Designation of a land management entity approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts) to provide in-perpetuity management;
- e. A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan;

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- f. Designation of responsible parties and their roles (e.g., provision of endowment by SDG&E to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity); and
- g. Management specifications including, but not limited to, regular biological surveys to compare with the baseline data; invasive, non-native species control; fence/sign replacement or repair; public education; trash removal; and annual reports to CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts).

10. **MMCRP MM Biology-7:** Mitigation for Bird Species. *This measure applies to all work areas in which any construction-related activities must be conducted during the nesting bird season (generally between January 15 and August 31, but may be earlier or later depending on species, location, and weather conditions).*

Nesting Bird Survey Requirements: If work is scheduled to occur during the avian nesting season, nesting bird surveys shall be conducted according to the following provisions:

- a. Nest surveys shall occur within 5 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities. If there is no work in an area for 7 days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again;
- b. Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests, which is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an “active nest” if abandoned by the adult birds or once fledglings are no longer dependent on the nest”. Surveys shall include nests of protected species within vegetation identified for removal and/or pruning, and within the following buffers of active work areas: 0.25-mile buffer for white-tailed kite; 500-foot buffer for other raptor species;
- c. Surveys shall be conducted during locally appropriate dates for nesting seasons determined in consultation with the USFWS and CDFW; note that generally the season is between January 15 and August 31 but may be earlier or later depending on species, location, and weather conditions. Species-specific nesting seasons for some species are identified below;
- d. The surveys shall be conducted by a CPUC, USFWS-, and CDFW-approved qualified biologist;
- e. Survey results shall be provided to CPUC, USFWS, and CDFW prior to initiating construction activities; and
- f. Work areas within which significant noise is not generated, such as work performed manually, by hand or on foot, and/or that would not cause significant disturbances to nesting birds (e.g., operating switches, driving on access roads, normally occurring activities at substations, and activities at staging and laydown areas) do not need to be surveyed prior to use. None of these activities shall result in physical contact with a nest.

Avoid Impacts on Nesting Birds. During the nesting season (generally between January 15 and August 31) raptor nests that are located within a 500-foot buffer from a work location shall be evaluated by a CPUC-, USFWS-, and CDFW-approved qualified biologist to determine whether the raptor nest is active. No trees with active raptor nests shall be removed during nesting season.

No additional measures shall be implemented if active nests are more than the following distances from the nearest work areas: (a) 0.25 mile for white-tailed kite, (b) 500 feet for raptors, Coastal California

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gnatcatcher, and least bell's vireo, (c) 250 feet for passerine birds in open space areas, or (d) 150 feet for common (non-special status) passerine birds in residential, commercial, and industrial areas. Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads). Where road use is limited to project-specific use, a buffer reduction or approval to drive through a buffer shall be obtained as described below under "Buffer Reduction".

As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment. An example of an exclusion technique is covering equipment with tarps.

Buffer Reduction. The specified buffers from nesting birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g., the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, level of project activity, and level of pre-existing disturbance on site), it is determined by a CPUC-, USFWS-, and CDFW-approved qualified biologist that implementation of a specified smaller buffer distance will still avoid nest abandonment and failure. This requirement includes buffer reductions or temporary buffer incursions for project-related use of roads where no stopping, standing, or other work activities shall occur in the buffer. Requests to reduce standard buffers or for temporary buffer incursions must be submitted to CPUC's independent biologist for review. Requests to reduce buffers must include:

- a. Species;
- b. Location;
- c. Pre-existing conditions present on site;
- d. Description of the work to be conducted within the reduced buffer;
- e. Size and expected duration of proposed buffer reduction;
- f. Reason for the buffer reduction;
- g. Name and contact information of the CPUC-, USFWS-, and CDFW-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring; and
- h. Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions.

CPUC's independent biologist shall respond to SDG&E's request for a buffer reduction (and buffer reduction terms) within 1 business day; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities. If the buffer reduction request is denied, or if the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the specified buffer(s) listed above in this measure shall be implemented.

Non-special status species found building nests within the work areas after specific project activities begin may be tolerant of that specific project activity; however, the CPUC-, USFWS-, and CDFW-approved qualified biologist shall implement an appropriate buffer or other appropriate measures to protect the nest after

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taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance. In these cases, the proposed buffer or other measures must be approved by CPUC's independent biologist through the buffer reduction process outlined in this measure, if buffers are less than those specified in this measure. These nests shall be monitored on a daily basis and only during construction activities (no monitoring required during periods when no work is conducted) by a qualified biologist until the qualified biologist has determined that the young have fledged or construction ends within the work area (whichever occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented.

Specific Requirements for Coastal California Gnatcatcher and Least Bell's Vireo. Where there is potential nesting habitat for the coastal California gnatcatcher or least Bell's vireo within or adjacent to the MHPA, construction or operation/maintenance noise that exceeds the existing baseline noise level for a site by more than 3 dB hourly average or an hourly average threshold of 60 decibels, whichever is higher, shall be avoided during these species' breeding seasons as follows: coastal California Gnatcatcher March 1 through August 15, and least Bell's vireo March 15 through September 15. If avoidance is not possible during the breeding season, SDG&E shall work with a qualified acoustician approved by the CPUC, USFWS, and CDFW to develop and implement noise attenuation measures. The following measures shall be adhered to when project activities during the breeding season occur within riparian habitats that may support vireo and flycatcher:

- A biologist knowledgeable of vireo and/or flycatcher biology and ecology, approved by the CPUC, USFWS, and CDFW, will survey within the project impact footprint and a 300-foot buffer (within riparian scrub) before clearing vegetation or project construction to check for vireo and/or flycatcher nesting activity. Should an active nest be located in the impact footprint, then work will be suspended until the nest is vacated.
- Biological buffers of at least 100 feet will be maintained adjacent to active nests.

For project activities during the breeding season adjacent to known occupied vireo and/or flycatcher nesting habitat, the biologist will monitor nesting bird activity. If the biologist determines that nesting birds are being disrupted by project activities, then work will be suspended until effective minimization measures (e.g., noise attenuation structures) developed in coordination with the CPUC, USFWS, and CDFW are in place or until after the breeding season is completed.

Any lighting required during project activities will be shielded and directed away from vireo and/or flycatcher habitat to ensure that these areas are not artificially illuminated.

Avian Protection on Power Lines. The project shall include collision-reducing techniques for transmission lines (based on Reducing Avian Collisions with Power Lines: The State of the Art in 2012; Avian Power Line Interaction Committee [APLIC] 2012).

Monitoring and Reporting. All nests with a reduced buffer shall be monitored on a daily basis during construction activities by a CPUC-, USFWS-, and CDFW-approved qualified biologist until the qualified biologist has determined that the young have fledged or until one week after construction ends within the reduced buffer/work area (whichever occurs first).

Nest locations and exclusion buffers shall be mapped (using geographic information systems [GIS]) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC, CDFW, and USFWS. A monthly written report shall be submitted to CPUC, CDFW, and USFWS for construction

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within a reduced buffer and shall include the following: information included in buffer reduction requests, work conducted within the work site, duration of work activities and related buffer reduction, information on nest success (eggs, young, and adults). No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CPUC, CDFW, and USFWS at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties, are likely acclimated to disturbance and do not need to be monitored, as determined by the CPUC-, USFWS-, and CDFW-approved qualified biologist and approved by CPUC's independent biologist.

11. **MMCRP MM Biology-8:** Burrowing Owl Monitoring and Mitigation Plan. SDG&E shall prepare a Burrowing Owl Monitoring and Mitigation Plan (BOMMP) consistent with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). SDG&E shall submit the Draft BOMMP to CDFW and CPUC. SDG&E shall be required to obtain approval from CDFW on the BOMMP prior to construction. SDG&E shall provide the approved BOMMP to the CPUC 30 days prior to construction.

In accordance with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) and CDFW-approved BOMMP, SDG&E shall conduct a preconstruction take avoidance survey for the burrowing owl prior to initiating ground disturbance activities. In areas where owl presence is not found, construction may proceed without further mitigation. If western burrowing owl occupancy on site is confirmed during preconstruction take avoidance surveys, SDG&E shall implement the CDFW-approved Burrowing Owl Monitoring and Mitigation Plan in coordination with CDFW.

12. **MMCRP MM Biology-9:** San Diego Desert Woodrat Mitigation. A CPUC-approved qualified biologist shall conduct a preconstruction survey to identify potential San Diego desert woodrat houses within the project work areas and within 5 feet of the edge of the work areas to avoid direct take of woodrats. All woodrat houses shall be documented and reported through the MMCRP. Woodrat houses found within the work site or within 5 feet from a work site shall be flagged or fenced for avoidance. If impacts to a woodrat house located within a work site are unavoidable, a CPUC-approved qualified biologist, prior to construction and outside of the breeding season (April through June), shall dismantle the house by hand, removing the materials layer by layer to allow for adult woodrats to escape. If young are present and found during the disassembling process, the CPUC-approved qualified biologist shall leave the site for at least 24 hours to allow for the rats to relocate their young on their own. This step shall be repeated as needed until the young have been relocated by the parent woodrats. Once the nest is vacant, the disassembly process shall be completed and the nest sticks shall be collected and moved to another suitable nearby location to allow for nest reconstruction. Piles of cut vegetation/slash shall be retained near the work site prior to nest dismantling to provide refuge for woodrats that may become displaced.

SECTION 7.0 – SUMMARY OF IMPACTS

7.1 PROJECT SPECIFIC IMPACTS

Segment B impacts are classified as either permanent or temporary. Permanent impacts include the installation of cable steel poles, H-frame structure, and associated permanent work areas and access routes. Temporary impacts include removing vegetation to create a temporary work area for new steel cable pole and H-frame structure placement, trenching for installation of underground lines, installation of deepwell anodes or using areas for stringing sites and staging yards.

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7.1.1 Permanent Impacts

A total of approximately 29,927 sq. ft. (0.69 acre) of permanent impacts is anticipated to result from implementation of Segment B. Permanent work areas include new/replacement structures and permanent work pads that will need to be maintained. The permanent footprint for each structure is as follows: new 230-kV steel cable poles are approximately 6 to 8 feet in diameter and 159 feet high, new 138-kV steel cable poles are approximately 5 to 6 feet in diameter and 100 feet high, foundations are approximately 4 to 10 feet in diameter and 1 to 2 feet high, pier foundations are approximately 6 to 8 feet in diameter, retaining walls are approximately 10 to 14 feet in height and 60 to 200 feet in length, and new steel H-frame structures are 4 to 5 feet in diameter and 65 feet high. Cable poles will require a permanent maintenance pad that is typically about 50 feet by 75 feet (3,750 sq. ft.) in size, however, actual pad sizes will vary depending upon site conditions. Previously cleared areas will typically overlap with permanent maintenance pads. Approximate permanent work areas for each structure were determined by project engineers.

7.1.2 Temporary Impacts

A total of approximately 3,761,271 sq. ft. (86.35 acres) of temporary impacts is anticipated to result from implementation of Segment B. Of this total, approximately 133,142 sq. ft. (3.06 acres) of temporary impacts will occur from the use of work areas around each structure for the installation of new cable poles, installations of guard structures, replacement of H-frame, and overhead work. The work areas will be used for equipment, vehicles, and materials during pole installation activities. Work areas may require grading and/or vegetation trimming or removal to facilitate installation activities. Approximate temporary impacts for each structure were determined by project engineers.

Approximately 949,172 sq. ft. (21.79 acres) will be temporarily impacted for minor modifications to the Mission and Peñasquitos Substations, and use of these substations for staging equipment.

Approximately 45,366 sq. ft. (1.06 acres) will be temporarily impacted for the utilization of five stringing sites (Stringing Sites #1-5). Stringing Sites #1 and #2 are contained entirely within the impact area of the Peñasquitos Substation; therefore, anticipated impacts for the use of Stringing Sites #1 and #2 are included in the impact assessment for the Peñasquitos Substation (above), and are not included in this total. The five stringing sites are anticipated to be irregularly shaped. However, the shape of these sites may vary to minimize impacts to the surrounding area. Approximate stringing site impacts were determined by project engineers. Stringing site activities will be confined to previously disturbed areas such as existing access roads to the greatest extent possible. The dimensions of the stringing sites may be adjusted in order to fully utilize roads and/or other disturbed areas.

Approximately 2,627,976 sq. ft. (60.33 acres) will be temporarily impacted for staging yard utilization. Up to twelve staging yards are expected to be used, including the Carmel Valley, Evergreen Nursery, Stonebridge, Stowe, Site 1A, Site 1B, Site 2, Site 3, Site 4A, Site 4B, Site 4C, and Site 5.

Approximately 5,615 sq. ft. (0.13 acres) will be temporary impacted for installation of deepwell anodes.

Construction of the underground transmission line would require an approximately 16 to 20-foot-wide work area. The work area would increase to a maximum of 130 feet wide and 30 feet long at vault locations. Prior to trenching, paint would be used to mark out the trench alignment, both centerline and 10-foot offsets, at 50-foot intervals and at the beginning and end of each curve in the alignment. The work area would be utilized for the trench, trenching area, and vehicle loading. Temporary impacts for the underground transmission line were not assessed in this PSR due to the fact that underground transmission line construction is proposed to be entirely within developed roadways.

Table 4: Anticipated Segment B Impact Summary Table

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Type of Impact		Area Impacted (sq. ft.)		
		Within a Preserve	Outside of a Preserve	Total
Temporary	Total Anticipated Temporary Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	248	37,871	38,119
	Total Anticipated Temporary Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	83,524	3,639,628	3,723,152
	Total Anticipated Temporary impacts	83,772	3,677,499	3,761,271
Permanent	Total Anticipated Permanent Impacts to Sensitive Vegetation Communities (Coastal Sage Scrub and Chaparral)	0	12,611	12,611
	Total Anticipated Permanent Impacts to Non-Sensitive Vegetation Communities (Disturbed, Bare Ground, and Landscape/Ornamental communities)	0	17,316	17,316
	Total Anticipated Permanent Impacts	0	29,927	29,927

SECTION 8.0 – MITIGATION

8.1 NON-SENSITIVE HABITATS

Per the SDG&E NCCP, no mitigation is required for permanent or temporary impacts to non-sensitive habitat communities such as bare ground, landscape/ornamental, and disturbed areas. Therefore, no mitigation is required for 17,316 sq. ft. (0.40 acre) of permanent impacts and 3,723,152 sq. ft. (85.47 acres) of temporary impacts to these habitat types.

8.2 PROJECT IMPACTS WITHIN PRESERVE AREAS

The following determinations are based on Table 7.4 of the SDG&E NCCP and the project’s FEIR for project sites located within the San Diego County MSCP; where Preserve boundaries (mapped areas) have been established.

Permanent impacts to sensitive habitat types associated with structure locations within a designated Preserve will be mitigated for according to ratios described in Table 7.4 of the SDG&E NCCP and the Project’s FEIR for impacts occurring within a Preserve for the construction of new facilities. The following locations along the new transmission line for Segment B occur within a designated Preserve: GS15, GS16, GS17, GS18, E40, E41, E42, and E43. In addition, Stringing Sites #3, #4, and #5 occur within a designated Preserve. However, no permanent impacts to sensitive habitats within a defined Preserve are expected due to Segment B related activities.

Per Table 7.4 of the SDG&E NCCP, temporary impacts to sensitive habitats within a Preserve of less than 500 sq. ft. per site do not require mitigation. However, in compliance with the Project’s FEIR, SDG&E will mitigate for 248 sq. ft. of temporary impacts to sensitive habitat types located within Preserve areas in compliance with the Project-specific Habitat Restoration Plan.

8.3 PROJECT IMPACTS OUTSIDE OF PRESERVE AREAS

All structures not listed in Section 8.2 are located outside a Preserve. Permanent impacts to sensitive habitat types located outside a Preserve for the construction of new facilities will be mitigated according to ratios described in the Project's FEIR. SDG&E proposes to withdraw credit from the SDG&E mitigation bank for permanent impacts to sensitive vegetation communities located outside Preserve areas as a result of construction of new facilities at a ratio of 1:1 (Per the SDG&E NCCP), and O&M of existing facilities at a ratio of 1:1 (Per the Project FEIR). Therefore, SDG&E proposes to draw down a total of 12,611 sq. ft. of credit from the SDG&E mitigation bank to mitigate for permanent impacts to sensitive habitat types located outside Preserve areas.

Per Table 7.4 of the SDG&E NCCP and the Project's FEIR, temporary impacts to sensitive habitat types located outside a Preserve area will be mitigated in compliance with a Project-specific Habitat Restoration Plan currently under development. The Project-specific Habitat Restoration Plan will, at minimum, meet the requirements of the SDG&E NCCP. Therefore, a total of 37,871 sq. ft. of temporary impacts to sensitive habitat outside a Preserve will be mitigated through compliance with a Project-specific Habitat Restoration Plan. Acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio or as otherwise required by MM Biology-6 of the Project's FEIR.

SECTION 9.0 – AVOIDANCE AND MINIMIZATION OF IMPACTS TO BIOLOGICAL RESOURCES

The Project, including Segment B, has been designed to avoid sensitive habitat areas that may support special status species and sensitive biological resources when possible, including not placing new poles in vernal pools, using existing access roads to the greatest extent possible, and placing staging areas, laydown areas, guard structures, and other work areas outside sensitive habitat types when feasible. Where avoidance of sensitive habitat areas supporting special status plants or wildlife is not possible, or where sensitive habitat areas exist adjacent to Project work areas, SDG&E will implement all applicable SDG&E NCCP Operational Protocols, applicable Project FEIR measures, and Reviewer Recommendations to ensure impacts remain less than significant. Minor modifications to temporary work spaces during construction will be reviewed in accordance with the MMCRP to ensure that proposed modifications achieve or exceed the level of environmental protection approved in the FEIR, are consistent with California Environmental Quality Act requirements, and comply with the APMs and MMs identified in the MMCRP. Required pre-activity survey, pursuant to the SDG&E NCCP and the Project's FEIR, would confirm the absence of any other special status species not covered under the SDG&E NCCP. If any non-covered special status species are identified during the surveys, compliance with Sections 7.1 and 7.2 of the SDG&E NCCP and implementation of the MMCRP would provide avoidance and minimization of impacts.

SECTION 10.0 – REFERENCES

Busby Biological Services, Inc. (BBS)

2014 Biological Technical Report for Sycamore to Peñasquitos 230 Kilovolt Transmission Line Proposed Project, City of San Diego, San Diego County, California. March 2014.

2015 Response to Data Request #11, Question 2: Provide rare plant survey data and identify areas where surveys will still be ongoing as of April 30, 2015.

Gray and Bramlet

1992 Habitat Classification System, Natural Resources, Geographic Information System (GIS) Proposed Project. County of Orange Environmental Management Agency, Santa Ana, California.

California Native Plant Society Electronic Inventory (CNPSEI)

2016 Inventory of Rare and Endangered Plants (online edition, v7-10c). California Native Plant Society. Sacramento, California. Accessed September 2016 from <http://www.cnps.org/inventory>.

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California Department of Fish and Wildlife (CDFW)

2012 *Staff Report on Burrowing Owl Mitigation*. California Department of Fish and Game (CDFG) March 7.

2016 California Natural Diversity Database (CNDDDB). RareFind Version 5.0. Database Query. Wildlife and Habitat Data Analysis Branch. Accessed September 2016.

California Public Utilities Commission (CPUC)

2016 Sycamore-Peñasquitos 230-kV Transmission Line Proposed Project Final Environmental Impact Report; Addendum,
http://www.cpuc.ca.gov/Environment/info/panoramaenv/Sycamore_Penasquitos/FEIR.html. May.

Chambers Group, Inc. (Chambers Group)

2016a Survey Summary Report for the 2015/2016 Protocol-level, Wet Season Fairy Shrimp Survey for the Proposed Sycamore to Peñasquitos 230-kilovolt Transmission Line Proposed Project. In progress.

2016b Survey Summary Report for the 2016 Protocol-level, Dry Season Fairy Shrimp Survey for the Proposed Sycamore to Peñasquitos 230-kilovolt Transmission Line Proposed Project. In progress.

2016c Quino Checkerspot Butterfly Survey Summary Report for Portions of the Proposed San Diego Gas & Electric Company Sycamore to Peñasquitos 230-Kv Transmission Line Proposed Project Within the U.S. Fish and Wildlife Service Recommended Quino Survey Area, San Diego County, California.

2016d Results of the 2015/2016 Wintering and Breeding Season Focused Surveys for Burrowing Owl (*Athene cunicularia*) for the Carmel Valley Staging Yard Portion of the Proposed 230kv Artesian Substation Expansion Proposed Project, San Diego County, California

2016e Results of the 2016 Focused Surveys for Burrowing Owl (*Athene cunicularia*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Proposed Project, San Diego County, California.

2016f Results of the 2016 Focused Surveys for Least Bell's Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax traillii extimus*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Proposed Project, San Diego County, California.

2016g Results of the 2016 Focused Surveys for Coastal California Gnatcatcher (*Polioptila californica californica*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Proposed Project, San Diego County, California.

2017 Results of the 2016 Focused Plant Surveys for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Proposed Project, San Diego County, California

San Diego Gas & Electric (SDG&E)

1995a Subregional Natural Communities Conservation Plan. December 15, 1995.

1995b Subregional Natural Communities Conservation Plan Implementing Agreement/CESA Memorandum. Entered into by and among the United States Fish and Wildlife Service, California Department of Fish and Game, and San Diego Gas & Electric Company. December 18, 1995.

2007 SDG&E's Low Effect Habitat Conservation Plan for the Quino Checkerspot Butterfly

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APPENDICES

Appendix A: Pre-activity Survey Report for the Sycamore to Peñasquitos 230 Kilovolt Transmission Line Project, Marine Corps Air Station (MCAS) Miramar Portion

Appendix B: Project Mapbook

Appendix C: Site Photographs

Appendix A:

**Pre-activity Survey Report for the Sycamore to Peñasquitos 230 Kilovolt Transmission Line
Project, Marine Corps Air Station (MCAS) Miramar Portion**

Pre-activity Survey Report

Sycamore-Peñasquitos 230 Kilovolt Transmission Line Project

Marine Corps Air Station (MCAS) Miramar Portion

Prepared: March 2017

Prepared for:

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1.0 INTRODUCTION

San Diego Gas & Electric (SDG&E) proposes to construct the Sycamore - Peñasquitos 230 Kilovolt (kV) Transmission Line Project (Project), a new transmission line that would replace existing, predominantly wood structures between the existing SDG&E Sycamore Canyon and Peñasquitos Substations. The approximately 14.4-mile transmission line was identified in the Final Environmental Impact Report (FEIR) as the environmentally superior alternative (Alternative 5: Pomerado Road to Miramar Area North Combination Underground/Overhead) (California Public Utilities Commission [CPUC] 2016). All new transmission line facilities will be located within the existing SDG&E right-of-way (ROW) or within franchise position within existing public roadways. The Project is located in the City of San Diego; Marine Corps Air Station (MCAS) Miramar; and unincorporated communities of Carmel Valley, Mira Mesa, and Scripps Ranch in San Diego County, California.

The Project alignment extends from the Peñasquitos Substation in the west to the Sycamore Canyon Substation on MCAS Miramar in the east, in San Diego County, California. The Project is located in the United States Geological Survey (USGS) Del Mar and Poway 7.5-minute quadrangles. The Project is surrounded by a mix of public and private land uses including commercial development, office buildings, community parks, a golf driving range, a mining facility, residential development, and open space within Carroll Canyon and Scripps Ranch. The easternmost portion of the Project is located on MCAS Miramar (Appendix A: Figures 1 and 2). As such, SDG&E is submitting a Tier I application to the Committee for Land and Airspace Management Policy (CLAMP) for the portion of the Project that is located on MCAS Miramar.

As required by the SDG&E Subregional Natural Communities Conservation Plan (NCCP; SDG&E 1995a and 1995b), SDG&E contracted Chambers Group, Inc. (Chambers Group) to complete a Pre-activity Survey Report (PSR) for the Project. This PSR analyzes the potential impacts associated with the work to be performed on MCAS Miramar, which includes installation of a new 230 kV transmission line, relocation of the existing 138 kV transmission line to an underground position, and substation upgrades (Appendix A: Figure 3). The PSR study included a review of all Project impact areas and the habitats immediately surrounding those impact areas on MCAS Miramar (Biological Survey Area [BSA]) in order to determine Project-related impacts to sensitive habitat types and potential impacts to NCCP-covered plant and wildlife species.

2.0 PROPOSED WORK DESCRIPTION

The Project consists of replacement, consolidation, and upgrading facilities within the existing SDG&E ROW. All Project features and facilities located on MCAS Miramar are located within existing SDG&E ROW and/or property (i.e., substation site), as shown on Appendix A: Figures 1 through 3, and access to all of these Project features would be via existing paved or dirt access roads. The portion of the Project that is located on MCAS Miramar includes:

- Installation of new 230 kV transmission line on a combination of replaced structures and new underground conduit;

- Relocation of existing 138 kV power line on a combination of replaced structures and new underground conduit; and
- Minor upgrades at the existing Sycamore Canyon Substation.

Table 1: Project Features on MCAS Miramar summarizes the Project features located within the boundary of MCAS Miramar, the proposed action at each feature location, and brief construction notes. Appendix B includes a photograph log for each Project feature. For a more detailed discussion of the Project description for work being performed on MCAS Miramar, please refer to Attachment A of the CLAMP application (Attachment A: Project Description for the Sycamore to Peñasquitos 230 kV Transmission Line Project, MCAS Miramar – Tier 1 CLAMP Application).

Table 1. Project Features on MCAS Miramar

Pole Number/Site Location	Proposed Action(s)	Construction Notes
Pole Locations		
25459-005-Z205474 R1	Remove	Existing 138 kV steel tubular monopole inside substation. Line will be transitioned to underground position to improve existing facilities. Steel pole to be removed from service.
25459-006-Z100987 R2	Remove	Existing 138 kV wood monopole. Line will be transitioned to underground position to improve existing facilities. Wood pole to be removed from service.
25459-007-100986 R3	Remove	Existing 138 kV wood H-frame. Line will be transitioned to underground position to improve existing facilities. Wood poles to be replaced by P03A/P03B.
25459-008-Z473526 T1	Topped	Existing 138 kV wood monopole. To be topped above existing 69 kV distribution line. 138 kV portion will be transitioned to underground position to improve facilities. Structure height will be 42 feet.
25459-007 P03A/B	Install	Install adjacent, single-circuit 230 kV and 138 kV steel poles to replace R3. Replaces 25459-007-100986 (R3), which will be removed. Structure heights will be 159.5 and 85 feet, respectively.
Stringing Sites		
25459-008 Stringing Site 1	Access	Work associated with T1, above. Install new 230 kV to replaced and existing poles. Other temporary work.
Undergrounding		
25459-014 Underground Trenching	Trench	Install a portion of new 230 kV line and move existing above ground 138 kV line to an underground position.
Multiple Use Work Area		
25459-015 Multiple Use Work Area	Various	Area located south and immediately adjacent to the existing Sycamore Canyon Substation. Area proposed to be used for stringing of existing poles and temporary lay down, among other temporary uses.

3.0 HABITAT EVALUATION

The Project is located within the designated boundaries of the SDG&E Subregional NCCP. A series of site visits and focused surveys were performed to determine the presence or absence of sensitive resources on or in the vicinity of the Project (CPUC 2016; Busby Biological Services, Inc. [BBS] 2014 and 2015; Chambers Group 2016a-f). Per the NCCP and FEIR, a pre-activity survey was conducted to confirm that site conditions have not changed, and to assess the potential for impacts to sensitive species as a result of Project-related activities. Current databases within five miles of the Project were reviewed. Six NCCP-covered plant species and four NCCP-covered wildlife species have been documented within five miles of the Project according to the California Natural Diversity Database (CNDDDB) (California Department of Fish and Wildlife [CDFW] 2016) and California Native Plant Society Electronic Inventory (CNPS 2016). Two additional NCCP-covered wildlife species, one SDG&E Low-Effect Habitat Conservation Plan (HCP)-covered wildlife species, and seven special-status wildlife species that are not NCCP-covered have species-specific survey requirements and/or protection measures per the FEIR (CPUC 2016).

Chambers Group biologists, Christina Congedo and Corinne Klein, conducted a pre-activity survey for the Project on August 9, 2016 between the hours of 0700 and 1730. Weather conditions during the survey included temperatures of 79 to 84 degrees Fahrenheit, wind speeds of 0 to 5 miles per hour, and cloud cover of 0 to 15 percent. The results of the PSR study as well as previous site visits and focused surveys are described below.

3.1 Water Resources

Potential jurisdictional water resources occur within the vicinity of the portion of the Project that is located on MCAS Miramar (United States Marine Corps [USMC] 2014, Environmental Intelligence [EI] 2014, BBS 2015). All impacts to known or potential jurisdictional areas will be avoided through project design and utilization of appropriate Best Management Practices (BMPs) during implementation of the Project.

3.2 Vegetation Communities/Land Cover Types

The Project components on MCAS Miramar are located within and around the existing Sycamore Canyon Substation (Appendix A: Figures 2 and 3). The vegetation communities/land cover types that occur within this area include bare ground, developed, coastal sage scrub (disturbed Diegan and revegetated), and southern mixed chaparral.

Portions of project sites classified as bare ground include areas with exposed soils, disturbed areas with no vegetation, and existing access roads.

Portions of project sites classified as developed include areas that are characterized by the presence of human-made structures, such as the Sycamore Canyon Substation and existing work pads.

Portions of project sites classified as disturbed Diegan coastal sage scrub include areas that occur on ridges and south-facing slopes that support California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage

(*Salvia mellifera*), white sage (*Salvia apiana*), laurel sumac (*Malosma laurina*), and other associated coastal sage scrub species.

Portions of project sites classified as revegetated coastal sage scrub include areas that support coastal sage scrub species but that have been or are being restored to native habitat through use of container plant installation and/or native seed mix application. These restored areas show evidence of recontouring, irrigation equipment, straw wattles, even distribution of plants, and other indications of restoration activities.

Portions of project sites classified as southern mixed chaparral include areas that occur on steep, mesic, north-facing slopes that support chamise (*Adenostoma fasciculatum*) and other chaparral plant species.

3.3 NCCP-Covered, Federally Listed, and Special-Status Species

The results of focused surveys for special-status plant species, Riverside fairy shrimp (*Streptocephalus woottoni*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), Quino checkerspot butterfly (*Euphydryas editha quino*), burrowing owl (*Athene cunicularia*), least Bell's vireo (*Vireo bellii pusillus*), and coastal California gnatcatcher (*Polioptila californica californica*) are included in focused survey reports prepared for the Project (BBS 2014 and Chambers Group 2016a-f). The results of the previous focused surveys and the pre-activity survey are summarized below.

3.3.1 Plants

Two NCCP-covered, federally listed plant species – Del Mar manzanita (*Arctostaphylos glandulosa* ssp. *crassifolia*) and willow monardella (*Monardella viminea*) – are known to occur within 1 mile of the Project based on both the CNDDDB (CDFW 2016) and the most recent MCAS Miramar Sensitive Resources map (USMC 2014); however, neither of these species is expected to occur within the BSA.

Del Mar manzanita is not expected to occur within the BSA. The closest known population is approximately 0.5 mile west of the BSA (USMC 2014). However, this species was not detected on MCAS Miramar during focused plant surveys (BBS 2014 and Chambers Group 2016a) or the pre-activity survey. Therefore, no impacts are anticipated to this species as a result of implementation of the Project on MCAS Miramar.

Willow monardella, a NCCP narrow endemic species, is not expected to occur within the BSA. The closest known population is approximately 0.75 mile southeast of the BSA (USMC 2014); however, no suitable habitat exists within the BSA, and this species was not detected on MCAS Miramar during focused plant surveys conducted within the blooming period of the species (BBS 2014 and Chambers Group 2016a) or the pre-activity survey. Therefore, no impacts are anticipated to this species as a result of implementation of the Project on MCAS Miramar.

Thread-leaved brodiaea (*Brodiaea filifolia*), a NCCP-covered species, was identified in Mitigation Measure (MM) Biology-2 of the Mitigation Monitoring, Compliance, and Reporting Program (MMCRP; CPUC 2016) as a species that should be staked or flagged for avoidance if found within the BSA. Based on the results of the site visit, focused surveys, and pre-activity survey, thread-leaved brodiaea is not expected to occur within the BSA. Clay soils are mapped within the BSA and suitable grassland

habitat for thread-leaved brodiaea was observed within the BSA. However, this species was not observed in the BSA during the focused plant surveys conducted within the blooming period for this species (Busby Biological Services 2014 and 2015; Chambers Group 2016) or during the pre-activity survey. Therefore, no impacts are anticipated to this species as a result of implementation of the Project on MCAS Miramar.

Four other NCCP-covered, federally listed plant species – Encinitas baccharis (*Baccharis vanessae*), San Diego ambrosia (*Ambrosia pumila*), San Diego mesa mint (*Pogogyne abramsii*), and San Diego thorn mint (*Acanthomintha ilicifolia*) – are known to occur between 1 and 5 miles of the Project based on CNDDDB results (CDFW 2016); however, these species are not known to occur on MCAS Miramar (USMC 2014). Furthermore, these species were not observed on MCAS Miramar during focused plant surveys conducted within the blooming period for these species or during the pre-activity survey (BBS 2014 and Chambers Group 2016a). Therefore, these species are not expected to occur within the BSA and no impacts are anticipated to these species as a result of implementation of the Project on MCAS Miramar.

3.3.2 Wildlife

One NCCP-covered, federally listed wildlife species – coastal California gnatcatcher– is known to occur within 1 mile of the BSA based on the CNDDDB results (CDFW 2016); however, the closest historical detection on MCAS Miramar is approximately 2.5 miles southwest of the BSA, and the closest recent detection on MCAS Miramar is approximately 3 miles southwest of the BSA. Furthermore, no coastal California gnatcatchers were detected on MCAS Miramar during focused coastal California gnatcatcher surveys (BBS 2014 and Chambers Group 2016b) or the pre-activity survey. Therefore, coastal California gnatcatcher is not expected to occur within the BSA and no impacts are anticipated to this species as a result of implementation of the Project on MCAS Miramar.

Three other NCCP-covered, federally listed wildlife species – least Bell's vireo, Riverside fairy shrimp, and San Diego fairy shrimp – are known to occur between 1 and 5 miles from the BSA based on CNDDDB results (CDFW 2016) and are known to occur on MCAS Miramar (USMC 2014).

Least Bell's vireo is not expected to occur within the BSA because no suitable habitat exists within or adjacent to the BSA, and the closest known territory is located approximately 3 miles southeast of the Project (USMC 2014). Furthermore, this species was not detected on MCAS Miramar during focused least Bell's vireo surveys (BBS 2014 and Chambers Group 2016c) or the pre-activity survey. Therefore, no impacts are anticipated to this species as a result of implementation of the Project on MCAS Miramar.

Extensive studies for San Diego fairy shrimp and Riverside fairy shrimp have been conducted throughout MCAS Miramar. Based on the most current CNDDDB and MCAS Miramar data, neither of these species are known to occur within the vicinity of the portion of the Project that is located on MCAS Miramar. In addition, neither of these species were detected on MCAS Miramar during focused fairy shrimp surveys (BBS 2014 and Chambers Group 2016d) or the pre-activity survey. Therefore, San Diego fairy shrimp or Riverside fairy shrimp are not expected to occur within the BSA and no impacts are anticipated to these species as a result of implementation of the Project on MCAS Miramar.

The MCAS Miramar portion of the Project is located within the United States Fish and Wildlife Service (USFWS) mapped “Recommended Quino Survey Area” (USFWS 2014) and focused surveys were conducted for Quino checkerspot butterfly in the spring of 2016, per MMCRP MM Biology-5 of the FEIR (CPUC 2016). Quino checkerspot butterfly was not detected on MCAS Miramar during focused Quino checkerspot butterfly surveys (BBS 2014 and Chambers Group 2016e) or the pre-activity survey. Therefore, no impacts are anticipated to this species as a result of the Project.

The MCAS Miramar portion of the Project was evaluated for the potential for burrowing owl (*Athene cunicularia*), an NCCP-covered and narrow endemic species. No suitable habitat was found during the pre-activity survey for the portion of the Project on MCAS Miramar and no burrowing owls or sign were found during any focused or pre-activity surveys. Therefore, burrowing owl is not expected to occur within the BSA and no impacts are anticipated to this species as a result of the implementation of the Project on MCAS Miramar.

The MCAS Miramar portion of the Project was evaluated for the potential for San Diego desert woodrat (*Neotoma lepida intermedia*), an NCCP-covered species, to occur in the BSA. No woodrats or woodrat middens were observed during any of the focused or pre-activity surveys. There is low potential for woodrats to be located in the coastal sage scrub and chaparral habitats within the BSA.

The MCAS Miramar portion of the Project was evaluated for special-status bat species. No NCCP-covered bat species are known to occur in the BSA. Special-status bat species that have a potential to occur in the BSA include the following seven California Species of Special Concern (SSC): Mexican long-tongued bat (*Choeronycteris mexicana*), pallid bat (*Antrozous pallidus*), Townsend’s big-eared bat (*Corynorhinus townsendii*), spotted bat (*Euderma maculatum*), western red bat (*Lasiurus blossevillii*), western mastiff bat (*Eumops perotis californicus*), and big free-tailed bat (*Nyctinomops macrotis*) (Busby Biological Services, Inc. 2014). Trees within a 50-foot buffer of active work areas and structures with suitable special-status bat roosting habitat within a 100-foot buffer of active work areas (e.g., bridges) were assessed for maternal bat roosts. No special-status bat species or maternal roosts were found on MCAS Miramar during the pre-activity survey. Therefore, maternal roosts of special-status bat species are not expected to occur within the BSA and no impacts to these species are anticipated as a result of implementation of the Project on MCAS Miramar.

3.3.3 Migratory Bird Treaty Act Covered Species

In addition to the NCCP-covered, federally listed, and special-status wildlife species discussed above, bird species covered by the federal Migratory Bird Species Act (MBTA) are known to occur within the vicinity of the Project site. There is a high potential for MBTA-covered species to nest in the BSA, and impacts may occur to these species as a result of implementation of the Project on MCAS Miramar.

4.0 IMPACTS

For the purposes of this PSR, impacts are defined as physical use of land on MCAS Miramar for the purposes of staging equipment, stringing sites, excavation for installing or removing poles, temporary and permanent work areas at each pole location, undergrounding, and creation of a new access road (Appendix A: Figure 3). This PSR

assesses impacts for the portion of the Project that occurs on MCAS Miramar only; impacts associated with the portion of the Project that does not occur on MCAS Miramar will be provided in a separate PSR.

Project impacts are classified as either permanent or temporary. Permanent impacts include the installation of light-duty steel poles, heavy-duty steel poles, and associated permanent work areas and access routes. Temporary impacts include removing vegetation to create a temporary work area for new steel pole placement, trenching for installation of underground lines, or using areas for stringing sites and laydown areas (Appendix A: Figure 3).

Because no Preserve areas have been formally delineated on MCAS Miramar, areas of moderate, high, or very high quality habitat on habitat evaluation maps prepared for MCAS Miramar would be considered a “Preserve area” under the SDG&E NCCP. However, based on the most recent Habitat Evaluation Model Composite Map (Figure 4.9 in the most recent version of the MCAS Miramar Integrated Natural Resources Management Plan [INRMP]), no moderate, high, or very high quality habitat has been designated in the portion of the Project that will occur on MCAS Miramar (USMC 2011). Therefore, no impacts to Preserve areas are anticipated.

Table 2 summarizes the anticipated permanent and temporary impacts on MCAS Miramar. Actual impacts resulting from Project-related activities that occur during construction will be recorded during construction and captured in the post-construction report.

Table 2. Summary of Anticipated Impacts on MCAS Miramar

Type of Impact	Anticipated Resource Impact (All Outside of Preserve Areas)	Approx. Acres	Approx. Square Feet
Permanent	Anticipated Impacts to Sensitive Vegetation Communities (coastal sage scrub [disturbed Diegan] and southern mixed chaparral)	0.13	5,678
	Anticipated Impacts to Non-Sensitive Vegetation Communities (bare ground)	0.11	4,741
	Total Anticipated Permanent impacts	0.24	10,419
Temporary	Anticipated Impacts to Sensitive Vegetation Communities (coastal sage scrub, [disturbed Diegan and revegetated] and southern mixed chaparral)	0.53	22,903
	Anticipated Impacts to Non-Sensitive Vegetation Communities (bare ground and developed)	2.24	97,365
	Total Anticipated Temporary Impacts	2.77	120,268

4.1 Permanent Impacts

Anticipated permanent impacts as a result of implementation of the Project on MCAS Miramar are associated with replacement of existing facilities. Permanent impacts include installation of a double-circuit at pole location P03A/B to replace pole R3

(Appendix A: Figure 3). Permanent impacts were calculated based on permanent maintenance work space requirements provided by Project Engineers as well as other Project team members.

A total approximately 0.24 acre (10,419 square feet) of permanent impacts are anticipated across all vegetation communities (sensitive and non-sensitive) as a result of Project activities listed above.

A total of approximately 0.13 acre (5,678 square feet) of permanent impacts are anticipated to sensitive vegetation communities as a result of Project activities listed above, including approximately 0.02 acre (734 square feet) to coastal sage scrub and approximately 0.11 acre (4,944 square feet) to southern mixed chaparral.

Approximately 0.11 acre (4,741 square feet) of permanent impacts are anticipated to non-sensitive vegetation communities as a result of Project activities listed above, all of which are within bare ground.

4.2 Temporary Impacts

Anticipated temporary impacts resulting from the portion of the Project that will occur on MCAS Miramar include temporary work pads and/or staging areas around each pole, stringing site, laydown area, and undergrounding locations. Undergrounding activities are considered construction of new facilities. All Project activities other than undergrounding are associated with maintenance of existing facilities (Appendix A: Figure 3). Temporary impacts were calculated based on temporary work space requirements provided by the Project Engineers as well as other project team members.

A total of approximately 2.77 acres (120,268 square feet) of temporary impacts are anticipated across all vegetation communities (sensitive and non-sensitive) as a result of Project activities listed above. Of this total, approximately 0.38 acre (16,463 square feet) will be associated with new facilities, and approximately 2.38 acres (103,804 square feet) will be associated with maintenance of existing facilities.

A total of approximately 0.53 acres (22,903 square feet) of temporary impacts are anticipated to sensitive vegetation communities as a result of implementation of the Project, including approximately 0.26 acre (11,233 square feet) to coastal sage scrub and approximately 0.27 acre (11,670 square feet) to southern mixed chaparral. Of this total, approximately 0.08 acre (3,465 square feet) will be associated with the construction of new facilities, and approximately 0.45 acre (19,437 square feet) will be associated with maintenance of existing facilities.

A total of approximately 2.24 acres (97,365 square feet) of temporary impacts are anticipated to non-sensitive vegetation communities as a result of implementation of the Project, including approximately 2.22 acres (96,693 square feet) to bare ground and approximately 0.02 acres (672 square feet) to developed land. Of this total, approximately 0.30 acre (12,998 square feet) will be associated with the construction of new facilities, and approximately 1.94 acres (84,367 square feet) will be associated with maintenance of existing facilities.

5.0 REVIEWER RECOMMENDATIONS & MITIGATION

5.1 Reviewer Recommendations

Project work areas have been designed to minimize ground disturbance and impacts to sensitive biological resources. Construction will be restricted to previously disturbed areas and bare ground to the extent feasible to minimize ground disturbance and impacts to sensitive biological resources. Work areas will be clearly delineated and Best Management Practices will be installed to protect adjacent habitat. In addition, as required by the Project's FEIR, SDG&E will implement the following applicable MMs and Applicant Proposed Measures (APMs) during construction to avoid and minimize impacts to biological resources within the BSA.

1. **MMCRP APM Biology-1:** Minimization of Impacts to Special-Status Plants. Implementation of the following measures will ensure impacts to special-status plant species remain less than significant:
 - Prior to construction, SDG&E shall retain a qualified biologist to conduct focused, special-status plant surveys during the spring and summer 2015 in suitable habitats where focused plant surveys were not previously conducted. 2014 in all habitats that may support the special-status plant species with a potential to occur in the Proposed Project Survey Area.
 - Locations of special-status plants shall be identified and inventoried.
 - The qualified biologist shall supervise construction activities within the vicinity of areas identified as having special-status plant species.
 - Impacts to special-status plant species shall be avoided to the maximum extent possible by installing fencing or flagging, marking areas to be avoided in construction areas, and limiting work in areas identified as having special-status plant species to periods of time when the plants have set seed and are no longer growing. Where impacts to special-status plant species are unavoidable, the impact shall be quantified and compensated through off-site land preservation, plant salvage, transplantation, or other appropriate methods as determined by the qualified biologist. Alternatively, if the special-status plant species in question is a SDG&E Subregional NCCP covered species, mitigation consistent with measures established in the NCCP and discussed in the SDG&E Subregional NCCP, above, shall be provided.
2. **MMCRP APM Biology-2:** SDG&E Subregional NCCP. The Project will avoid and minimize impacts to biological resources through implementation of the SDG&E Subregional NCCP. The SDG&E Subregional NCCP establishes a mechanism for addressing biological resource impacts incidental to the development, maintenance, and repair of SDG&E facilities within the SDG&E Subregional NCCP coverage area. The Project is located within the SDG&E Subregional NCCP coverage area. The SDG&E Subregional NCCP includes a Federal Endangered Species Act (ESA) Section 10(A) permit and a California ESA Section 2081 memorandum of understanding (for incidental take) with an

Implementation Agreement with the USFWS and the CDFW, respectively, for the management and conservation of multiple species and their associated habitats, as established according to the Federal and State ESAs and California's NCCP Act. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the Agreement and the SDG&E Subregional NCCP meet all relevant standards and requirements of the California ESA, the Federal ESA, the NCCP Act, and the Native Plant Protection Act with regard to SDG&E's activities in the Subregional Plan Area. Pursuant to the SDG&E Subregional NCCP, SDG&E will conduct pre-construction studies for all activities occurring off of existing access roads in natural areas. An independent biological consulting firm will survey all Project impact areas and prepared a PSR outlining all anticipated impacts related to the Project. The Project will include monitoring for all project components, as recommended by the PSR and outlined in the SDG&E Subregional NCCP, as well as other avoidance and minimization measures outlined in the NCCP's Operational Protocols. The PSR will be submitted to the CDFW and USFWS for review. Prior to the commencement of construction, a verification survey will be conducted of the Project disturbance areas, as required by the SDG&E Subregional NCCP. Biological monitors will be present during construction to assure implementation of the avoidance and minimization measures. If the previously-delineated work areas must be expanded or modified during construction, the monitors will survey the additional impact area to determine if any sensitive resources will be impacted by the proposed activities, to identify avoidance and minimization measures, and to document any additional impacts. Any additional impacts are included in a Post-construction Report (PCR) for purposes of calculating the appropriate mitigation, which generally includes site enhancement or credit withdrawal from the SDG&E mitigation bank. When construction is complete, the biological monitor will conduct a survey of the entire line to determine actual impacts from construction. The PCR will determine how much site enhancement and credit withdrawal from the SDG&E mitigation bank will be required to address impacts from project related activities. These impact and mitigation credit calculations are submitted to the USFWS and the CDFW as part of the NCCP Annual Report pursuant to requirements of the NCCP and the NCCP Implementing Agreement. Specific operating restrictions that are incorporated into the Project design to comply with the SDG&E Subregional NCCP include the following:

- Vehicles would be kept on access roads and limited to 15 miles per hour (Section 7.1.1, 1);
- No wildlife, including rattlesnakes, may be harmed, except to protect life and limb (7.1.1, 2);
- Feeding of wildlife is not allowed (Section 7.1.1, 4);
- No pets are allowed within the ROW (Section 7.1.1, 5);
- Plant or wildlife species may not be collected for pets or any other reason (Section 7.1.1, 7);

- Littering is not allowed, and no food or waste would be left on the ROW or adjacent properties (Section 7.1.1, 8);
- Measures to prevent or minimize wild fires would be implemented, including exercising care when driving and not parking vehicles where catalytic converters can ignite dry vegetation (Section 7.1.1, 9);
- Field crews shall refer all environmental issues, including wildlife relocation, dead, or sick wildlife, or questions regarding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may be necessary to assist with wildlife relocations (Section 7.1.1, 10);
- All SDG&E personnel would participate in an environmental training program conducted by SDG&E, with annual updates (Section 7.1.2, 11);
- The Environmental Surveyor shall conduct pre-activity studies for all activities occurring in natural areas, and will complete a proactivity study form including recommendations for review by a biologist and construction monitoring, if appropriate. The form will be provided to CDFW and USFWS but does not require their approval (Section 7.1.3, 13);
- The Environmental Surveyor shall flag boundaries of habitats to be avoided and, if necessary, the construction work boundaries (Section 7.1.3, 14);
- The Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable (Section 7.1.4, 25);
- In the event SDG&E identifies a covered species (listed as threatened or endangered by the federal or state) of plant within the temporary work area (10-foot radius) surrounding a power pole, SDG&E would notify the USFWS (for Federal ESA listed plants) and CDFW (for California ESA listed plants) (Section 7.1.4, 28);
- The Environmental Surveyor shall conduct monitoring as recommended in the pre-activity study form (Section 7.1.4, 35);
- Supplies, equipment, or construction excavations where wildlife could hide (e.g., pipes, culverts, pole holes, trenches) shall be inspected prior to moving or working on/in them (Section 7.1.4, 37 and 38);
- Fugitive dust will be controlled by regular watering and speed limits (Section 7.1.4, 39);
- During the nesting season, the presence or absence of nesting species (including raptors) shall be determined by a biologist who would

recommend appropriate avoidance and minimization measures (Section 7.1.6, 50);

- Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed (Section 7.1.7, 52); and
- Staging/storage areas for equipment and materials shall be located outside of riparian areas (Section 7.1.7, 53).

3. **MMCRP MM Biology-1a:** General Field Personnel Behavior Requirements. All field personnel shall abide by the following general behavior requirements:

- Vehicles must be kept on approved access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads. Vehicles shall be turned around in established or designated areas only;
- No wildlife, including rattlesnakes, may be harmed, except to protect life and limb;
- Firearms shall be prohibited except for those used by security personnel;
- Feeding of wildlife shall not be allowed;
- SDG&E personnel shall not bring pets to work areas in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations;
- Parking or driving underneath oak trees shall not be allowed in order to protect root structures except in established traffic areas;
- Plant or wildlife species shall not be collected for pets or any other reason;
- Littering shall not be allowed. SDG&E shall not deposit or leave any food or waste in any work area;
- Wildfires shall be prevented or minimized by exercising care when driving and by not parking vehicles where catalytic converters can ignite dry vegetation. In times of high fire hazard, trucks shall carry water and shovels, or fire extinguishers in the field. The use of shields, protective mats, or other fire prevention methods shall be used during grinding and welding to prevent or minimize the potential for fire. Care shall be exhibited when smoking in permitted areas. Smoking is not permitted within the City of San Diego Open Space; and
- Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impact to a biologist(s) approved by the CPUC and the USFWS and CDFW. Other CPUC- and USFWS- or CDFW-biologists or

experts in wildlife handling may need to be brought in for assistance with wildlife relocations.

4. **MMCRP MM Biology-1b:** Environmental Training Program. An environmental training program shall be developed and presented to all crew members prior to the beginning of all project construction. The training shall describe special-status plant and wildlife species and sensitive habitats that could occur within project work areas, protection afforded to these species and habitats, and avoidance and minimization measures required to avoid and/or minimize impacts from the project. Penalties for violations of environmental laws shall also be incorporated into the training session. Each crewmember shall be provided with an informational training handout and a decal to indicate that he/she has attended the training. The roles and responsibilities of CPUC-, USFWS-, and CDFW-approved biologist(s) and other environmental representatives shall be identified in the MMCRP and discussed during the training. All new construction personnel shall receive this training before beginning work on this project.

A copy of the training and training materials shall be provided to CPUC for review and approval at least 30 days prior to the start of construction. Training logs and sign-in sheets shall be provided to CPUC on a monthly basis. As needed, in-field training shall be provided to new on-site construction personnel by the environmental compliance supervisor or a qualified individual who shall be identified by SDG&E's Project Biologist, or initial training shall be recorded and replayed for new personnel.

5. **MMCRP MM Biology-1c:** Pre-Activity Surveys. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct a pre-activity survey for all activities occurring off of access roads in sensitive habitats. The pre-activity survey shall be conducted no earlier than 30 days prior to surface disturbance. The results of the pre-activity survey shall be documented by the Qualified Biologist in a PSR. The PSR shall be submitted to the CPUC for review and approval prior to the start of construction, and the results shall be submitted to CDFW and USFWS as required by any regulatory permits or approvals. The PSR shall include the following:

- Type, location, and size of project;
- Date, time, weather, surrounding land uses;
- Evaluation of type and quality of habitat;
- Work description and methods which will be used to avoid or minimize ground disturbance, including biological monitoring during construction;
- Anticipated impacts and proposed mitigation; and
- Map of location of work area.

In those situations where the Qualified Biologist cannot make a definitive species identification, the Qualified Biologist shall make a determination based on the available evidence and professional expertise.

In order to ensure that habitats are not inadvertently impacted, the CPUC-, USFWS-, and CDFW-approved biologist shall flag boundaries of habitat which must be avoided. When necessary, the CPUC-, USFWS-, and CDFW-approved biologist shall also demark appropriate equipment laydown areas, vehicle turn around areas, and pads for placement of large construction equipment such as cranes, bucket trucks, augers, etc. When appropriate, the CPUC-, USFWS-, and CDFW-approved biologist shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project site-specific basis. Avoidance of habitat for thread-leaved brodiaea is prioritized over minimization and mitigation.

SDG&E shall maintain a library of special-status plant species locations, known to SDG&E, occurring within the project BSA. "Known" means a verified population either extant or documented using record data. Information on known sites may come from a variety of record data sources including local agency Habitat Conservation Plans, pre-activity surveys, or biological surveys conducted for environmental compliance of the project. Plant inventories shall be consulted as part of pre-activity survey procedures.

6. **MMCRP MM Biology-1d:** Maintenance, Repair, and Construction of Facilities. SDG&E shall implement the following measures pertaining to maintenance, repair, and construction of facilities:
 - a. Maintenance, repair and construction activities shall be designed and implemented to minimize new disturbance, erosion on manufactured and other slopes, and off-site degradation from accelerated sedimentation, and to reduce maintenance and repair costs;
 - b. Routine maintenance of all facilities shall include visual inspections on a regular basis, conducted from vehicles driven on the project access roads where possible. If it is necessary to inspect areas which cannot be seen from the roads, the inspection shall be done on foot or from the air;
 - c. Erosion shall be minimized on access roads and other locations primarily with water bars. The water bars are mounds of soil shaped to direct flow and prevent erosion;
 - d. Hydrologic impacts shall be minimized through the use of state-of-the-art technical design and construction techniques to minimize ponding, eliminate flood hazards, and avoid erosion and siltation into any creeks, streams, rivers, or bodies of water by use of Best Management Practices;
 - e. When siting new facilities, every effort shall be made to cross wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian area.

- f. During repair or maintenance of facilities in a streambed, water may be temporarily diverted as long as the natural drainage patterns are restored after disturbance to minimize the impact of the disturbances and to help re-establish or enhance the native habitat. Erosion control during construction in a streambed in the form of intermittent check dams and culverts shall also be considered to prevent alteration to natural drainage pattern and prevent siltation;
- g.
- h. Impact to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines;
- i. During work on facilities, all trucks, tools, and equipment shall be kept on existing access roads or cleared areas, to the extent possible;
- j. The CPUC-, USFWS-, and CDFW-approved biologist shall approve of an activity prior to working in any natural area where disturbance to habitat may be unavoidable;
- k. Insulator washing shall be allowed from access roads if other applicable protocols in this MM are followed;
- l. Brush clearing around facilities for fire protection shall not be conducted from January 15 through August 31 (to avoid the general bird nesting season) without prior approval by the CPUC-, USFWS-, and CDFW-approved biologist. The CPUC-, USFWS-, and CDFW-approved biologist shall make sure that the habitat contains no active nests, burrows, or dens prior to clearing;
- m. In the event that a special-status plant species is located within the area required to be cleared for fire protection purposes, SDG&E shall notify the USFWS (for ESA-listed plants), and CDFW (for CESA-listed plants), in writing, of the plant's identity and location and of the proposed activity, which will result in a take of such plant. Notification shall occur ten working days prior to such activity, during which time USFWS or CDFW may remove such plant(s). If neither USFWS nor CDFW have removed such plant(s) with the ten working days following the notice, SDG&E may proceed to complete its fire clearing and cause a take of such plant(s) consistent with SDG&E's take coverage for the ESA- or CESA-listed plants. When fire clearing is necessary in instances other than around power poles, and the potential for impacts to special-status species exist, SDG&E shall follow the pre-activity survey and notification procedures in MM Biology-1c, above. Wire stringing shall be allowed year-round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and vehicles remain on access roads;
- n. Maintenance of cut and fill slopes shall consist primarily of erosion repair. In situations where revegetation would improve the success of erosion

- control, planting or seeding with native hydroseed mix may be done on slopes;
- o. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the CPUC-, USFWS-, and CDFW-approved biologist, or used immediately to fill eroded areas. Cleared vegetation shall be hauled to a permitted disposal location;
 - p. The CPUC-, USFWS-, and CDFW-approved biologist shall be contacted to perform a pre-activity survey when vegetation trimming is planned in sensitive habitats. Whenever possible, trees in sensitive habitats such as native riparian, woodland, or scrub vegetation shall be scheduled for trimming in non-sensitive times (i.e., outside of breeding or nesting seasons);
 - q. No new facilities and activities shall be planned that would disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads shall be allowed to continue in areas containing vernal pool habitat, provided no such habitat located within these roads would be impacted by project activities. New construction of overhead infrastructure which spans vernal pool habitats shall be allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools;
 - r. If any previously unidentified dens, burrows, nests, or special-status plants are located on any project site after the pre-activity survey, the CPUC-, USFWS-, and CDFW-approved biologist shall be contacted. The CPUC-, USFWS- and CDFW-approved biologist shall determine how to best avoid or minimize impacting the resource by considering such methods as project or work plan redevelopment, equipment placement or construction method modification, seasonal/time of day limitations, etc.;
 - s. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct monitoring as recommended in the PSR. At completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall check to verify compliance, including observing that flagged areas have been avoided and that reclamation has been properly implemented. Also at completion of work, the CPUC-, USFWS-, and CDFW-approved biologist(s) shall be responsible for removing all habitat flagging from the construction site;
 - t. The CPUC-, USFWS-, and CDFW-approved biologist(s) shall conduct checks on mowing procedures to ensure that mowing is limited to a 12-foot wide area on straight portions of the road (slightly wider on radius turns), and that the mowing height is no less than four inches;
 - u. Supplies or equipment where wildlife could hide (e.g., pipes, culverts, pole holes) shall be inspected prior to moving or working on them to reduce the potential for injury to wildlife. Supplies or equipment that cannot be inspected, or from which animals cannot be removed, shall be

capped or otherwise covered at the end of each work day to avoid animal entrapment. Old piping or other supplies that have been left open shall not be capped until inspected and any species found in them allowed to escape. Ramping shall be provided in open trenches when necessary. If an animal is found entrapped in supplies or equipment, such as a pipe section, the supplies or equipment shall be avoided and the animal(s) left to leave on its own accord, except as otherwise authorized by the CPUC-, USFWS- and CDFW-approved biologist. Refer to MM Biology-1a, Item 10 [referred to as Item J herein] for wildlife relocations;

- v. All steep-walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the CPUC, USFWS-, and CDFW-approved biologist(s) shall be called immediately to remove it if it cannot escape unimpeded;
- w. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities shall be controlled by regular watering. At all times, fugitive dust emissions will be controlled by limiting on-site vehicle speed to 15 miles per hour; and
- x. Before using pesticides in areas where burrowing owls may be found, a pre-activity survey shall be conducted.

7. **MMCRP MM Biology-1g:** Survey Work Protocols. SDG&E shall implement the follow measures during survey work:

- a. Brush clearing for foot path or line-of-sight cutting shall not be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds;
- b. SDG&E survey personnel shall keep vehicles on existing access roads. No clearing of brush shall be allowed from February through September without prior approval from the CPUC-, USFWS-, and CDFW-approved biologist, who will ensure the brush clearing activity, does not adversely affect a special-status species or nesting birds; and
- c. Hiking off roads or paths for survey data collection shall be allowed year-round as long as other protocols are met.

8. **MMCRP MM Biology-3:** Weed Control Plan. SDG&E shall prepare and implement a comprehensive, adaptive Weed Control Plan for pre-construction and long-term invasive, non-native species abatement. Developed land shall be excluded from weed control. Where SDG&E owns the property, the Weed Control Plan shall include specific weed abatement methods, practices, and treatment timing developed specifically for the Project area by qualified individuals with at least 5 years of weed control experience within San Diego

County. The Weed Control Plan shall address control methods and issues controlling invasive non-native species within all vegetation communities and land cover types found along the Project alignment. On ROW easement on MCAS Miramar, the Weed Control Plan shall incorporate all appropriate and legal U.S. Marine Corps-stipulated regulations. The Weed Control Plan shall be submitted to MCAS Miramar for final authorization of weed control methods, practices, and timing prior to implementation of weed control on MCAS Miramar. The Weed Control Plan shall be submitted to the City of San Diego for final authorization of weed control methods, practices, and timing prior to implementation of any weed control within the City of San Diego MHPA. The Weed Control Plan shall include the following:

- A pre-construction weed inventory shall be conducted by surveying the entire ROW and areas immediately adjacent to the ROW where access permission is obtained, as well as at all ancillary facilities associated with the Project for weed populations that: (1) are considered by the San Diego County Agriculture Commissioner, MCAS Miramar (for ROW on MCAS Miramar), or City of San Diego (for ROW within the City of San Diego MHPA) as being a priority for control, (2) are weed populations that are rated High or Moderate for negative ecological impact in the California Invasive Plant Inventory (online) Database (Cal-IPC 2006 [and 2007 update]; <http://www.cal-ipc.org/ip/inventory/index.php>) or are weed species of concern to MCAS Miramar (for ROW on MCAS Miramar), and (3) aid and promote the spread of wildfires in San Diego County.
- Prolific wildfire-promoting species such as brome grasses (*Bromus* sp.) shall be mapped but not targeted for control outside of Project impact areas. These populations shall be mapped and described according to density and area covered. These plant species shall be treated prior to construction or at a time when treatments would be most effective based on phenology according to control methods and practices for invasive weed populations included in the Weed Control Plan or required by MCAS Miramar or City of San Diego.
- Weed control treatments shall include all legally permitted methods to be used in the following prioritized order: preventative, manual, mechanical, and chemical.
- All treatments shall be applied with the authorization of the, MCAS Miramar and City of San Diego as appropriate.
- The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Advisor (PCA) and implemented by a Licensed Qualified Applicator.
- Where manual and/or mechanical methods are used, disposal of the plant debris will be within an approved landfill area within San Diego County.
- The timing of the weed control treatment shall be determined for each plant species in consultation with the PCA for the Project, and with MCAS

Miramar, and City of San Diego as appropriate, with the goal of controlling populations before they start producing seeds. For the lifespan of the project (i.e., as long as the project is physically present), long-term measures to control the introduction and spread of weeds in the project area shall be taken as follows:

- From the time construction begins until 2 years after construction is complete, annual surveying for new invasive weed populations and the monitoring of identified and treated populations shall be required in the survey areas described above. After this time, surveying for new invasive weed populations and monitoring of identified and treated populations shall be required at an interval of every two years.
 - However, the treatment of weeds shall occur on a minimum annual basis, unless otherwise approved by the PCA, MCAS Miramar, and City of San Diego as appropriate.
 - During project construction and operation/maintenance, all seeds and straw materials shall be certified weed free, and all gravel and fill material shall also be certified weed free.
 - During project construction, vehicle and boot wash stations shall be provided.
9. **MMCRP MM Biology-6:** Compensatory Mitigation for Impacts to Habitat. SDG&E shall restore temporarily impacted areas to pre-construction conditions following construction according to the performance criteria described below and/or shall purchase/dedicate suitable habitat for preservation to off-set permanently impacted areas. Restoration of some vegetation communities in temporarily impacted areas may not be possible if those areas are subject to vegetation management to maintain proper clearance between transmission lines and vegetation, for example. In those instances, the mitigation shall consist of off-site acquisition and preservation of the vegetation community. Restoration of temporarily impacted areas involves recontouring the land, replacing the topsoil (if it was collected), planting seed and/or container stock, maintaining (i.e., weeding, replacement planting, supplemental watering, etc.), and monitoring the restored area for a period of 5 years and or until year 5 success criteria are met. SDG&E shall prepare a Habitat Restoration Plan that shall be subject to approval by the CPUC, USFWS, CDFW, City of San Diego (for restoration within City of San Diego MHPA), and MCAS Miramar (for restoration on MCAS Miramar) prior to habitat impacts. Required mitigation ratios are provided by habitat type in Table 4.1-10. In cases where the impacts to sensitive vegetation communities occur in the City of San Diego MHPA, the mitigation shall also occur in the MHPA. The Habitat Restoration Plan shall also identify, if applicable, the potential for reintroduction and/or increasing MSCP-covered species populations within habitat restoration areas if those covered species were affected by the Project.

Table 4.1-10. Required Habitat Mitigation Ratios

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent ¹
Diegan Coastal Sage Scrub		
Diegan coastal sage scrub	1:1	1:1
Diegan coastal sage scrub in the MHPA	1:1	2:1
Diegan coastal sage scrub-Disturbed	1:1	1:1
Diegan coastal sage scrub-Disturbed in the MHPA	1:1	2:1
Diegan coastal sage scrub-Revegetated	1:1	1:1
Diegan coastal sage scrub-Revegetated in the MHPA	---	2:1
Coastal Sage Scrub		
Coastal sage-chaparral scrub	0.5:1	1:1
Coastal sage-chaparral scrub in the MHPA	1:1	2:1
Chaparral		
Chamise chaparral	0.5:1	1:1
Chamise chaparral in the MHPA	1:1	2:1
Chamise chaparral-disturbed	0.5:1	1:1
Chamise chaparral-disturbed in the MHPA	1:1	2:1
Scrub oak chaparral	1:1	1:1
Scrub oak chaparral in the MHPA	2:1	2:1
Southern mixed chaparral	0.5:1	1:1
Southern mixed chaparral in the MHPA	1:1	2:1
Southern mixed chaparral-disturbed	0.5:1	1:1
Southern mixed chaparral-disturbed in the MHPA	1:1	2:1
Grassland		
Native grassland	1:1	1:1
Native grassland in the MHPA	2:1	2:1
Non-native grassland	0.5:1	1:1
Non-native grassland in the MHPA	---	2:1
Freshwater Marsh		
Freshwater marsh	---	1:1
Vernal Pool		
San Diego Mesa Vernal Pool	3:1	3:1
Riparian		
Southern riparian scrub	---	1:1
Mule fat scrub	---	1:1

Vegetation Community	Mitigation Ratio	
	Temporary	Permanent ¹
Mulefat scrub in MHPA	---	2:1
Southern willow scrub	---	1:1
Southern willow scrub in MHPA	---	2:1
Tamarisk scrub in MHPA	---	2:1
Southern coast live oak riparian forest	---	1:1
Southern coast live oak riparian forest in MHPA	---	2:1
Notes		
¹ Mitigation ratios for permanent impacts are consistent with SDG&E's NCCP; 1:1 for permanent impacts outside a preserve and 2:1 for permanent impacts inside a preserve.		

The Restoration Plan shall include the following performance criteria:

- a. Percent cover and composition shall be similar to the conditions of a nearby reference site, defined as variation of no more than 10 percent absolute cover from the reference site cover and species composition condition;
- b. Maintenance and monitoring for restoration shall be for 5 years or until success criteria are met. Compensation planting areas shall be monitored eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and above;
- c. Compensation planting areas shall be monitored for invasive plants in the first 5 years following replanting. Invasive plant monitoring shall occur eight times in Year 1, six times per year in Years 2 and 3, and 4 times per year in Years 4 and 5. If invasive plants are found during the 5-year monitoring period, they shall be removed as necessary to support meeting the cover and vegetation composition success criteria;
- d. If the restoration fails to meet the established success criteria after the maintenance and monitoring period, maintenance and monitoring shall extend beyond the 5-year period until the criteria are met or unless otherwise approved by the CPUC; and
- e. Maintenance and monitoring shall be conducted following a prescribed schedule to assess progress and identify potential problems with the restoration. Remedial action (e.g., additional planting, weeding, erosion control, use of container stock, supplemental watering, etc.) shall be taken by an experienced, licensed Habitat Restoration Contractor during the maintenance and monitoring period if necessary to ensure the success of the restoration.

Any impacts associated with unauthorized activity (e.g., exceeding approved construction footprints or implementing the Habitat Management Plan after the allowed timeframe of 18 months following the initiation of any vegetation disturbing activities) shall be mitigated at a 5:1 ratio. Restoration of the unauthorized impacts shall be credited at a 1:1 ratio (i.e., mitigated by in-place habitat restoration); the remaining 4:1 shall be acquired and preserved off-site.

For areas where habitat restoration cannot meet mitigation requirements, as determined by the Habitat Restoration Specialist in coordination with CPUC, USFWS, CDFW, and MCAS Miramar (for restoration on MCAS Miramar), off-site purchase and dedication of habitat (or as otherwise prescribed by MCAS Miramar for restoration on MCAS Miramar) shall be provided at the mitigation ratios provided in Table 4.1-10.

Mitigation Parcels/Habitat Management Plans. All off-site mitigation parcels shall be approved by the CPUC, USFWS, CDFW and MCAS Miramar (as applicable) and must be acquired, or their acquisition must be assured. To demonstrate that such parcels will be acquired, SDG&E shall submit a Habitat Acquisition Plan at least 120 days prior to any ground disturbing activities for CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) review and approval. The Habitat Acquisition Plan shall include, but shall not be limited to:

- a. Legal descriptions and maps of all parcels to be acquired;
- b. Schedule that includes phasing relative to impacts;
- c. Documentation demonstrating that the mitigation parcel(s) provides high quality habitat roughly equivalent in composition to the habitats that would be impacted by the project and at appropriate acreages;
- d. Timing of conservation easement recording;
- e. Initiation of habitat management activities relative to acquisition; and
- f. Assurance mechanisms (e.g., performance bonds to assure adequate funding) for any parcels not actually acquired prior to vegetation disturbing activities.

A Habitat Management Plan shall be prepared by a biologist and approved by the CPUC, USFWS, CDFW, and MCAS Miramar (as applicable) for all acquired off-site mitigation parcels. The Habitat Management Plan must be approved in writing by these agencies (as applicable) within 18 months of the initiation of any vegetation disturbing activities. The Habitat Management Plan shall provide direction for the preservation and in-perpetuity management of all acquired, off-site mitigation parcels. The Habitat Management Plan shall include, but shall not be limited to:

- a. Adequate SDG&E funding for the preparation and implementation of the HMP;

- b. Legal descriptions of all mitigation parcels approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts);
- c. Baseline biological data for all mitigation parcels;
- d. Designation of a land management entity approved by the CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts) to provide in-perpetuity management;
- e. A Property Analysis Record prepared by the designated land management entity that explains the amount of funding required to implement the Habitat Management Plan;
- f. Designation of responsible parties and their roles (e.g., provision of endowment by SDG&E to fund the Habitat Management Plan and implementation of the Habitat Management Plan by the designated land management entity);
- g. Management specifications including, but not limited to, regular biological surveys to compare with the baseline data; invasive, non-native species control; fence/sign replacement or repair; public education; trash removal; and annual reports to CPUC, USFWS, CDFW, and MCAS Miramar (for mitigation parcels to be acquired for MCAS Miramar impacts);

10. **MMCRP MM Biology-7:** Mitigation for Bird Species *This measure applies to all work areas in which any construction-related activities must be conducted during the nesting bird season (generally between January 15 and August 31, but may be earlier or later depending on species, location, and weather conditions).*

Nesting Bird Survey Requirements: If work is scheduled to occur during the avian nesting season, nesting bird surveys shall be conducted according to the following provisions:

- a. Nest surveys shall occur within 5 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities. If there is no work in an area for 7 days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again;
- b. Surveys shall be conducted with sufficient survey duration and intensity of effort necessary for the identification of active nests, which is defined as once birds begin constructing, preparing, or using a nest for egg-laying. A nest is no longer an "active nest" if abandoned by the adult birds or once fledglings are no longer dependent on the nest". Surveys shall include nests of protected species within vegetation identified for removal and/or pruning, and within the following buffers of active work areas: 0.25-mile buffer for white-tailed kite; 500-foot buffer for other raptor species;

- c. Surveys shall be conducted during locally appropriate dates for nesting seasons determined in consultation with the USFWS and CDFW; note that generally the season is between January 15 and August 31 but may be earlier or later depending on species, location, and weather conditions. Species-specific nesting seasons for some species are identified below;
- d. The surveys shall be conducted by a CPUC, USFWS-, and CDFW-approved qualified biologist;
- e. Survey results shall be provided to CPUC, USFWS, and CDFW prior to initiating construction activities; and
- f. Work areas within which significant noise is not generated, such as work performed manually, by hand or on foot, and/or that would not cause significant disturbances to nesting birds (e.g., operating switches, driving on access roads, normally occurring activities at substations, and activities at staging and laydown areas) do not need to be surveyed prior to use. None of these activities shall result in physical contact with a nest.

Avoid Impacts on Nesting Birds. During the nesting season (generally between January 15 and August 31) raptor nests that are located within a 500-foot buffer from a work location shall be evaluated by a CPUC-, USFWS-, and CDFW-approved qualified biologist to determine whether the raptor nest is active. No trees with active raptor nests shall be removed during nesting season.

No additional measures shall be implemented if active nests are more than the following distances from the nearest work areas: (a) 0.25 mile for white-tailed kite, (b) 500 feet for raptors, Coastal California gnatcatcher, and least bell's vireo, (c) 250 feet for passerine birds in open space areas, or (d) 150 feet for common (non-special status) passerine birds in residential, commercial, and industrial areas. Buffers shall not apply to construction-related traffic using existing roads where the use of such roads is not limited to project-specific use (i.e., county roads, highways, farm roads, or other private roads). Where road use is limited to project-specific use, a buffer reduction or approval to drive through a buffer shall be obtained as described below under "Buffer Reduction".

As appropriate, exclusion techniques may be used for any construction equipment that is left unattended for more than 24 hours to reduce the possibility of birds nesting in the construction equipment. An example of an exclusion technique is covering equipment with tarps.

Buffer Reduction. The specified buffers from nesting birds may be reduced on a case-by-case basis if, based on compelling biological or ecological reasoning (e.g., the biology of the bird species, concealment of the nest site by topography, land use type, vegetation, level of project activity, and level of pre-existing disturbance on site), it is determined by a CPUC-, USFWS-, and CDFW-approved qualified biologist that implementation of a specified smaller buffer distance will still avoid nest abandonment and failure. This requirement includes buffer reductions or temporary buffer incursions for project-related use of roads where no stopping, standing, or other work activities shall occur in the buffer.

Requests to reduce standard buffers or for temporary buffer incursions must be submitted to CPUC's independent biologist for review. Requests to reduce buffers must include:

- a. Species;
- b. Location;
- c. Pre-existing conditions present on site;
- d. Description of the work to be conducted within the reduced buffer;
- e. Size and expected duration of proposed buffer reduction;
- f. Reason for the buffer reduction;
- g. Name and contact information of the CPUC-, USFWS-, and CDFW-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring; and
- h. Proposed frequency and methods of monitoring necessary for the nest given the type of bird and surrounding conditions.

CPUC's independent biologist shall respond to SDG&E's request for a buffer reduction (and buffer reduction terms) within 1 business day; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities. If the buffer reduction request is denied, or if the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the specified buffer(s) listed above in this measure shall be implemented.

Non-special status species found building nests within the work areas after specific project activities begin may be tolerant of that specific project activity; however, the CPUC-, USFWS-, and CDFW-approved qualified biologist shall implement an appropriate buffer or other appropriate measures to protect the nest after taking into consideration the position of the nest, the bird species nesting on site, the type of work to be conducted, and duration of the construction disturbance. In these cases, the proposed buffer or other measures must be approved by CPUC's independent biologist through the buffer reduction process outlined in this measure, if buffers are less than those specified in this measure. These nests shall be monitored on a daily basis and only during construction activities (no monitoring required during periods when no work is conducted) by a qualified biologist until the qualified biologist has determined that the young have fledged or construction ends within the work area (whichever occurs first). If the qualified biologist determines that the nesting bird(s) are not tolerant of project activity, the buffer outlined above in this measure shall be implemented.

Specific Requirements for Coastal California Gnatcatcher and Least Bell's Vireo. Where there is potential nesting habitat for the coastal California gnatcatcher or least Bell's vireo within or adjacent to the MHPA, construction or operation/maintenance noise that exceeds the existing baseline noise level for a site by more than 3 dB hourly average or an hourly average threshold of 60 decibels, whichever is higher, shall be avoided during these species' breeding seasons as follows: coastal California Gnatcatcher March 1 through August 15, and least Bell's vireo March 15 through September 15. If avoidance is not possible during the breeding season, SDG&E shall work with a qualified acoustician approved by the CPUC, USFWS, and CDFW to develop and implement noise attenuation measures. The following measures shall be adhered to when project activities during the breeding season occur within riparian habitats that may support vireo and flycatcher:

- A biologist knowledgeable of vireo and/or flycatcher biology and ecology, approved by the CPUC, USFWS, and CDFW, will survey within the project impact footprint and a 300-foot buffer (within riparian scrub) before clearing vegetation or project construction to check for vireo and/or flycatcher nesting activity. Should an active nest be located in the impact footprint, then work will be suspended until the nest is vacated.
- Biological buffers of at least 100 feet will be maintained adjacent to active nests.

For project activities during the breeding season adjacent to known occupied vireo and/or flycatcher nesting habitat, the biologist will monitor nesting bird activity. If the biologist determines that nesting birds are being disrupted by project activities, then work will be suspended until effective minimization measures (e.g., noise attenuation structures) developed in coordination with the CPUC, USFWS, and CDFW are in place or until after the breeding season is completed.

Any lighting required during project activities will be shielded and directed away from vireo and/or flycatcher habitat to ensure that these areas are not artificially illuminated.

Avian Protection on Power Lines. The project shall include collision-reducing techniques for transmission lines (based on Reducing Avian Collisions with Power Lines: The State of the Art in 2012; Avian Power Line Interaction Committee [APLIC] 2012).

Monitoring and Reporting. All nests with a reduced buffer shall be monitored on a daily basis during construction activities by a CPUC-, USFWS-, and CDFW-approved qualified biologist until the qualified biologist has determined that the young have fledged or until one week after construction ends within the reduced buffer/work area (whichever occurs first).

Nest locations and exclusion buffers shall be mapped (using geographic information systems [GIS]) for all nests identified. This information shall be maintained in a database and shall be provided to CPUC, CDFW, and USFWS. A monthly written report shall be submitted to CPUC, CDFW, and USFWS for

construction within a reduced buffer and shall include the following: information included in buffer reduction requests, work conducted within the work site, duration of work activities and related buffer reduction, information on nest success (eggs, young, and adults). No avian reporting shall be required for construction occurring outside of the nesting season and if construction activities do not occur within a reduced buffer during any calendar month. A final report shall be submitted to CPUC, CDFW, and USFWS at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of project construction. Nests located in areas of existing human presence and disturbance, such as in yards of private residences, or within commercial and or industrial properties, are likely acclimated to disturbance and do not need to be monitored, as determined by the CPUC-, USFWS-, and CDFW-approved qualified biologist and approved by CPUC's independent biologist.

11. **MMCRP MM Biology-8:** Burrowing Owl Monitoring and Mitigation Plan. SDG&E shall prepare a Burrowing Owl Monitoring and Mitigation Plan (BOMMP) consistent with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). SDG&E shall submit the Draft BOMMP to CDFW and CPUC. SDG&E shall be required to obtain approval from CDFW on the BOMMP prior to construction. SDG&E shall provide the approved BOMMP to the CPUC 30 days prior to construction.

In accordance with the Staff Report on Burrowing Owl Mitigation (CDFW 2012) and CDFW-approved BOMMP, SDG&E shall conduct a preconstruction take avoidance survey for the burrowing owl prior to initiating ground disturbance activities. In areas where owl presence is not found, construction may proceed without further mitigation. If western burrowing owl occupancy on site is confirmed during preconstruction take avoidance surveys, SDG&E shall implement the CDFW-approved Burrowing Owl Monitoring and Mitigation Plan in coordination with CDFW.

12. **MMCRP MM Biology-9:** San Diego Desert Woodrat Mitigation. A CPUC-approved qualified biologist shall conduct a preconstruction survey to identify potential San Diego desert woodrat houses within the project work areas and within 5 feet of the edge of the work areas to avoid direct take of woodrats. All woodrat houses shall be documented and reported through the MMCRP. Woodrat houses found within the work site or within 5 feet from a work site shall be flagged or fenced for avoidance. If impacts to a woodrat house located within a work site are unavoidable, a CPUC-approved qualified biologist, prior to construction and outside of the breeding season (April through June), shall dismantle the house by hand, removing the materials layer by layer to allow for adult woodrats to escape. If young are present and found during the disassembling process, the CPUC-approved qualified biologist shall leave the site for at least 24 hours to allow for the rats to relocate their young on their own. This step shall be repeated as needed until the young have been relocated by the parent woodrats. Once the nest is vacant, the disassembly process shall be completed and the nest sticks shall be collected and moved to another suitable nearby location to allow for nest reconstruction. Piles of cut vegetation/slash shall

be retained near the work site prior to nest dismantling to provide refuge for woodrats that may become displaced.i

5.2 Preserve Areas

No Preserve areas have been designated within the portion of the Project that occurs on MCAS Miramar. Therefore, no impacts inside Preserve areas are anticipated.

5.3 Mitigation

The Project consists of replacement, consolidation, and upgrading facilities within the existing SDG&E ROW. Per Table 7.4 (b) of the SDG&E NCCP, all anticipated permanent and temporary impacts associated with the maintenance of existing facilities located outside of Preserve areas are mitigated by SDG&E's agreement to restrict development other than SDG&E's activities on fee-owned ROWs which contain habitat, connect fragmented habitat areas, or contribute to the carrying capacities of the Preserve areas in the region. SDG&E agrees to limit its use of such ROWs to utility activities. Therefore, credit withdrawal from the SDG&E Mitigation Bank is not required for permanent impacts to approximately 0.13 acre (5,678 square feet) of sensitive vegetation communities and temporary impacts to approximately 0.45 acre (19,437 square feet) of sensitive vegetation communities for the maintenance of existing facilities located outside of designated Preserve areas. These impacts and mitigation ratios are consistent with ratios identified in the FEIR; per Table 4.1-10 Required Habitat Mitigation Ratios, "Mitigation ratios for permanent impacts are consistent with the SDG&E's NCCP; 1:1 for permanent impacts outside a preserve and 2:1 for permanent impacts inside a preserve" (CPUC 2016).

All anticipated temporary impacts associated with new facilities located on the portion of the Project that occurs on MCAS Miramar are outside a Preserve area. SDG&E anticipates temporary impacts from the construction of new facilities to impact approximately 0.08 acre (3,465 square feet) of sensitive vegetation communities outside of designated Preserve areas. Per Table 7.4 (a) of the SDG&E NCCP, temporary impacts for the construction of new facilities outside a preserve will be mitigated through basic site remediation, which includes native hydroseed for erosion control where grubbing occurred. However, if roots are not grubbed during temporary impacts, the hydroseeding may not be necessary. This applies to areas greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio.

The Project does not fall within the SDG&E Low-Effect HCP mapped area for Quino checkerspot butterfly (SDG&E 2007). Therefore, mitigation is not required for impacts to suitable Quino checkerspot butterfly habitat.

Work crews shall follow all operational protocols, as stated in SDG&E's NCCP (Section 7.1, Operational Protocols) to avoid, minimize, or mitigate impacts to resources as a result of implementation of Project-related activities on MCAS Miramar. Additional avoidance and minimization measures will be implemented through the Reviewer Recommendations listed above.

6.0 CONCLUSIONS

This PSR was prepared using data collected during various general and focused biological surveys performed for the Project between 2013 and 2015, and data provided by MCAS Miramar. The final permanent and temporary impacts associated with the portion of the Project that occurs on MCAS Miramar will be captured in the post-construction report, and final mitigation requirements will be based on those final permanent and temporary impact acreage/square footage.

Based on the current data, credit withdrawal from the SDG&E Mitigation Bank is not required for permanent or temporary impacts as a result of the O&M of existing facilities located outside of a designated Preserve for the Project, per regulations set forth by Table 7.4 of the NCCP for. No permanent impacts will result from the construction of new facilities. Temporary impacts from the construction of new facilities outside of a Preserve will be mitigated through basic site remediation, which includes native hydroseed for erosion control where grubbing occurred. However, if roots are not grubbed during temporary impacts, the hydroseeding may not be necessary. This applies to areas greater than 500 square feet, and only where grubbing occurred. For all temporary impacts greater than 500 square feet, acreage not meeting success criteria shall be deducted from SDG&E mitigation credits at a 1:1 ratio.

7.0 REFERENCES

Busby Biological Services, Inc. (BBS)

2014 Biological Technical Report for Sycamore to Peñasquitos 230 Kilovolt Transmission Line Project, City of San Diego, San Diego County, California. March 2014.

2015 Final Supplemental Jurisdictional Delineation Memorandum for the New Survey Areas within the Proposed Sycamore to Peñasquitos 230 Kilovolt Transmission Line Project, San Diego County, California. April 30, 2015.

California Department of Fish and Wildlife (CDFW)

2016 CDFW Biogeographic Data Branch, California Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List. Available at: <http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/SPPlants.pdf>.

California Native Plant Society (CNPS)

2016 Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society Rare Plant Program, Sacramento, CA. Available at: <http://www.rareplants.cnps.org>.

California Public Utilities Commission (CPUC)

2016 Sycamore-Peñasquitos 230-kV Transmission Line Project Final Environmental Impact Report; Addendum. Available at: http://www.cpuc.ca.gov/Environment/info/panoramaenv/Sycamore_Penasquitos/FEIR.html. May.

Chambers Group, Inc. (Chambers Group)

- 2016a Results of the 2016 Focused Plant Surveys for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Project, San Diego County, California
- 2016b Results of the 2016 Focused Surveys for Coastal California Gnatcatcher (*Polioptila californica californica*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Project, San Diego County, California.
- 2016c Results of the 2016 Focused Surveys for Least Bell's Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax Traillii Extimus*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Project, San Diego County, California.
- 2016d Survey Summary Report for the 2015/2016 Protocol-level, Wet Season Fairy Shrimp Survey for the Proposed Sycamore to Peñasquitos 230-kilovolt Transmission Line Project. In progress.
- 2016e Quino Checkerspot Butterfly Survey Summary Report for Portions of the Proposed San Diego Gas & Electric Company Sycamore to Peñasquitos 230-Kv Transmission Line Project Within the U.S. Fish and Wildlife Service Recommended Quino Survey Area, San Diego County, California.
- 2016f Results of the 2016 Focused Surveys for Burrowing Owl (*Athene cunicularia*) for Alternative 5 of the Sycamore to Peñasquitos 230-Kilovolt Transmission Line Project, San Diego County, California.

San Diego Gas and Electric Company (SDG&E)

- 1995a Subregional Natural Communities Conservation Plan. December 15, 1995.
- 1995b Subregional Natural Communities Conservation Plan Implementing Agreement/CESA Memorandum. Entered into by and among the United States Fish and Wildlife Service, California Department of Fish and Game, and San Diego Gas & Electric Company. December 18, 1995.
- 2007 SDG&E's Low Effect Habitat Conservation Plan for the Quino Checkerspot Butterfly
- 2015 Draft Project Description for the Sycamore to Peñasquitos 230 kV Transmission Line Project, MCAS Miramar – Tier 1 CLAMP Application

Environmental Intelligence (EI)

- 2014 Jurisdictional Delineation of San Diego Gas & Electric's Sycamore to Peñasquitos 230 Kilovolt Transmission Line Improvements Project

United States Marine Corps (USMC)

- 2011 Integrated Natural Resources Management Plan for Marine Corps Air Station Miramar, California. August 2011.

2014 *Current Sensitive Resources Map*. Natural Resource Division of Marine Corps Air Station (MCAS) Miramar. Last updated February 2014. Available at: [http://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/Sensitive%20Resources%20Map%20\(Feb2014\).pdf](http://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/Sensitive%20Resources%20Map%20(Feb2014).pdf)

APPENDIX A
Figures

Figure 1



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Sycamore to Peñasquitos 230 kV Transmission Line Project
 Project Location Map
 Figure 1

-  Project Alignment
-  MCAS Miramar

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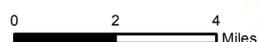
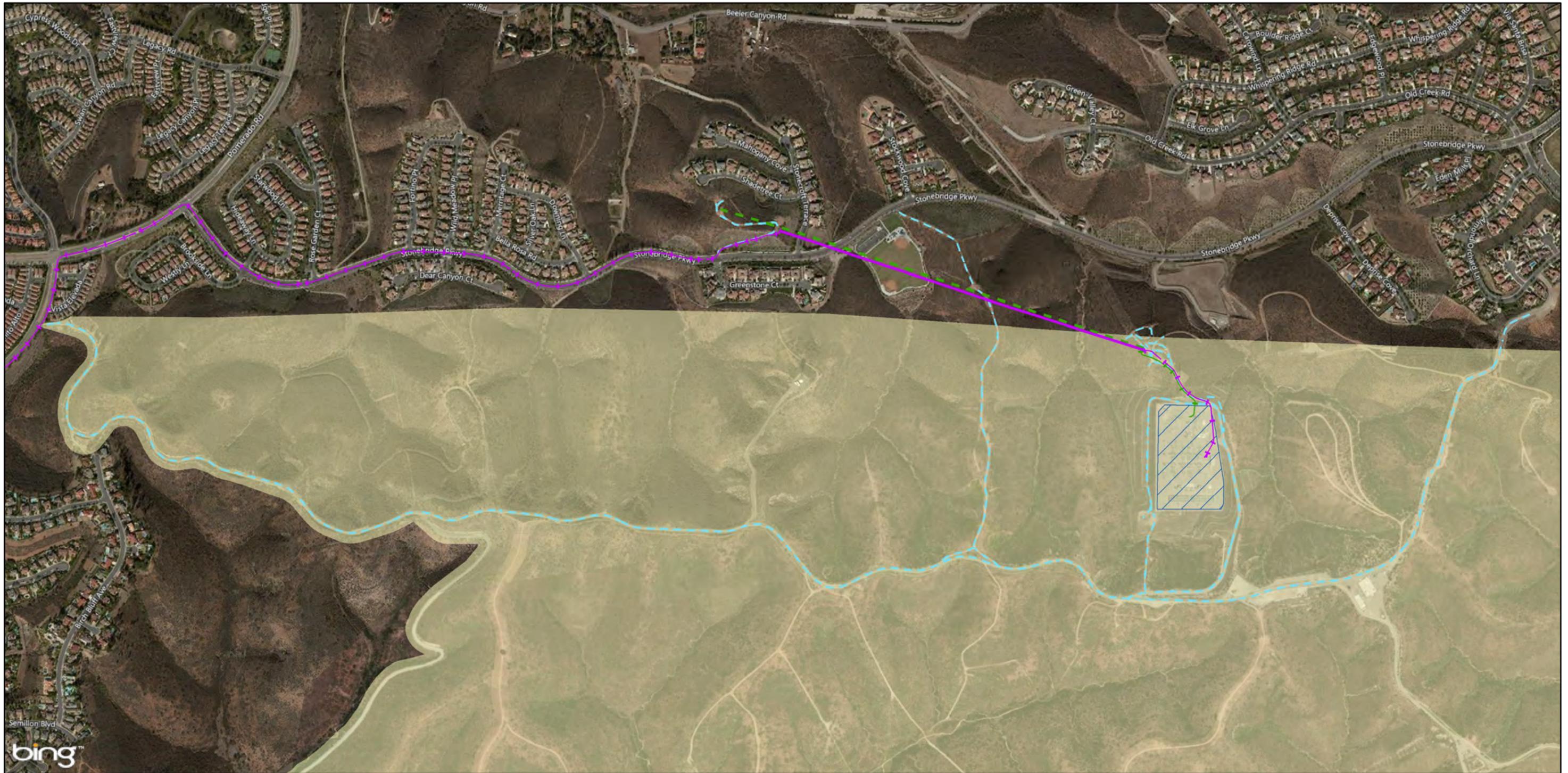


Figure 2



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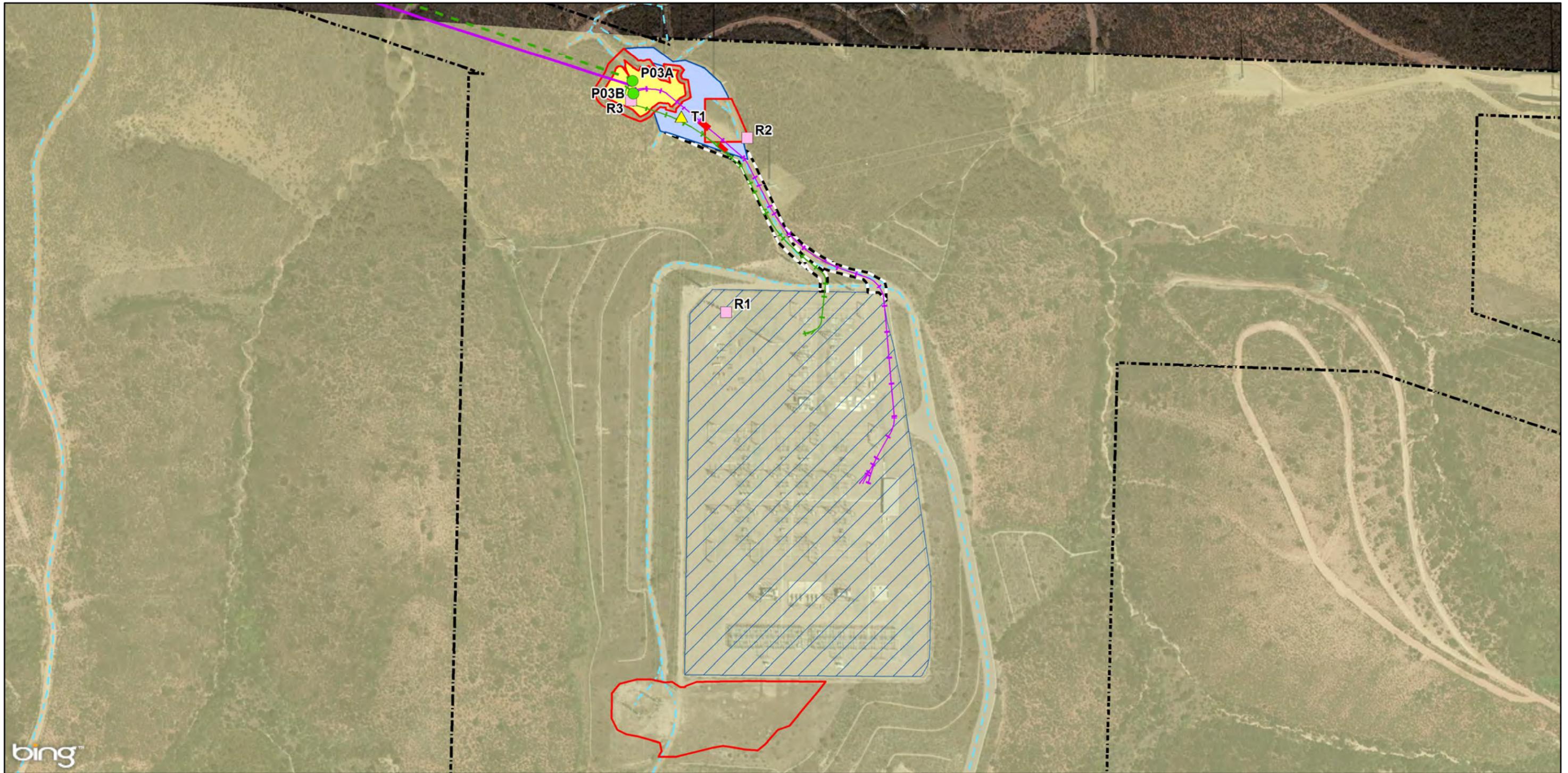
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- - - Relocated 138kV Overhead
- + - Relocated 138kV Underground
- + - New 230kV Overhead
- + - New 230kV Underground
- - - Access Road
- Existing Substation
- MCAS Miramar

Sycamore to Peñasquitos 230 kV Transmission Line Project
 MCAS Miramar Overview and Access Map
Figure 2



Figure 3



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- | | | |
|--|----------------------------------|------------------------------------|
| ● Proposed Structure | —+— Relocated 138kV Underground | □ Temporary Work Space |
| ■ Removed Structure | —+— New 230kV Overhead | ■ Stringing Site |
| ▲ Topped Structure | —+— New 230kV Underground | ■ Permanent Maintenance Work Space |
| —+— Relocated 138kV Overhead | ■ Underground Transmission Vault | ▨ Existing Substation |
| □ Temporary Underground Trench Work Area | --- Alt5_AccessRoads | □ Existing ROW |
| | ■ MCAS Miramar | |

Sycamore to Peñasquitos 230 kV Transmission Line Project
Project Construction/Design Plan and Detailed Site Map
Figure 3

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APPENDIX B
Photograph Log

APPENDIX B – PHOTOGRAPH LOG



Photo 1: R1
(facing south towards existing 138 kV steel monopole to be transitioned underground and wood pole to be removed).



Photo 2: R2
(facing north towards existing 138 kV wood monopole to be removed and transitioned underground).

APPENDIX B – PHOTOGRAPH LOG



Photo 3: R3
(facing northwest towards existing 138 kV wood monopole to be removed and transitioned underground).



Photo 4: T1
(facing northwest towards existing 138 kV wood monopole to be transitioned underground and topped above existing 69 kV distribution line).

APPENDIX B – PHOTOGRAPH LOG



Photo 5:
P03A/B (facing south towards proposed double-circuit 230 kV/138 kV steel monopole location of installation).



Photo 6:
Stringing Site (facing northwest towards stringing site in foreground and T1 in distance).

APPENDIX B – PHOTOGRAPH LOG



Photo 7:
Underground Trenching (facing north towards portion of underground trenching in revegetated coastal sage scrub north of Sycamore Canyon Substation).



Photo 8:
Multiple Use Work Area (facing west towards multiple use work area south of and adjacent to Sycamore Canyon Substation).

Appendix B: Project Mapbook



**Sycamore to Peñasquitos
230kV Transmission Line Project**

Appendix B

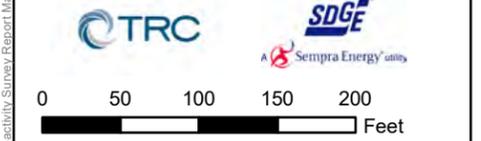
Pre-activity Survey Report Mapbook

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- Proposed New ADSS Interset Structure
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- - Reductor 138kV Overhead
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- ▭ Permanent Impact
- ▭ Substation

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**Sycamore to Peñasquitos
230kV Transmission Line Project**

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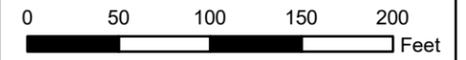
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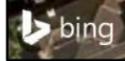
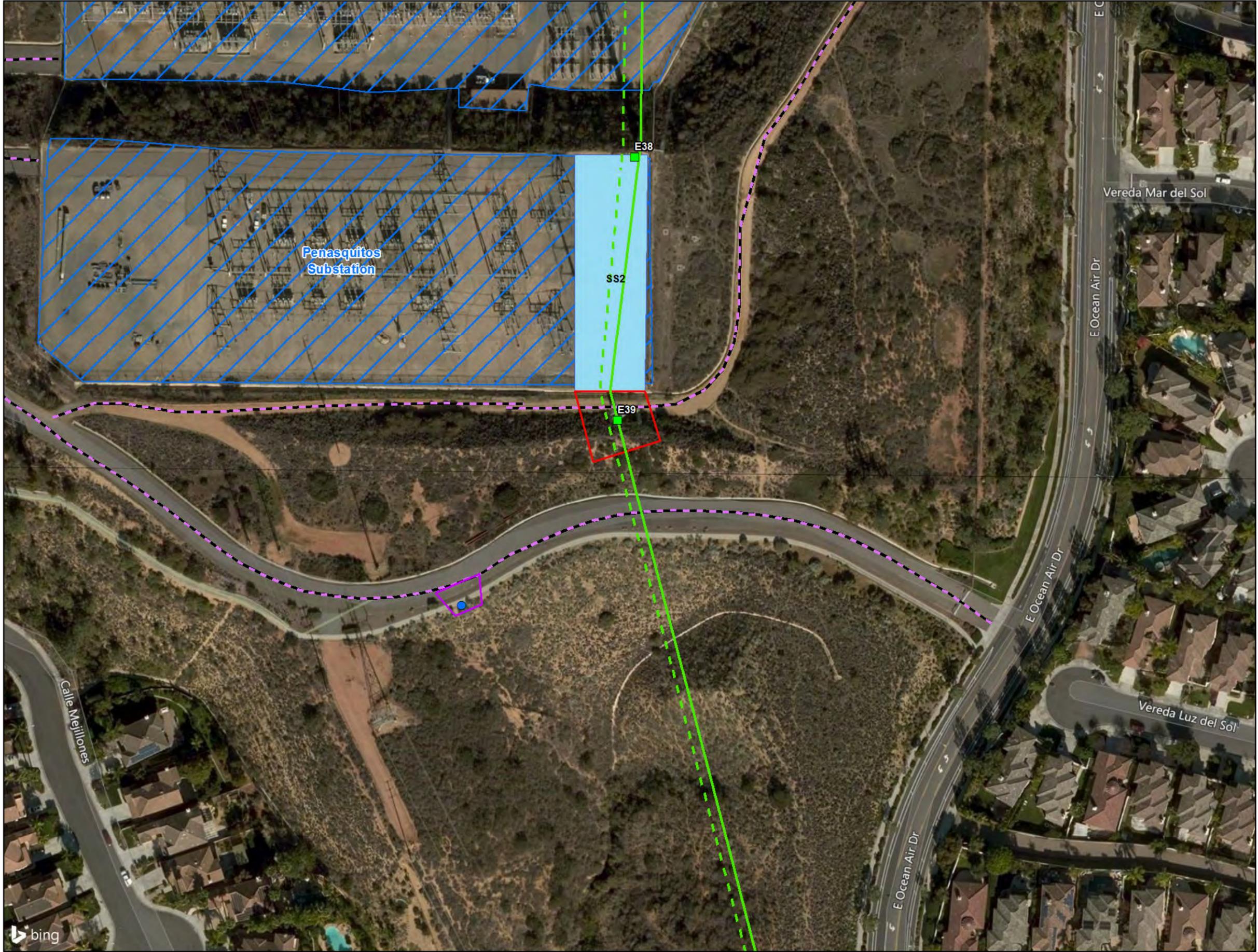
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**Sycamore to Peñasquitos
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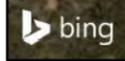
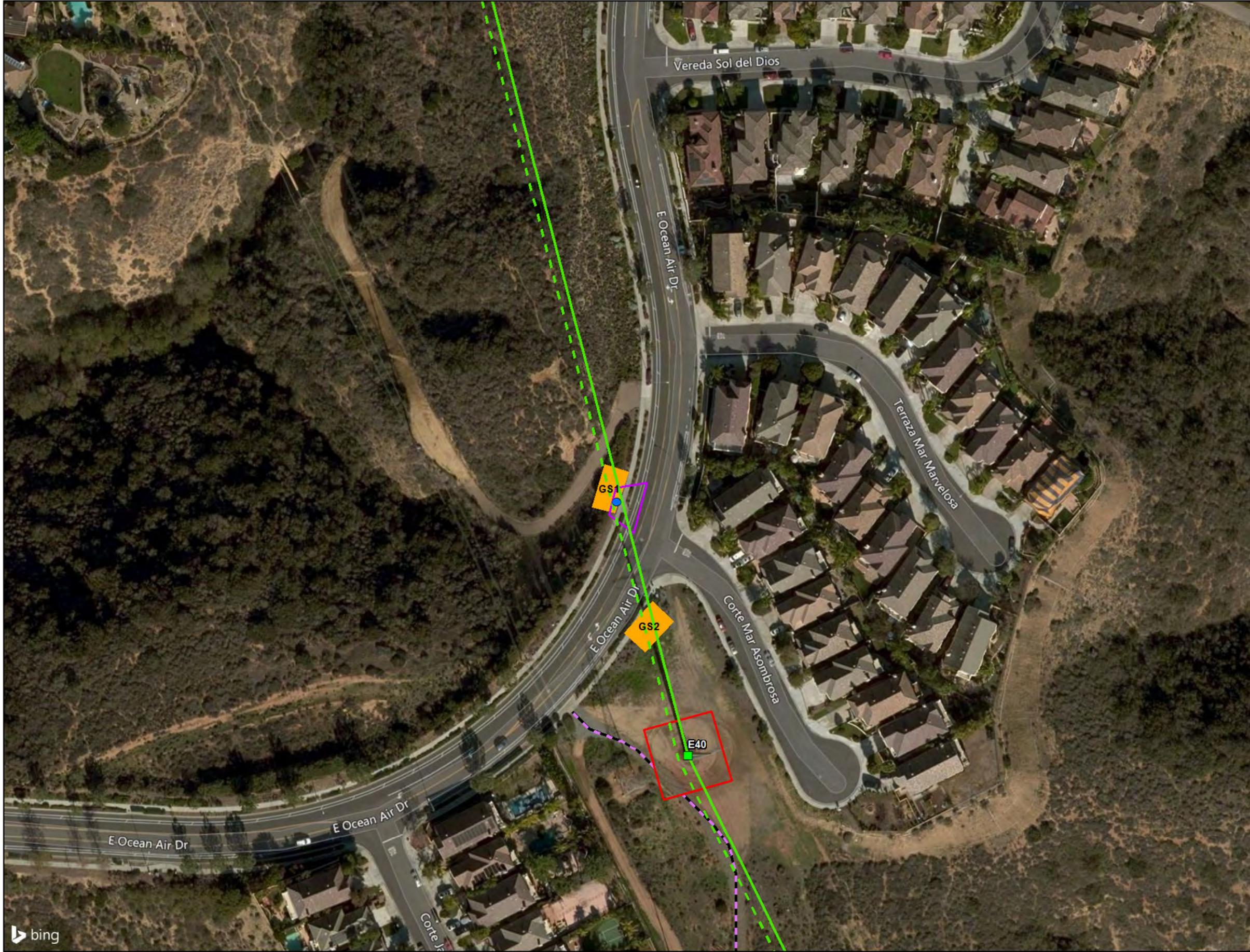
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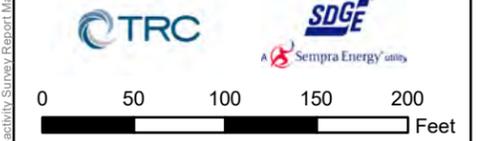
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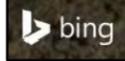
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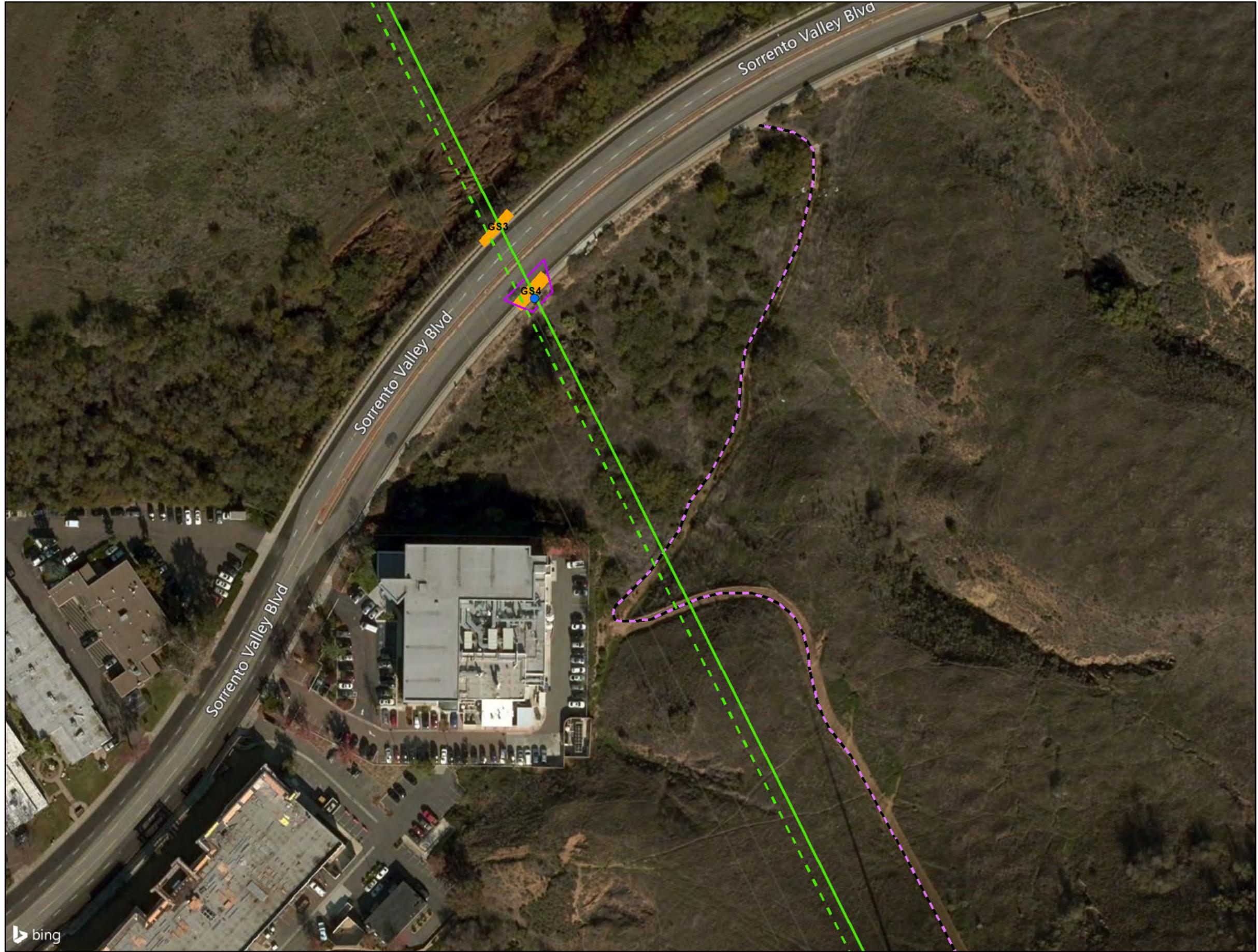
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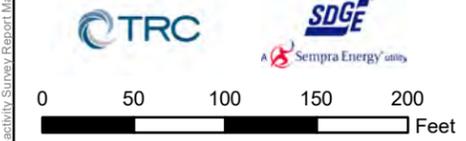
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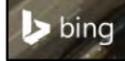
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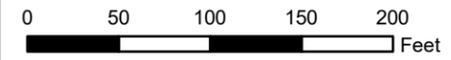
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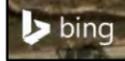
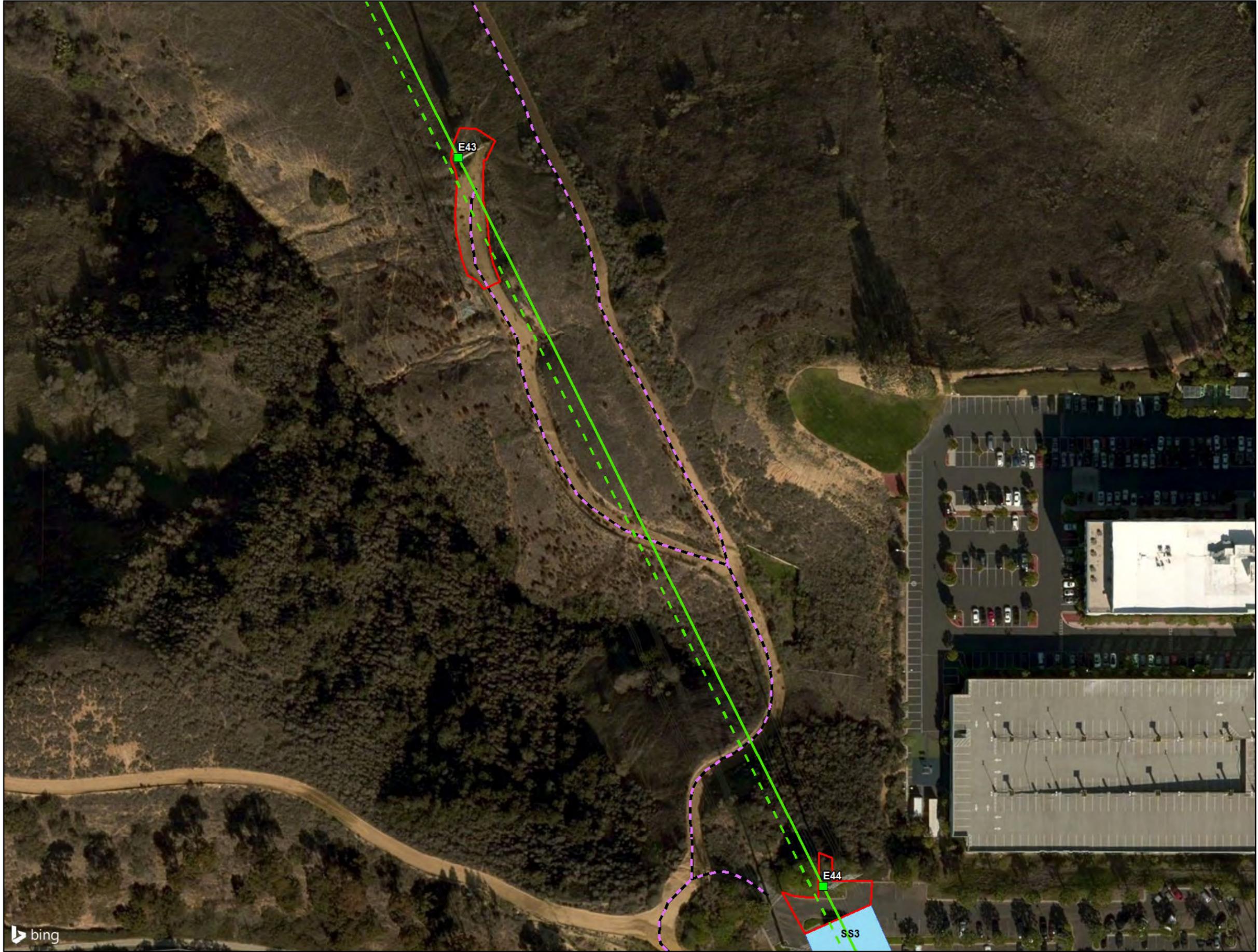
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230kV Transmission Line Project**

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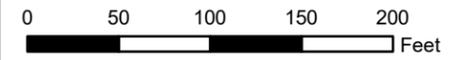
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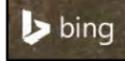
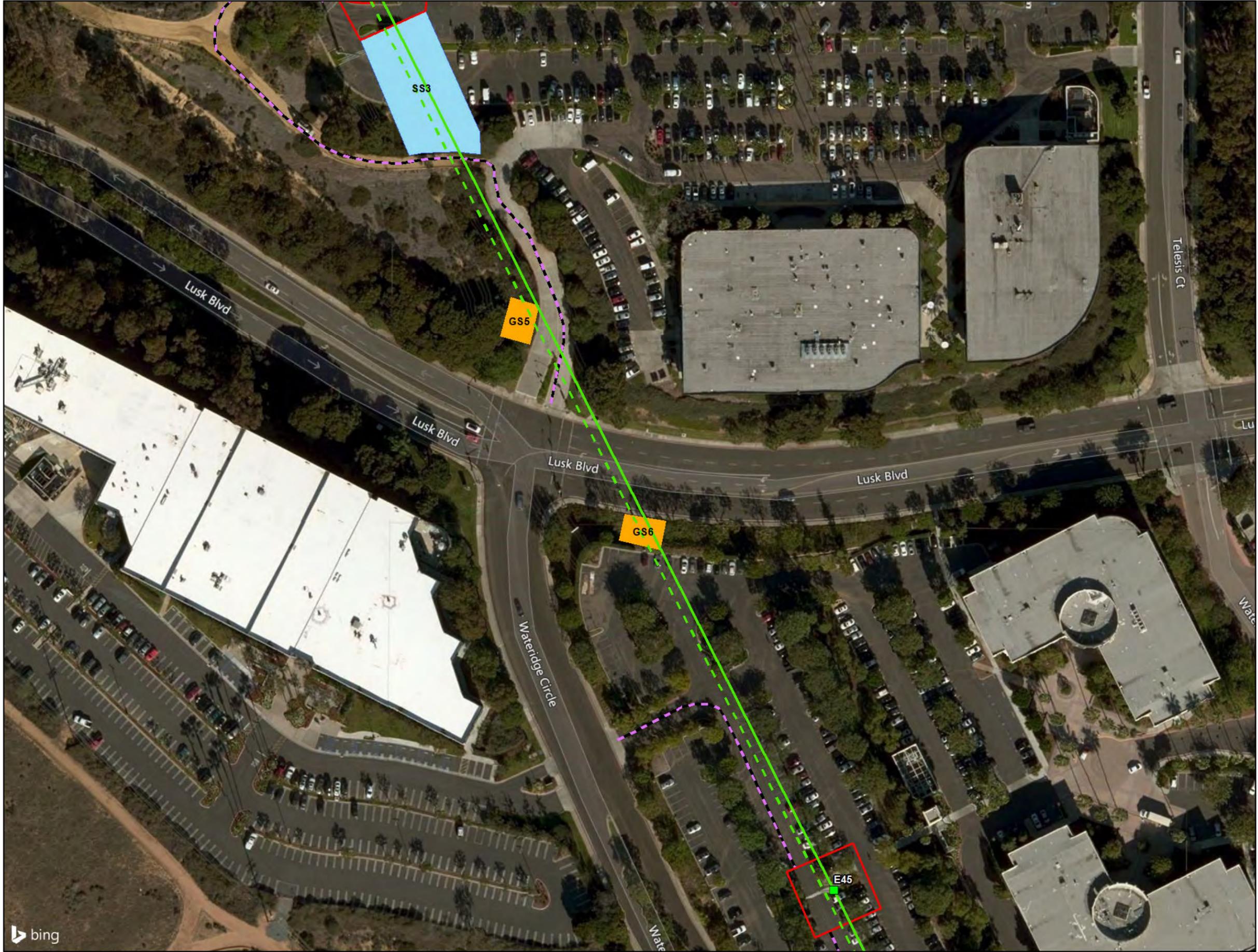
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**Sycamore to Peñasquitos
230kV Transmission Line Project**

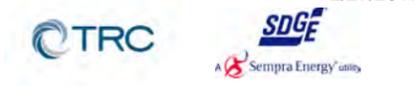
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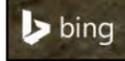
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- Proposed Structure
- Proposed New ADSS Intersect Structure
- Removed Pole
- AC Mitigation Location
- New 230kV Overhead
- - - Reconductor 230kV Overhead
- - - Reconductor 138kV Overhead
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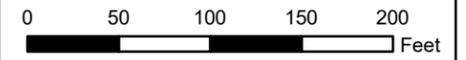
Pre-activity Survey Report Mapbook

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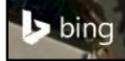
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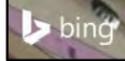
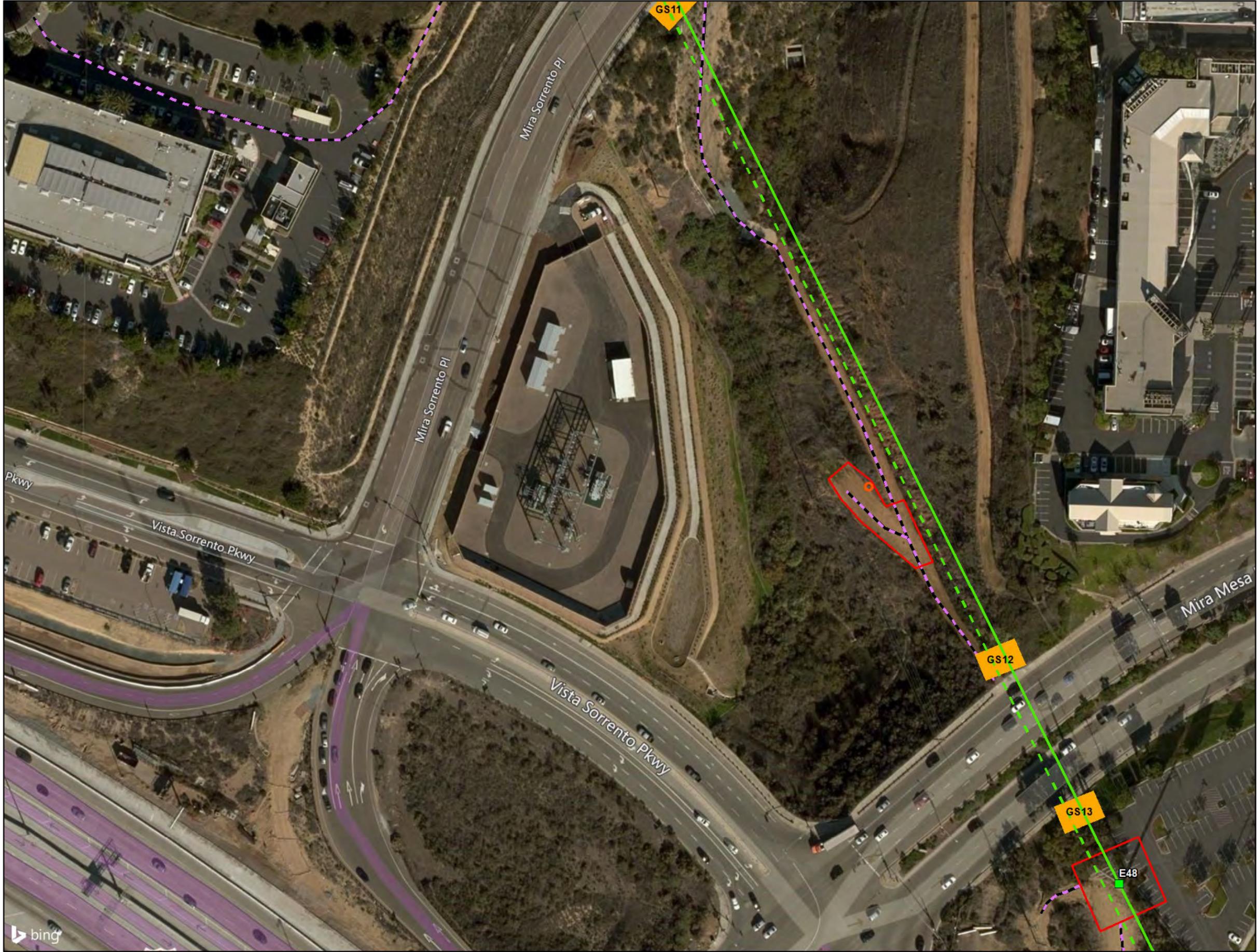
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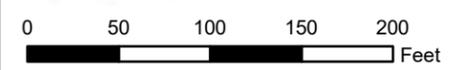
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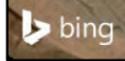
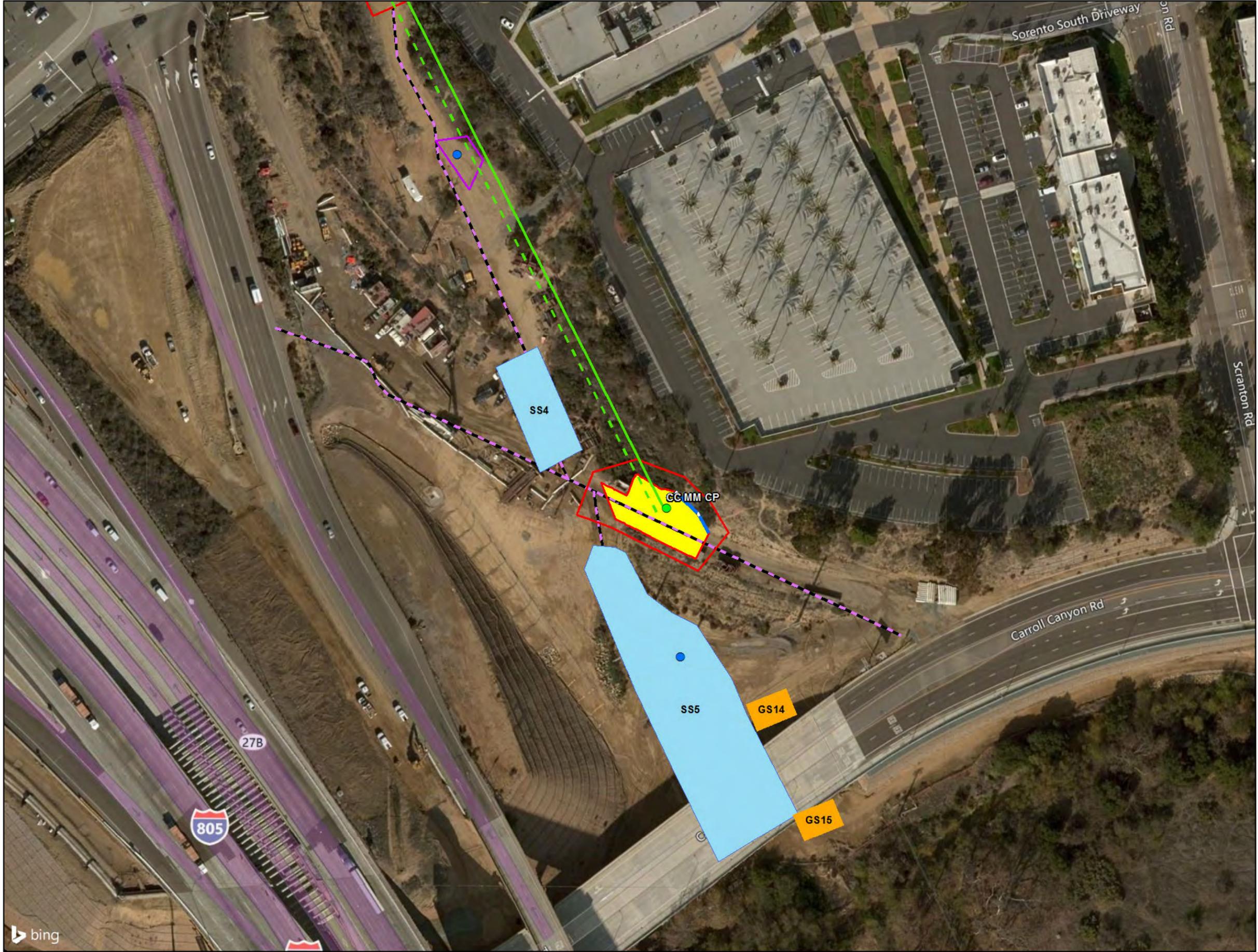
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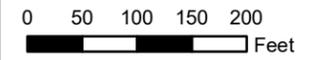
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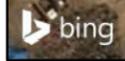
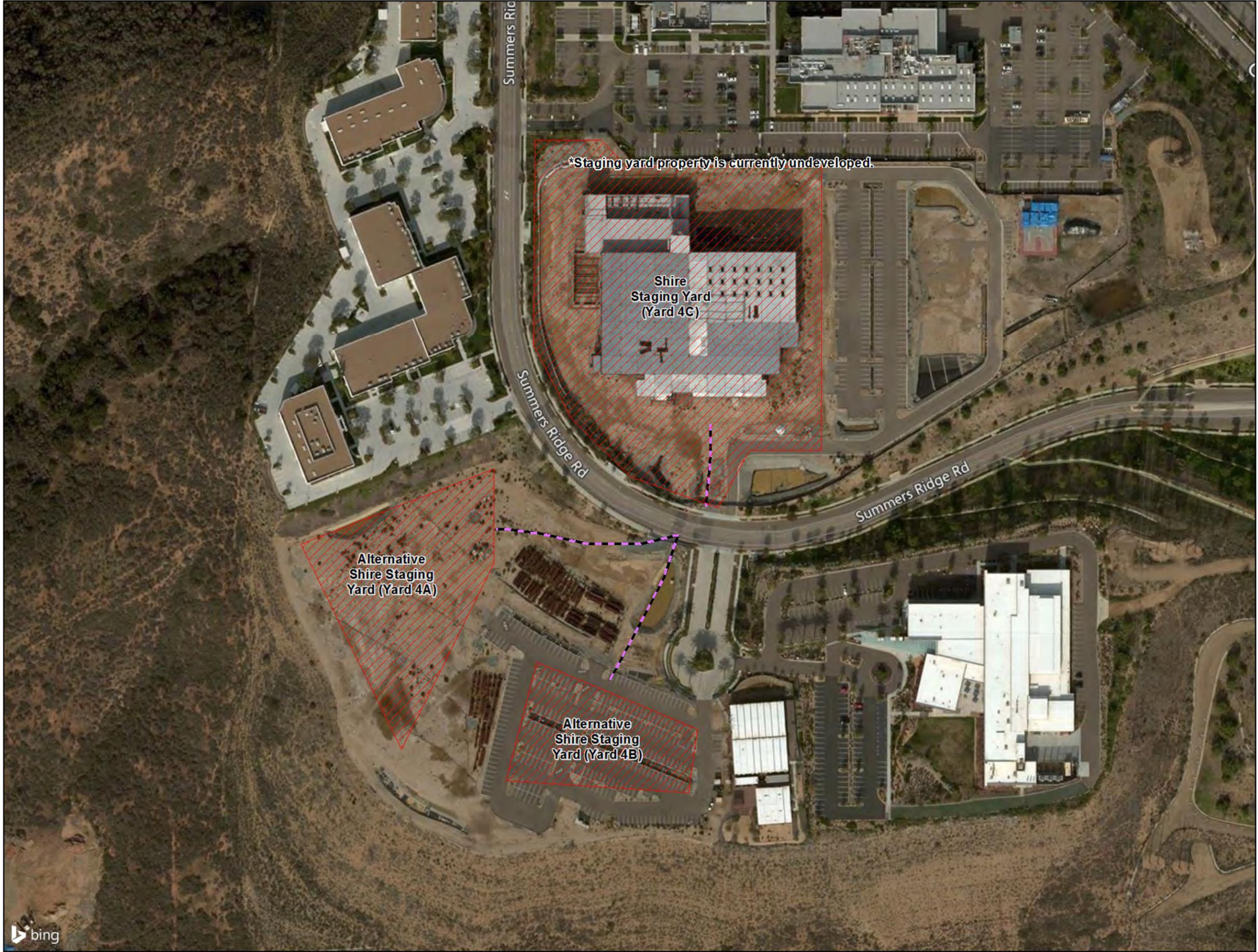
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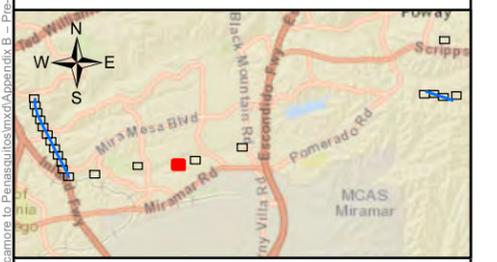
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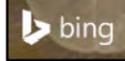
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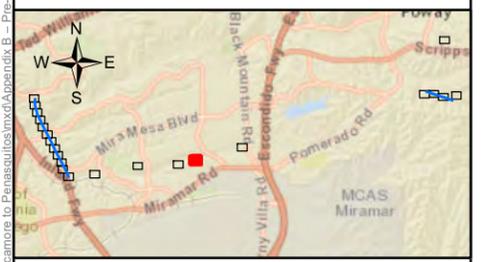
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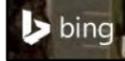
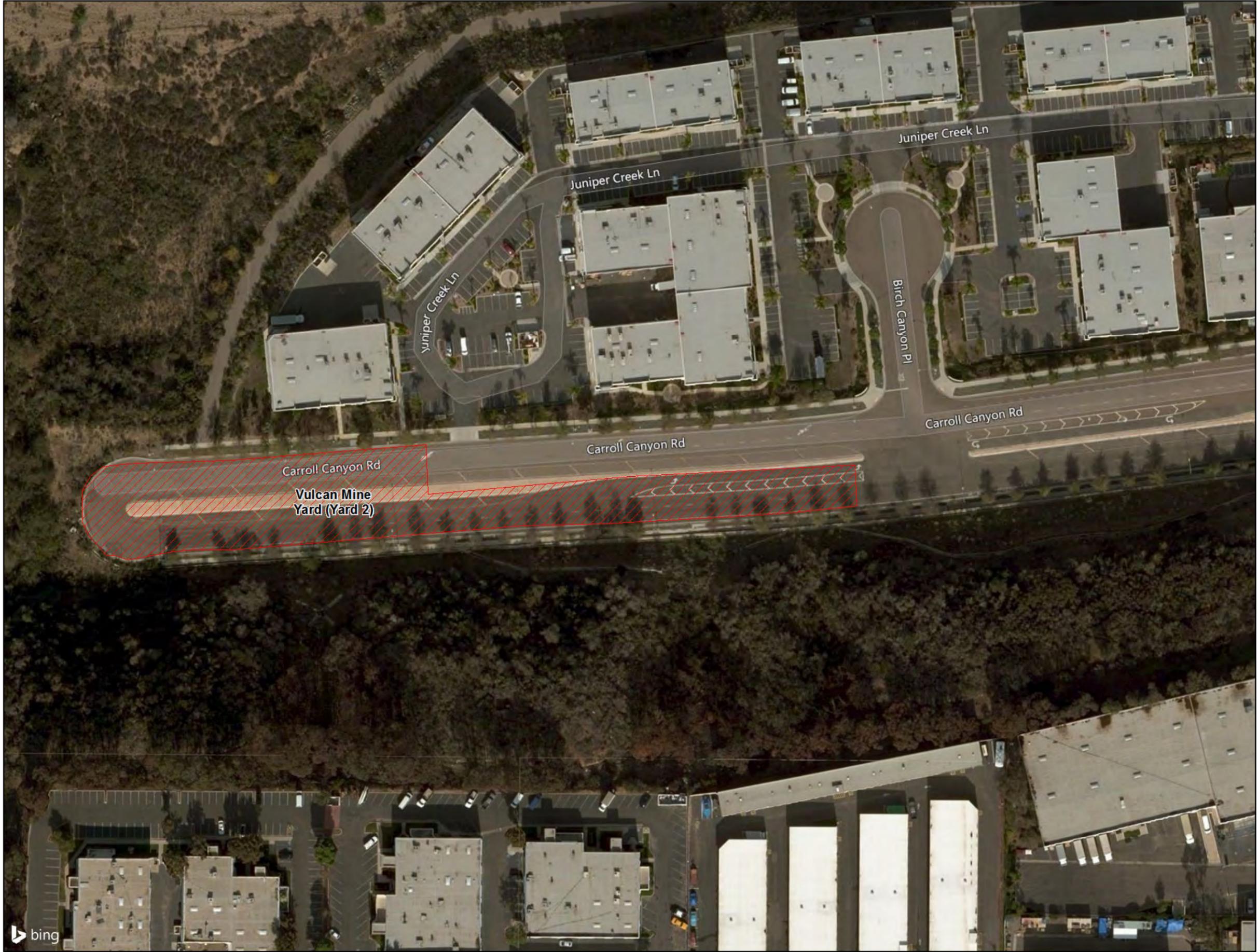
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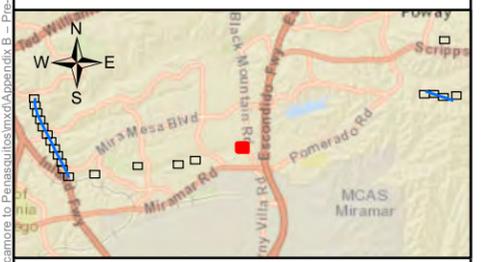
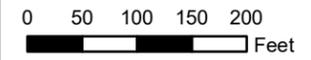
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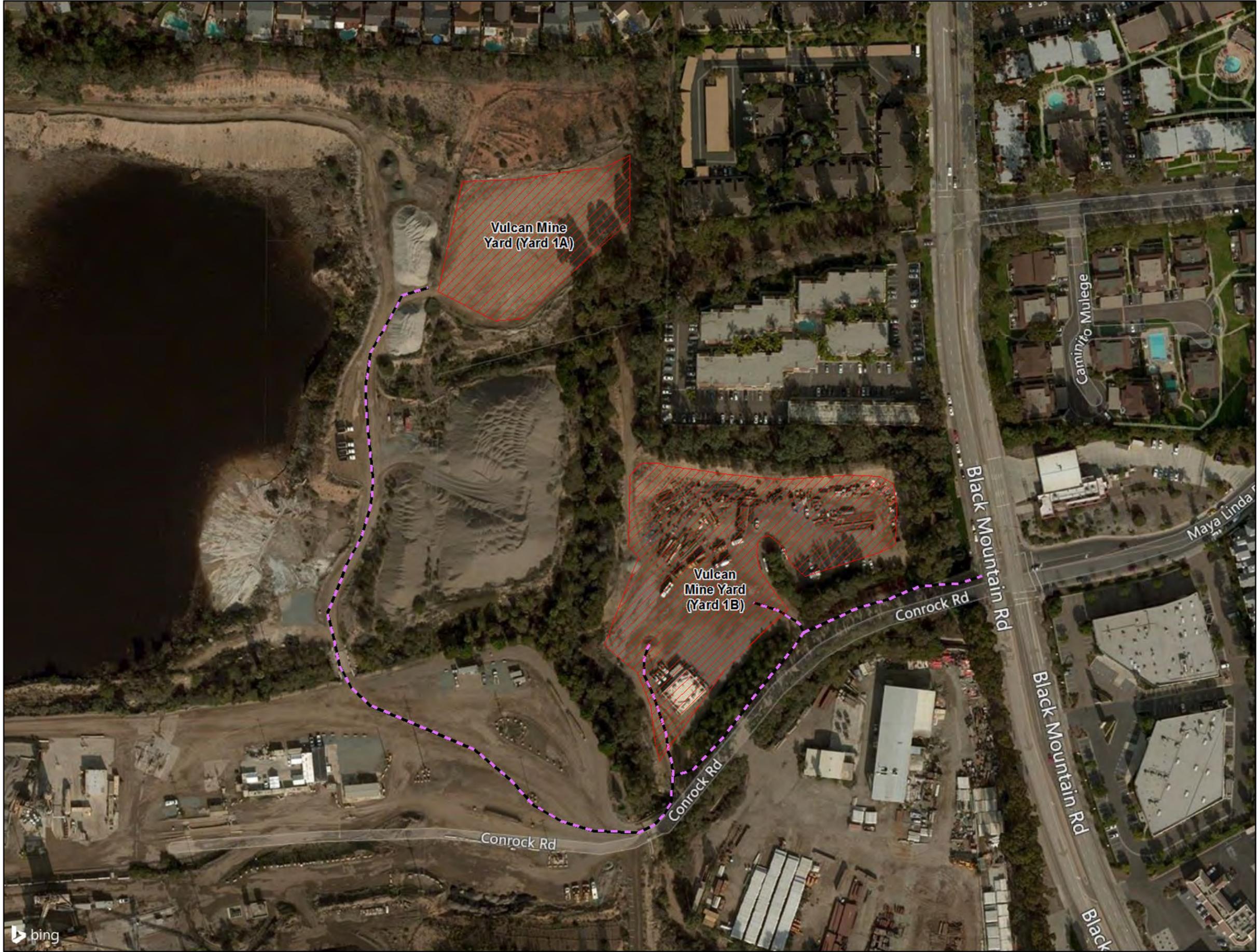
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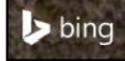
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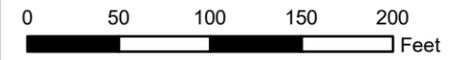
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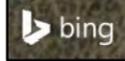
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This PSR does not cover Project components located on MCAS Miramar. Therefore, not all Project components that occur within sensitive habitat areas are depicted on this Mapbook. The Project components located on MCAS Miramar are covered by a separate PSR document (refer to Appendix A).

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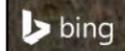
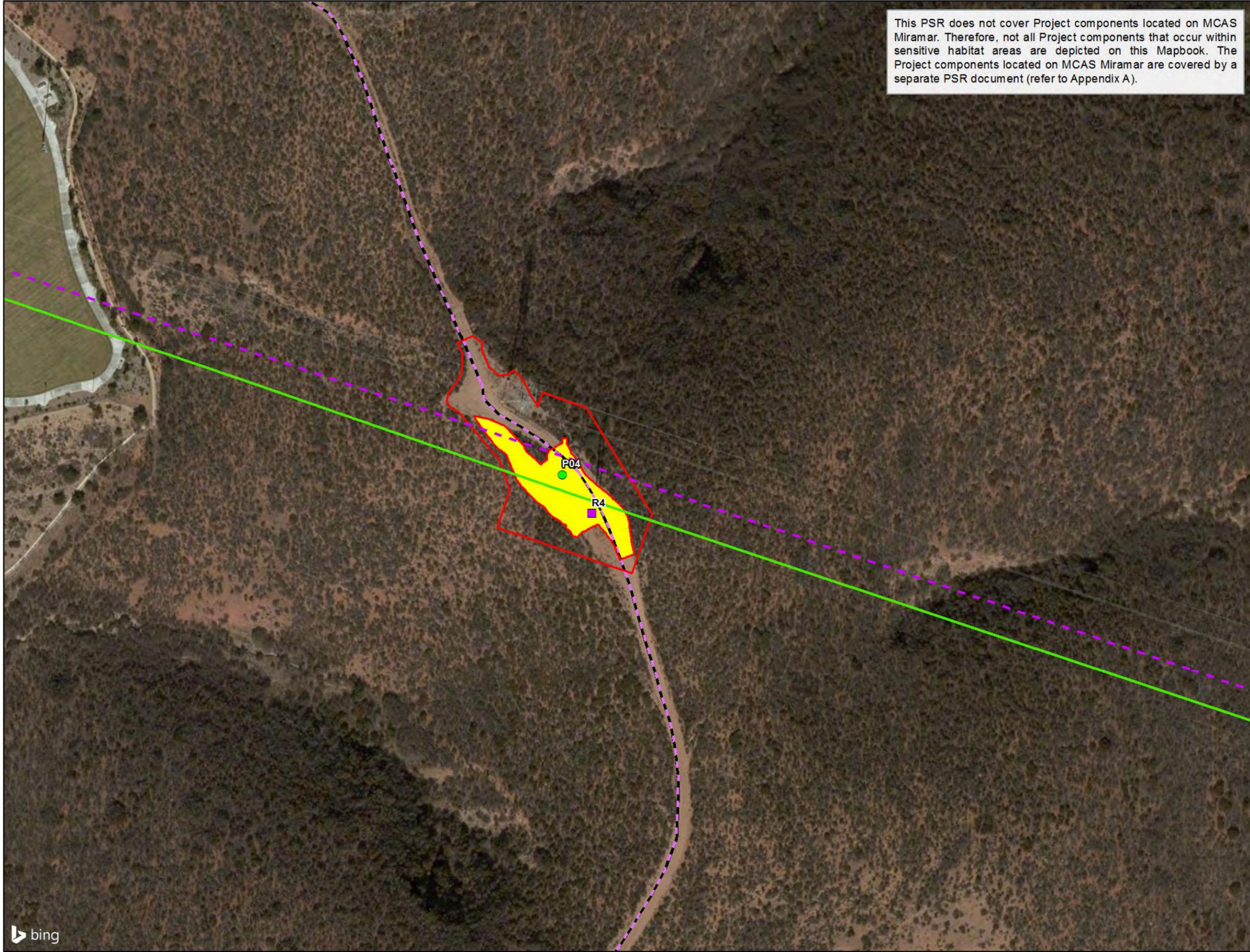
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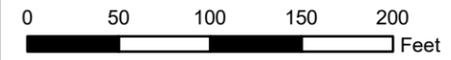
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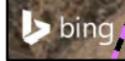
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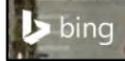
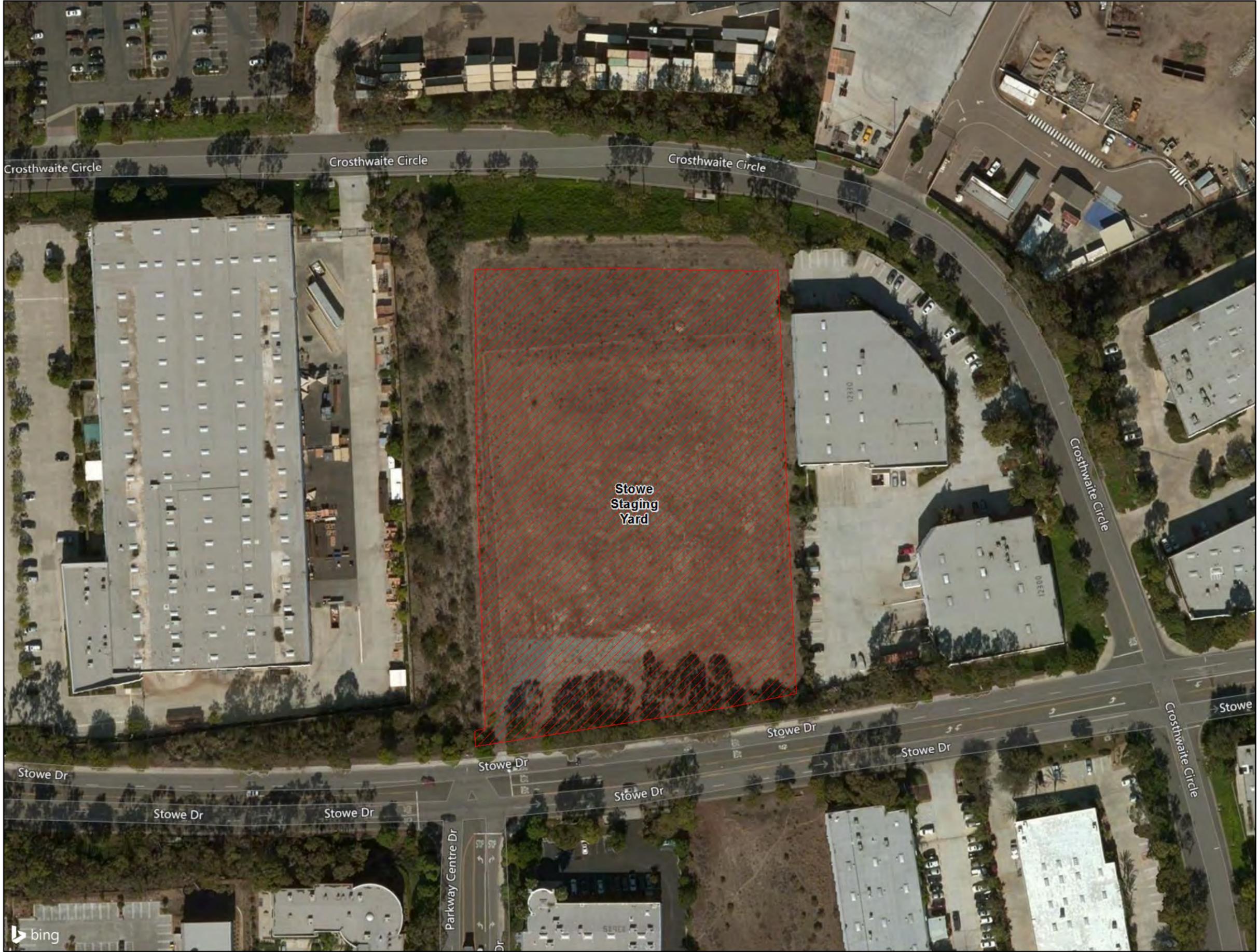
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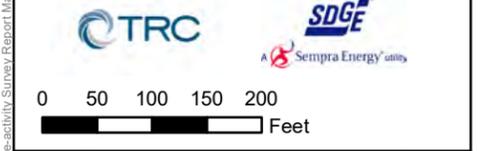




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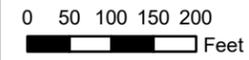
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230kV Transmission Line Project**

Appendix B

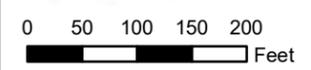
Pre-activity Survey Report Mapbook

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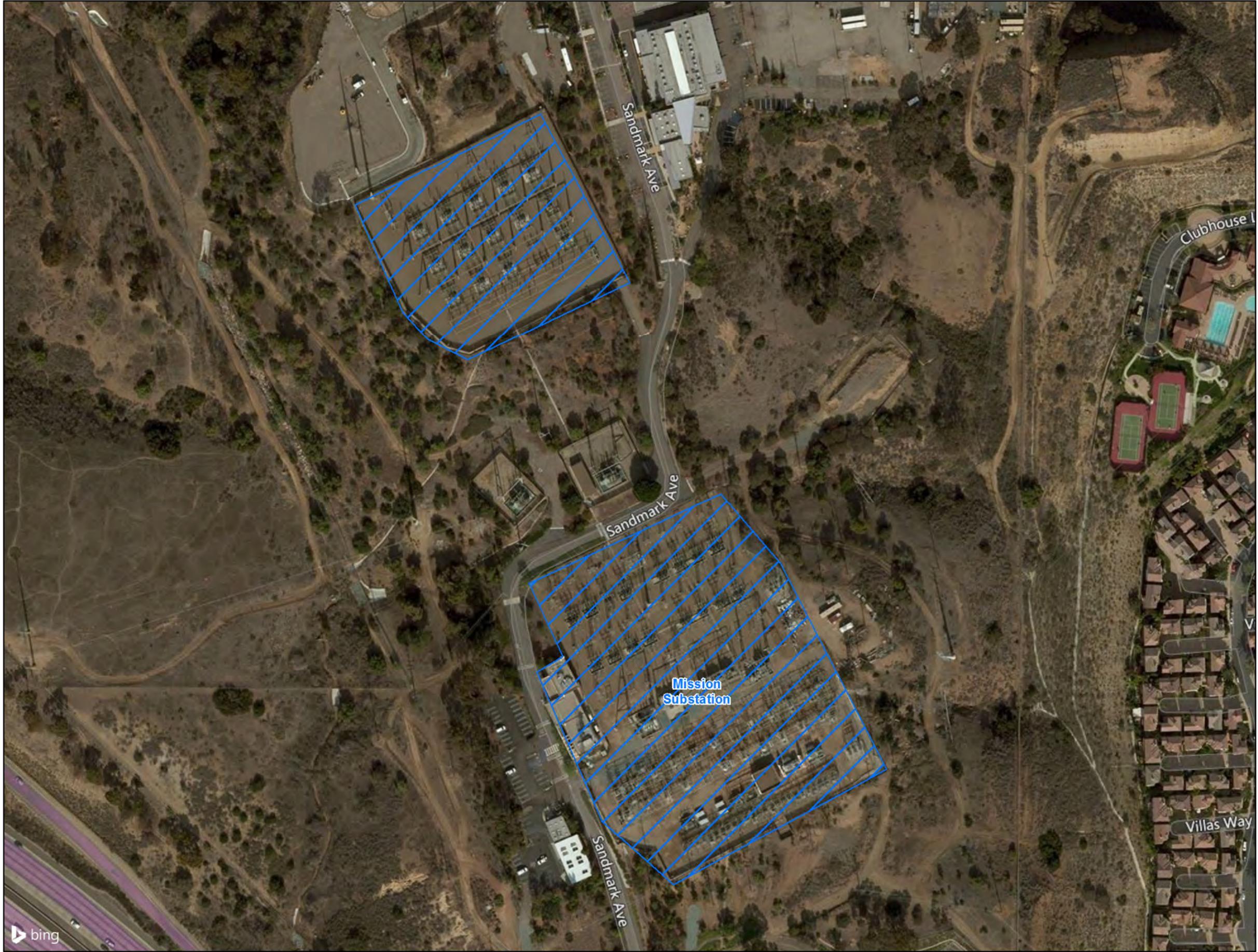
- Existing Structure
- Proposed Structure
- Proposed New ADSS Intersect Structure
- Removed Pole
- AC Mitigation Location
- New 230kV Overhead
- - Reconductor 230kV Overhead
- - Reconductor 138kV Overhead
- Access Road
- ▭ Retaining Wall
- ▭ Temporary Stringing Site
- ▭ Temporary Guard Structure
- ▭ Structure Installation/Removal
- ▭ Temporary Work Area (AC Mitigation)
- ▨ Staging Yards
- ▭ Permanent Impact
- ▭ Substation

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2/27/2017



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Appendix C: Site Photographs

Appendix C – SITE PHOTOGRAPHS



Photograph 1. Tower pad **CC MM CP** temporary and permanent impacts in **disturbed coastal sage scrub** and **bare ground** habitats.

Photo taken facing north.



Photograph 2. Tower pad **E39** in **coastal sage scrub**, **landscape/ornamental**, and **bare ground** habitat.

Photo taken facing west.



Photograph 3. Tower pad **E40** in **bare ground** and **coastal sage scrub** habitat.

Photo taken facing south.

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Photograph 4. Tower pad **E41** in **bare ground** habitat.

Photo taken facing west.



Photograph 5. Tower pad **E42** in **bare ground** habitat.

Photo taken facing northeast.



Photograph 6. Tower pad **E43** in **bare ground** habitat.

Photo taken facing north.

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Photograph 7. Tower pad **E44** in **coastal sage scrub** and **landscape/ornamental** habitat.
Photo taken facing northeast.



Photograph 8. Tower pad **E45** in **landscape/ornamental** habitat.
Photo taken facing south.



Photograph 9. Tower pad **E46** in **landscape/ornamental** habitat.
Photo taken facing west.

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Photograph 10. Tower pad **E47** in **bare ground** and **coastal sage scrub** habitat.

Photo taken facing south.



Photograph 11. Tower pad **E48** in **bare ground** and **coastal sage scrub** habitat.

Photo taken facing northeast.



Photograph 12. Tower pad **P04** permanent and temporary impacts in **chaparral** and **disturbed** habitat.

Photo taken facing northwest.

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Photograph 13. Tower pad **P05 CP** permanent and temporary impacts in **coastal sage scrub, bare ground, disturbed coastal sage scrub, chaparral, and landscape/ornamental** habitat.

Photo taken facing northeast.



Photograph 14. Tower pad **P06** permanent impacts in **bare ground and chaparral** habitat. Temporary impacts in **bare ground, chaparral, and coastal sage scrub** habitat.

Photo taken facing north.



Photograph 15. **Guard Structure (GS) 1** in **developed and landscape/ornamental** habitat.

Photo taken facing northeast.

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Photograph 16. **Guard Structure 2** in **landscape/ornamental** habitat.

Photo taken facing northeast.



Photograph 17. **Guard Structure 3** in **coastal sage scrub** habitat.

Photo taken facing northeast.



Photograph 18. **Guard Structure 4** in **disturbed** habitat.

Photo taken facing northeast.

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Photograph 19. **Guard Structure 5** in **landscape/ornamental** habitat.

Photo taken facing west.



Photograph 20. **Guard Structure 6** in **landscape/ornamental** habitat.

Photo taken facing north.



Photograph 21. **Guard Structure 7** in **landscape/ornamental** habitat.

Photo taken facing south.

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Photograph 22. **Guard Structure 8** in **landscape/ornamental** habitat.

Photo taken facing north.



Photograph 23. **Guard Structure 9** in **disturbed** and **landscape/ornamental** habitat.

Photo taken facing northeast.



Photograph 24. **Guard Structure 10** in **coastal sage scrub** and **landscape/ornamental** habitat.

Photo taken facing west.

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Photograph 25. **Guard Structure 11** in **coastal sage scrub** and **disturbed** habitat.

Photo taken facing west.



Photograph 26. **Guard Structure 12** in **coastal sage scrub, disturbed, and landscape/ornamental** habitat.

Photo taken facing east.



Photograph 27. **Guard Structure 13** in **landscape/ornamental** habitat.

Photo taken facing northwest.

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Photograph 28. **Guard Structure 14** in **disturbed** habitat.

Photo taken facing east.



Photograph 29. **Guard Structure 15** in **disturbed** habitat.

Photo taken facing east.



Photograph 30. **Guard Structure 16** in **landscape/ornamental** habitat.

Photo taken facing north.

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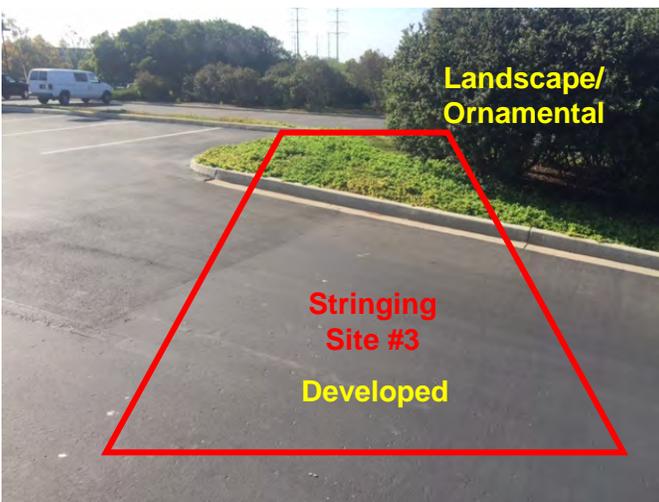
Photograph 31. **Guard Structure 17** in **landscape/ornamental** habitat.

Photo taken facing northeast.



Photograph 32. **Guard Structure 18** in **landscape/ornamental** habitat.

Photo taken facing northeast.



Photograph 33. Proposed location for **Stringing Site #3** in **landscape/ornamental** and **developed** habitat.

Photo taken facing south.

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Photograph 34. Proposed location for **Stringing Site #4** in **landscape/ornamental** and **bare ground** habitat.

Photo taken facing south.



Photograph 35. Proposed location for **Stringing Site #5** in **landscape/ornamental** and **bare ground** habitat.

Photo taken facing north.



Photograph 36. Proposed location for **Carmel Valley Staging Yard** in **bare ground** habitat.

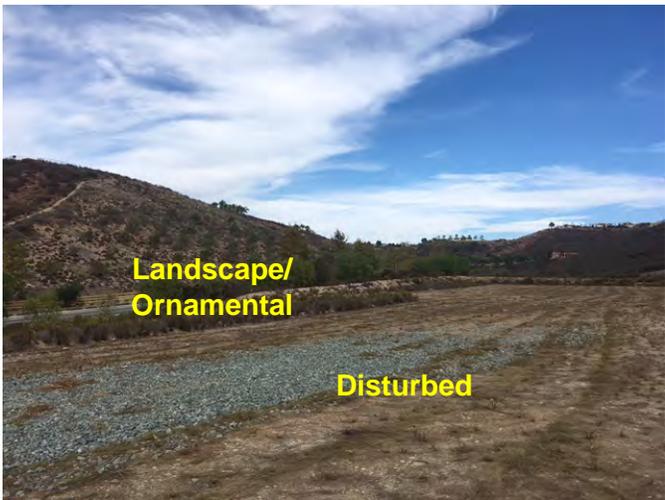
Photo taken facing southwest.

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Photograph 37. Proposed location for **Evergreen Nursery Staging Yard** in **developed** habitat.

Photo taken facing southwest.



Photograph 38. **Stonebridge Staging Yard** in **disturbed** and **landscape/ornamental** habitats.

Photo taken facing east.



Photograph 39. **Stowe Staging Yard** in **disturbed** habitat.

Photo taken facing north.

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Photograph 40. **Site 1A Staging Yard** in **bare ground** habitat.

Photo taken facing northwest.



Photograph 41. **Site 1B Staging Yard** in **bare ground** habitat.

Photo taken facing southwest.



Photograph 42. **Site 2 Staging Yard** in **developed** habitat.

Photo taken facing east.

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Photograph 43. **Site 3 Staging Yard** in **bare ground** habitat.

Photo taken facing northwest.



Photograph 44. **Site 4A Staging Yard** in **disturbed** habitat.

Photo taken facing northwest.



Photograph 45. **Site 4B Staging Yard** in **developed** habitat.

Photo taken facing south.

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Photograph 46. **Site 4C Staging Yard** in **bare ground** habitat.

Photo taken facing north.



Photograph 47. **Site 5 Staging Yard** in **disturbed** habitat.

Photo taken facing east.



Photograph 48. **Mission Substation** in **developed** habitat.

Photo taken facing northwest.

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Photograph 49.
Peñasquitos Substation
in **developed** habitat.
Stringing Sites #1 and #2
area also contained within
this substation, in
developed habitat.

Photo taken facing
northwest.