

Burrowing Owl Monitoring and Mitigation Plan

Sycamore-Peñasquitos 230 Kilovolt Transmission Line Project

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LIST OF ATTACHMENTS

- Attachment 1: Operational Protocols from SDG&E's Subregional Natural Community Conservation Plan
- Attachment 2: Project Site and Vicinity Map
- Attachment 3: BUOW Suitable Habitat and Survey Areas Map

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1.0 INTRODUCTION

The Burrowing Owl Monitoring and Mitigation Plan (Plan) provides the measures to be implemented by San Diego Gas & Electric Company (SDG&E) and its contractors to protect burrowing owls (*Athene cunicularia*; BUOW) during construction of the Sycamore to Peñasquitos 230 kilovolt (kV) Transmission Line Project (Project). This Plan was prepared in accordance with Mitigation Measure (MM) Biology-8: Burrowing Owl Monitoring and Mitigation Plan, as described in the Project's Final Environmental Impact Report (CPUC 2016) Mitigation Monitoring, Compliance, and Reporting Program (MMCRP). The Plan is consistent with the California Department of Fish and Wildlife (CDFW) *Staff Report on Burrowing Owl Mitigation* (CDFW Staff Report) (CDFW 2012) and other applicable measures in the MMCRP.

The Project is covered by the SDG&E Subregional Natural Community Conservation Plan (NCCP) (SDG&E 1995a). 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 will avoid and minimize impacts to resident, nesting, and/or transient BUOW through implementation of Operational Protocols included in the SDG&E Subregional NCCP (Attachment 1). The Project will mitigate impacts to suitable BUOW habitat through implementation of Mitigation and Habitat Enhancement Measures included in the SDG&E Subregional NCCP. This Plan provides additional guidance and procedures to implement if BUOW occupancy is confirmed during Project activities.

PROJECT DESCRIPTION

The Project proposes 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:

- Segment A - Construction of approximately 0.74 mile of new 230 kV transmission line and relocated 138 kV power line on new tubular steel poles (monopole structures) and steel H-frame structures all within existing SDG&E right-of-way (ROW) located between the existing Sycamore Canyon Substation and a trail originating at Stonebridge Parkway. Construction of one new cable pole at the transition point from overhead to underground
- Segment B - Construction of approximately 11.45 miles of 230 kV underground transmission line in existing roads and bridges
- Segment C – 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 within existing SDG&E ROW from Scranton Road to Peñasquitos Substation and construction of one new cable pole at the transition point from underground to overhead

- Minor modifications of the existing Sycamore Canyon and Peñasquitos substations to allow for connection of the new 230 kV transmission line

PROJECT LOCATION

The Project alignment extends from the Peñasquitos Substation in the west to the Sycamore Canyon Substation on Marine Corps Air Station (MCAS) Miramar in the east, in San Diego County, California (Attachment 2). 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 before terminating at the Sycamore Substation. The Project is located in the United States Geological Survey (USGS) Del Mar and Poway 7.5-minute quadrangles.

2.0 OBJECTIVES

This Plan fulfills the requirements of MM Biology-8 and provides guidance on avoidance, minimization, and mitigation of potential impacts to BUOW. The management practices and techniques presented in this Plan are intended to accomplish the following objectives:

- When feasible, design and implement Project phases seasonally and spatially to avoid negative impacts and potential take of BUOW.
- Facilitate take avoidance surveys and site surveillance as necessary to detect and track the potential presence of BUOW in the Project area.
- Apply mitigation measures to offset any impacts to BUOW and/or BUOW habitat.
- Minimize disturbance to BUOW in the Project area through implementation of appropriate buffers, visual screens, or other measures.
- Implement BUOW burrow exclusion and/or BUOW passive relocation procedures in situations when avoidance and/or minimization is not feasible.
- Provide results of surveys, monitoring, and actions taken to avoid and minimize impacts to BUOW through timely and thorough reporting procedures.

3.0 APPLICABLE MEASURES

The Project's MMCRP requires implementation of protective measures to avoid and mitigate Project-related impacts to burrowing owls. Descriptions of the applicable protection measures are provided in the following subsections.

MITIGATION MEASURE 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 Mitigation Monitoring, Compliance, and Reporting Program 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.

MITIGATION MEASURE 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:*

- 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.*
- 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.*

- *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.*
- *The surveys shall be conducted by a CPUC, USFWS-, and CDFW-approved qualified biologist.*
- *Survey results shall be provided to CPUC, USFWS, and CDFW prior to initiating construction activities.*
- *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:

- *Species*
- *Location*
- *Pre-existing conditions present on site*
- *Description of the work to be conducted within the reduced buffer*
- *Size and expected duration of proposed buffer reduction*
- *Reason for the buffer reduction*
- *Name and contact information of the CPUC-, USFWS-, and CDFW-approved qualified biologist(s) who requested the buffer reduction and will conduct subsequent monitoring*
- *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...

...Avian Protection on Power Lines. *The project shall include collision-reducing techniques for transmission lines (based on Suggested Practices for Avian Protection on 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.

MITIGATION MEASURE 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.

4.0 PLAN IMPLEMENTATION

WORKER AWARENESS

A Safety and Environmental Awareness Program (SEAP) will be implemented for Project personnel associated with construction activities in accordance with Applicant Proposed Measure (APM) Haz-1 and MM Biology-1b. The SEAP training materials describe special-status plant and wildlife species (including BUOW) 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. Training materials will be reviewed and approved by CPUC prior to the start of construction.

SURVEYS

One transient BUOW was observed foraging at the Carmel Valley Road Staging Yard during focused wintering season surveys on December 10, 2015 (Attachment 3; Chambers Group 2016a¹). No BUOW were detected during subsequent breeding season surveys conducted for the Project (Chambers Group 2016a and 2016b) or during the pre-activity survey for the Project (Chambers Group 2016c). BUOW suitable habitat and the BUOW focused survey area for the Project are shown in Attachment 3.

A take avoidance (preconstruction) survey of BUOW suitable habitat will be conducted within 5 days prior to the start of ground-disturbing construction or vegetation trimming or removal activities. Methodology for the take avoidance survey will follow guidelines contained in Appendix D of the 2012 CDFW Staff Report. If BUOW is present during Project activities, avoidance and minimization, passive relocation and exclusion, reporting, and mitigation will be implemented, as appropriate.

AVOIDANCE AND MINIMIZATION

Avoidance and minimization measures that will be implemented in order to protect BUOW during construction activities associated with the Project are described below.

- In areas where BUOW are not found, construction may proceed without further mitigation.
- If BUOW are present, Project activities will take place outside the BUOW breeding season (February 1 to August 31), to the greatest extent feasible.
- If Project activities occur during the breeding season and nesting BUOW are present, a buffer will be flagged and/or fenced for avoidance in all Project areas within the vicinity of the burrow according to the buffer distances recommended by the CDFW Staff Report.

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.

With CPUC approval, these buffer distances may be reduced by a CDFW-, USFWS-, and CPUC-approved qualified biologist in accordance with MM Biology-7 buffer reduction and documentation requirements. Nesting bird avoidance, minimization, and monitoring will be implemented in accordance with MM Biology-7.

- In the event that an active BUOW burrow is detected during the non-breeding season (September 1 to January 31), a buffer will be flagged and/or fenced for avoidance in all Project areas within the vicinity of the burrow according to the buffer distances recommended by the CDFW Staff Report. With CPUC approval, these buffer distances may be reduced by a CDFW-, USFWS- and CPUC-approved qualified biologist in accordance with MM Biology-7 buffer reduction and documentation requirements.
- Monitoring will be conducted to ensure the appropriate buffers, as determined by the CDFW-, USFWS- and CPUC-approved qualified biologist, are adhered to by construction personnel and that they are adequate to provide the necessary protection. When construction activities commence adjacent to the buffer area, qualified biologist will be present on-site during all construction activities to monitor the behavior of BUOW for at least 3 days. The qualified biologist will have the authority to increase the setback distance and/or halt construction activities if there are signs of disturbance, such as changes in behavior as a result of construction or other indications of distress by BUOW. If the type of construction activity adjacent to the buffer increases in intensity, an additional 3 day monitoring period will be implemented to ensure the buffer is adequate under the changed circumstances. Conversely, it may be appropriate to reevaluate and potentially reduce the buffer if construction disturbance levels diminish substantially. If a buffer reduction is implemented, monitoring will be conducted 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).

PASSIVE RELOCATION AND EXCLUSION

Passive relocation is not anticipated since no BUOW were observed during focused surveys conducted in 2015 and 2016. If BUOW occupancy on site is confirmed and relocation is necessary, CDFW will be notified and the following BUOW exclusion procedures will be implemented, per recommendations set forth by the CDFW Staff Report. The procedures may be modified, based on site-specific conditions, through consultation with CDFW:

- In the event that an active BUOW burrow is observed within the Project ROW and/or could be impacted by Project activities, passive relocation and possibly burrow excavation may be initiated during the non-breeding season (September 1 to January 31) with approval by CDFW.
- The CDFW-, USFWS- and CPUC-approved qualified biologist will verify that there is an acceptable area within a reasonable distance that provides the necessary subsidies to

support the evicted BUOW with the goal to minimize the stress of relocation. The qualified biologist will:

- Determine if the BUOW is associated with a burrow on-site.
 - Assess the presence of primary and satellite burrows that may be associated with the BUOW detection.
 - Assess the area for other structures that may support BUOW (e.g., pipes, culverts).
 - Identify burrows and/or other structures in the impact footprint (i.e., within SDG&E property or ROW) that may need to be collapsed, removed, or blocked.
 - Determine if there are sufficient burrows outside the impact footprint (i.e., within a 500- foot buffer) that would be acceptable for the BUOW to take refuge in during the relocation process.
 - Verify that potential offsite refuge burrows are not currently occupied.
 - Assess the need for creation of artificial burrows, if necessary (i.e., there are insufficient burrows outside the impact footprint). Open space located adjacent to the Project provides suitable habitat for BUOW. It is expected that any owls evicted from currently occupied burrows will naturally disperse to nearby suitable habitat outside the Project construction area. If needed, artificial burrows may be installed within a nearby suitable location (e.g., unimpacted portions of the SDG&E ROW) following *Artificial burrows* guidelines in the Mitigation Methods section of the CDFW Staff Report.
- Exclusion of BUOW from an occupied burrow or a potentially occupied burrow (or complex of burrows) will occur through the installation of one-way doors to temporarily exclude the BUOW.
 - One-way doors will be installed on all confirmed and potential access points to the burrows for 48 hours prior to initiating burrow excavation. One-way doors will be installed in such a way that will prevent BUOW and other wildlife species from moving or circumventing the door in order to leave or re-enter the burrows. Doors will be placed to fully seal the burrow access points and will be secured in place using native soils, wire pins, or similar methods. If small gaps occur around the edges of the one-way doors, burlap cloth or similar material may be used to prevent small wildlife from accessing the burrow.
 - During the initial installation of one-way doors, an Environmental Monitor will record the presence and/or absence of BUOW sign at all burrow locations. All sign (tracks, molted feathers, pellets, prey remains, whitewash, nest material/decorations, and other items indicative of BUOW occupancy) will be subsequently cleared from the site in order to document the potential recurrence of BUOW presence at the burrow.

- One-way doors will not be necessary for shallow burrows where the Environmental Monitor can clearly see into the entirety of the burrows.
- Following installation of one-way doors at burrow access points, an Environmental Monitor will conduct daily monitoring of all burrows proposed for excavation. Monitoring of the locations of burrows proposed for excavation will occur with the aid of a spotting scope and/or binoculars (passive monitoring) from a sufficient distance in order not to deter BUOW or wildlife from leaving the burrow(s).
- During passive monitoring, the Environmental Monitor will record times of monitoring visits, equipment used, weather conditions, any observations of BUOW observed (including pairing status, behavior, and interaction with burrows on the Project), and general wildlife observations. At least one monitoring visit daily will be conducted during the early morning when owls are expected to be most active, but the monitoring schedule may be adjusted based on weather conditions or site-specific conditions.
- Following passive monitoring, the Environmental Monitor will approach the burrow and document the presence of any new sign since the initial exclusion visit and ensure that all one-way doors are properly secured and installed.
- Following the 48-hour monitoring period for burrow exclusion, the Environmental Monitor will excavate each burrow or burrow complex located within the Project work areas and for burrows that may lead under the ROW.
- All burrows located outside the Project work areas that will not be impacted by the Project will be left intact for future BUOW use. One-way doors will be left on the burrows that will not be impacted by the Project until construction is complete in those areas. These burrows will be monitored and documented for the presence of any new sign and to ensure that all one-way doors are properly secured and installed.
- Excavation will occur with the use of hand tools such as trowels or hand shovels. A “VideoStik” video-based flexible inspection scope may be used to visually inspect all burrows prior to initiating excavation. In some cases, when burrows have multiple tunnels and/or chambers, use of a scope may not be able to completely verify the absence of all wildlife from the burrow/complex. If full visual confirmation of the burrow occupancy status cannot be achieved by means of the scope, an Environmental Monitor will install corrugated piping or similar material within sections of the burrow prior to beginning excavation. Piping will be used to stabilize the burrow, prevent burrow collapse, and allow wildlife that may be present to escape the burrow during excavation if necessary. As excavation occurs, the burrow will be regularly inspected with the scope to verify that no owls or other wildlife are present, and piping will continually be re-installed for the portions of the burrow currently under excavation.

- Once excavation of an entire burrow/complex is complete, the Environmental Monitor will verify that no owls or wildlife reside within the burrow, the burrow will be photographed to document completed excavation, and the site will be backfilled with native soils to prevent future occupancy. Once excavation and closure of the burrow is complete, the site will be photographed to document completed exclusion and effectiveness.
- If, during excavation of the burrow, BUOW are observed to be present within the burrow, excavation will be halted immediately. One-way doors will be immediately re-installed; and, if necessary, piping large enough to allow BUOW to exit the burrow/complex will remain in place to prevent collapse of the occupied burrow. Monitoring of the site will resume until the burrow is determined to be unoccupied. If eggs are observed, all one-way doors will be immediately removed from the burrows, excavation activities will cease, and the CDFW will be notified.
- Following completion of all burrow excavations within the Project site, site surveillance will be conducted in order to detect BUOW if they return. The site will be monitored for BUOW until initiation of construction to ensure that BUOW have not returned to the burrow or burrow area. Ground-disturbing construction activities will take place within one week of the completion of burrow excavation.
- An Environmental Monitor will be present to monitor the Project ground disturbance in the areas of BUOW burrow excavations in order to verify that the site has not been recolonized by owls and to avoid take.

REPORTING

Plan reporting will be conducted in accordance with the MMCRP and MM Biology-7:

- Results of the take avoidance survey will be incorporated into the Weekly Compliance Summary Reports described in the MMCRP. Results of BUOW monitoring and mitigation efforts, including results of the take avoidance survey, avoidance, minimization, monitoring, and mitigation efforts will be summarized in annual reports submitted by SDG&E in accordance with the MMCRP.
- Following completion of the take avoidance survey, a letter report will be prepared and submitted to CDFW that includes the following items, in accordance with CDFW guidelines for survey reports:
 - Date, start, and end time of surveys and a description of weather conditions;
 - Name(s) of surveyor(s) and qualifications;
 - A discussion of how the timing of the survey affected the comprehensiveness and detection probability;
 - A description of survey methods used;

- A description and justification of the area surveyed relative to the Project area;
 - Number and age class of owls detected, number of occupied burrows, and description of WBO sign detected at burrows;
 - A description of WBO behavior during the surveys;
 - A detailed map (1:24,000 or closer) showing locations of all WBO observed, suitable burrows, and occupied burrows;
 - Signed field forms; and
 - Recent color photographs of the Project site.
- If BUOW are found occupying the Project area, avoidance and minimization measures will be implemented as described in Section 4.0, and the Environmental Monitor will document observations related to compliance with these measures in accordance with MMCRP compliance reporting requirements.
 - If nesting BUOW is identified in the Project area, burrow locations and exclusion buffers will be provided to CPUC and CDFW in accordance with the reporting requirements of MM Biology-7.
 - In accordance with MM Biology-7, a monthly written report will be submitted to CPUC, USFWS, and CDFW for any construction within a reduced BUOW nesting buffer. Monthly reports will include GIS data of nest locations and exclusion buffers, as well as any other guidance for nest avoidance. Monthly reports will also include information on nest buffers, work conducted within the work site, duration of work activities and related buffer reduction, and information on nest success (eggs, young, and adults).
 - A final report shall be submitted to CPUC, USFWS, and CDFW at the end of each nesting season summarizing all avian-related monitoring results and outcomes for the duration of Project construction.

If BUOW exclusion and passive relocation is conducted, a report will be submitted to CDFW and CPUC with the following details, per the CDFW Staff Report:

- A description and representative photographs of BUOW sign observed prior to exclusion and burrow excavation
- A full account of one-way doors installed, locations, methods, and photographs
- Passive and active monitoring methods and observations
- A description of equipment and methods used in burrow excavation (hand tools, scope, piping, etc.) and any general wildlife relocated from the burrow

- Photographic documentation of completed burrow excavation and completion of backfill of burrows showing effectiveness
- Post-excavation monitoring for potential recolonization of BUOW within the Project ROW and buffer
- Project maps showing BUOW observations and burrows excavated
- Dates that each avoidance and minimization measure was implemented.
- Results of monitoring conducted to demonstrate effectiveness of the measures.
- Dates and description of the initial construction activities.

MITIGATION

SDG&E will mitigate for permanent and temporary impacts to nesting BUOW, occupied BUOW burrows, and/or BUOW habitat in accordance with the *SDG&E Subregional NCCP* and the MMCPRP. Implementation of MMCPRP MM Biology-6: Compensatory Mitigation for Impacts to Habitat will ensure areas of temporary habitat impact are restored to preconstruction conditions and that permanent impacts are mitigated through off-site land preservation in comparable habitats at an approved mitigation ratio. Implementation of MMCPRP MM Biology-7 and MM Biology-8 will avoid occupied burrows and surrounding foraging areas to the extent feasible, establish nest buffers, and avoid nest abandonment as a result of construction activities.

As required and agreed upon by SDG&E and CDFW in the NCCP Implementing Agreement (SDG&E 1995b), SDG&E will mitigate permanent impacts by acquiring and permanently protecting sensitive vegetation communities and habitat impacted by the Project through SDG&E's NCCP Section 7.2 Habitat Enhancement and Measures and Section 7.4 Mitigation Credits. The NCCP's Implementing Agreement confirms that the mitigation, compensation, and enhancement obligations contained in the SDG&E NCCP meet all relevant standards and requirements for Project impacts. The SDG&E NCCP will satisfy BUOW protective, preservation, mitigation or conservation measures without any additional mitigation requirements from state or federal agencies.

In accordance with CDFW Staff Report best practices for mitigating temporary impacts to habitat, all previously undisturbed temporary work areas not subject to long-term use or ongoing vegetation maintenance will be enhanced, either through vegetation restoration, habitat enhancement, or a combination of the two, as described in SDG&E NCCP 7.2 Habitat Enhancement Measures. Implementation of Section 7.2 Habitat Enhancement Measures increases the value of biological resources in an impacted area, thereby improving the value of the habitat for NCCP covered species such as BUOW.

In accordance with the CDFW Staff Report best practices for mitigating permanent impacts to habitat, SDG&E's NCCP mitigation process provides permanent conservation of similar vegetation communities (e.g., grassland and scrublands) that provide for BUOW nesting, foraging, wintering, and dispersal comparable to or better than that of the impact area.

5.0 REFERENCES

Avian Power Line Interaction Committee (APLIC)

- 2012 *Reducing Avian Collisions with Power Lines: The State of the Art in 2012*. Edison Electric Institute and APLIC. Washington, D.C

Busby Biological Services, Inc.

- 2015 Burrowing Owl Survey Summary Report for the Proposed San Diego Gas & Electric Company Sycamore to Peñasquitos 230 Kilovolt Transmission Line Project.

California Department of Fish and Wildlife (CDFW)

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

California Public Utilities Commission (CPUC)

- 2016 Sycamore-Peñasquitos 230-kV Transmission Line 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 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 Project, San Diego County, California.
- 2016b 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. September 28.
- 2016c Draft Pre-Activity Survey Report (PSR) for the Sycamore to Peñasquitos Transmission Line Project. December 2016.

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.

ATTACHMENT 1

Operational Protocols from SDG&E's Subregional Natural Community Conservation Plan

7.1 Operational Protocols

Operational protocols represent an environmentally sensitive approach to traditional utility construction, maintenance and repair Activities recognizing that slight adjustments in construction techniques can yield major benefits for the environment. The appropriate Operational Protocols for each individual project will be determined and documented by the Environmental Surveyor. The information regarding the qualifications and responsibilities of the environmental surveyor is contained in Appendix B. The following mitigation measures shall be adhered to by SDG&E.

7.1.1 General Behavior for All Field Personnel

1. Vehicles must be kept on access roads. A 15 mile-per-hour speed limit shall be observed on dirt access roads to allow reptile species to disperse. Vehicles must be turned around in established or designated areas only.
2. No wildlife, including rattlesnakes, may be harmed, except to protect life and limb.
3. Firearms shall be prohibited on the rights-of-way except for those used by security personnel.
4. Feeding of wildlife is not allowed.
5. SDG&E personnel are not allowed to bring pets on the rights-of-way in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive domestic animal diseases to native wildlife populations.
6. Parking or driving underneath oak trees is not allowed in order to protect root structures except in established traffic areas.

7. Plant or wildlife species may not be collected for pets or any other reason.
8. Littering is not allowed. SDG&E shall not deposit or leave any food or waste on the rights-of-way or adjacent property.
9. Wild Fires 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, it may be necessary for trucks to 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 should be exhibited when smoking in natural habitats.
10. Field crews shall refer environmental issues including wildlife relocation, dead or sick wildlife, hazardous waste, or questions about avoiding environmental impacts to the Environmental Surveyor. Biologists or experts in wildlife handling may need to be brought in by Environmental Surveyor for assistance with wildlife relocations.

7.1.2 Training

11. All SDG&E personnel working within the project area shall participate in an employee training program conducted by SDG&E, with annual updates. The program will consist of a brief discussion of endangered species biology and the legal protections afforded to Covered Species; a discussion of the biology of the Covered Species protected under this Subregional Plan; the habitat requirements of these Covered Species; their status under the Endangered Species Acts; measures being taken for the protection of Covered Species and their habitats under this Subregional Plan; and a review of the Operational Protocols. A fact sheet conveying this information will also be distributed to all employees working in the project area.
12. Designated SDG&E staff will conduct selected reviews of SDG&E operations. Any proposed modifications to Operational Protocols, procedures or conditions will be promptly provided to CDFG and USFWS for their review and input for required permit or Subregional Plan amendments.

7.1.3 Preactivity Studies

13. The Environmental Surveyor shall conduct preactivity studies for all activities occurring off of access roads in natural areas. The scope of these studies is included in Appendix A. The Environmental Surveyor will complete a preactivity study form contained in Appendix A, including recommendations for review by a biologist and construction monitoring as appropriate. Biologists should be called in when there is the potential for unavoidable impacts to Covered Species. The forms are for information only, and will not require CDFG or USFWS approval. These forms shall be faxed to CDFG and USFWS, along with phone notification, who will reply within 5 working days, indicating if they would like to review the project and/or suggest recommendations for post project monitoring. If a biologist is required, he/she will be contacted concurrent to notification to CDFG and USFWS. SDG&E's project may proceed during this time if necessary, in compliance with the recommendations of the biologist (For narrow endemic species see mitigation IV following Table 3.1). USFWS survey protocols performed by qualified biologists will be required for new projects which are defined as projects requiring CEQA review.

In those situations where the Environmental Surveyor cannot make a definitive species

identification, an on-call biologist will be brought in. When the biologist is called, he or she will be contacted concurrently with CDFG and USFWS. The biologist will make the determination of the species in question and recommend avoidance or mitigation approaches to the Environmental Surveyor and a decision will be made. In those situations where more than one visit may be necessary to identify a given species, such as certain birds, no more than three site visits shall be required. It is expected that the typical USFWS search protocols will not be utilized in most situations due to the Plan's avoidance priority. Background information necessary to complete the annual report shall be collected on the preactivity study form and used by SDG&E to prepare the annual report.

14. In order to ensure that habitats are not inadvertently impacted, the Environmental Surveyor shall determine the extent of habitat and flag boundaries of habitats which must be avoided. When necessary, the Environmental Surveyor should 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 Environmental Surveyor shall make office and/or field presentations to field staff to review and become familiar with natural resources to be protected on a project specific basis.
15. SDG&E will maintain a library of rare plant locations known to SDG&E occurring within easements and fee owned properties. "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 on a project site (e.g. initial study), but there is no requirement for development of original biological data. Plant inventories shall be consulted as part of pre-activity survey procedures.

7.1.4 Maintenance, Repair and Construction of Facilities

16. 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.
17. Routine maintenance of all Facilities includes visual inspections on a regular basis, conducted from vehicles driven on the 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.
18. When the view of a gas transmission line marker becomes obscured by vegetation on a regular basis requiring repeated habitat removal, consideration shall be given to the replacement of markers with taller versions.
19. Erosion will 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.
20. Hydrologic impacts will 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.

21. When siting new facilities, every effort will be made to cross the wetland habitat perpendicular to the watercourse, spanning the watercourse to minimize the amount of disturbance to riparian areas (See Figure 4).
22. Gas and other facilities cross streambeds and require maintenance and repair. During such times water may be temporarily diverted as long as after disturbance natural drainage patterns are restored to minimize the impact of the disturbance and help to reestablish or enhance the native habitat. Erosion control during construction in the form of intermittent check dams and culverts should also be considered to prevent alteration to natural drainage patterns and prevent siltation.
23. Impacts to wetlands shall be minimized by avoiding pushing soil or brush into washes or ravines.
24. During work on facilities, all trucks, tools, and equipment should be kept on existing access roads or cleared areas, to the extent possible.
25. Environmental Surveyor must approve of activity prior to working in sensitive areas where disturbance to habitat may be unavoidable.
26. Insulator washing is allowed from access roads if other applicable protocols are followed.
27. Brush clearing around facilities for fire protection shall not be conducted from March through August without prior approval by the Environmental Surveyor. The Environmental Surveyor will make sure that the habitat contains no active nests, burrows, or dens prior to clearing.
28. In the event SDG&E identifies a covered species of plant within a 10' radius around power poles, which is the area required to be cleared for fire protection purposes, SDG&E shall notify USFWS (for ESA listed plants), and CDFG (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 will occur ten (10) working days prior to such Activity, during which time USFWS or CDFG may remove such plant(s). If neither USFWS or CDFG have removed such plant(s) within the ten (10) working days following the notice, SDG&E may proceed to complete its fire clearing and cause a Take of such plant(s).

When fire clearing is necessary in instances other than around power poles, and the potential for impacts to Covered Species exists, SDG&E will follow the preactivity study and notification procedures in Operational Protocol number 13.

29. Wire stringing is allowed year round in sensitive habitats if conductor is not allowed to drag on ground or in brush and vehicles remain on access roads.
30. 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.
31. Spoils created during maintenance operations shall be disposed of only on previously disturbed areas designated by the Environmental Surveyor or used immediately to fill eroded areas. Cleared vegetation shall be hauled off the rights-of-way to a permitted disposal location.

32. Within 6 months of Plan approval, environmentally sensitive tree trimming locations will be identified in the tree trim computer data base system utilized by tree trim contractors. (This data base also tracks the date of each tree trim, type of tree, where threatening dogs reside, etc.). The Environmental Surveyor should be contacted to perform a preactivity survey when trimming is planned in environmentally sensitive areas. Whenever possible, trees in environmentally sensitive areas (determined by CDFG and SDG&E) will be scheduled for trimming in the non-sensitive times.
33. No new Facilities and Activities shall be planned which disturb vernal pools, their watersheds, or impact their natural regeneration. Continued historic maintenance of existing infrastructure utilizing existing access roads is allowed to continue in areas containing vernal pool habitat. New construction of overhead infrastructure which spans vernal pool habitats is allowed as long as the placement of facilities or the associated construction activities in no way impact the vernal pools.
34. If any previously unidentified dens, burrows, or plants are located on any project site after the preactivity survey, the Environmental Surveyor shall be contacted. Environmental Surveyor will 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...
35. The Environmental Surveyor shall conduct monitoring as recommended in the preactivity survey report. At completion of work, the Environmental Surveyor 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 Environmental Surveyor is responsible for removing all habitat flagging from the construction site.
36. The Environmental Surveyor 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 4 inches.
37. 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 could not be removed shall be capped or otherwise covered at the end of each work day. Old piping or other supplies that have been left open, shall not be capped until inspected and any species found in it 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 CDFG.
38. 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 are located in the trench or excavation, the Environmental Surveyor shall be called immediately to remove them if they cannot escape unimpeded.
39. Large amounts of fugitive dust could interfere with photosynthesis. Fugitive dust created during clearing, grading, earth-moving, excavation or other construction activities will 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.

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

7.1.5 Maintenance of access roads shall consist of:

41. Repair of erosion by grading, addition of fill, and compacting. In each case of repair, the total area of disturbance shall be minimized by careful access and use of appropriately sized equipment. Repairs shall be done after preactivity surveys conducted by the Environmental Surveyor and in accordance with the recommendations regarding construction monitoring and relevant protocols. Consideration should be given to source of erosion problem, when source is within control of SDG&E.
42. Vegetation control through grading should be used only where the vegetation obscures the inspection of facilities, access may be entirely lost, or the threat of Facility failure or fire hazard exists. The graded access road area should not exceed 12'-wide on straight portions (radius turns may be slightly wider) (See Figure 23).
43. Mowing habitat can be an effective method for protecting the vegetative understory while at the same time creating access to a work area. Mowing should be used when permanent access is not required since, with time, total revegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing will be necessary to maintain permanent access.
44. Maintenance work on access roads should not expand the existing road bed (See Figure 23).
45. Material for filling in road ruts should never be obtained from the sides of the road which contain habitat without approval from Environmental Surveyor..

7.1.6 Construction of new access roads shall comply with the following:

46. SDG&E access roads will be designed and constructed according to the SDG&E *Guide for Encroachment on Transmission Rights-of-Way (4/91)*.
47. Access roads will be made available to managers of the regional preserve system subject to coordination with SDG&E.
48. New access roads shall be designed to be placed in previously disturbed areas and areas which require the least amount of grading in sensitive areas during construction whenever possible (See Figure 5). Preference shall be given to the use of stub roads rather than linking facilities tangentially.
49. SDG&E will consider providing access control on access roads leading into the regional preserve system where such control provides benefit to sensitive resources.
50. New access road construction is allowed year round. Every effort shall be made to avoid constructing roads during the nesting season. During the nesting season, the presence or absence of nesting species shall be determined by a biologist and appropriate avoidance and minimization recommendations followed.

7.1.7 Construction and Maintenance of Access Roads Through Streambeds

51. Construction of new access roads through streambeds requires a Streambed Alteration Agreement from CDFG and/or consultation with the Army Corps of Engineers.
52. Maintenance or construction vehicle access through shallow creeks or streams is allowed. However, no filling for access purposes in waterways is allowed without the installation of appropriately sized culverts. The use of geotextile matting should be considered when it would protect wetland species.
53. Staging/storage areas for equipment and materials shall be located outside of riparian areas. (See Figure 23).

7.1.8 Survey Work

54. Brush clearing for foot paths or line-of-sight cutting is not allowed from March through August in sensitive habitats without prior approval from the Environmental Surveyor, who will ensure that activity does not adversely affect a sensitive species.
55. SDG&E survey personnel must keep vehicles on existing access roads. No clearing of brush for panel point placement is allowed from March through August without prior approval from the Environmental Surveyor.
56. Hiking off roads or paths for survey data collection is allowed year round so long as other protocols are met.

7.1.9 Emergency Repairs

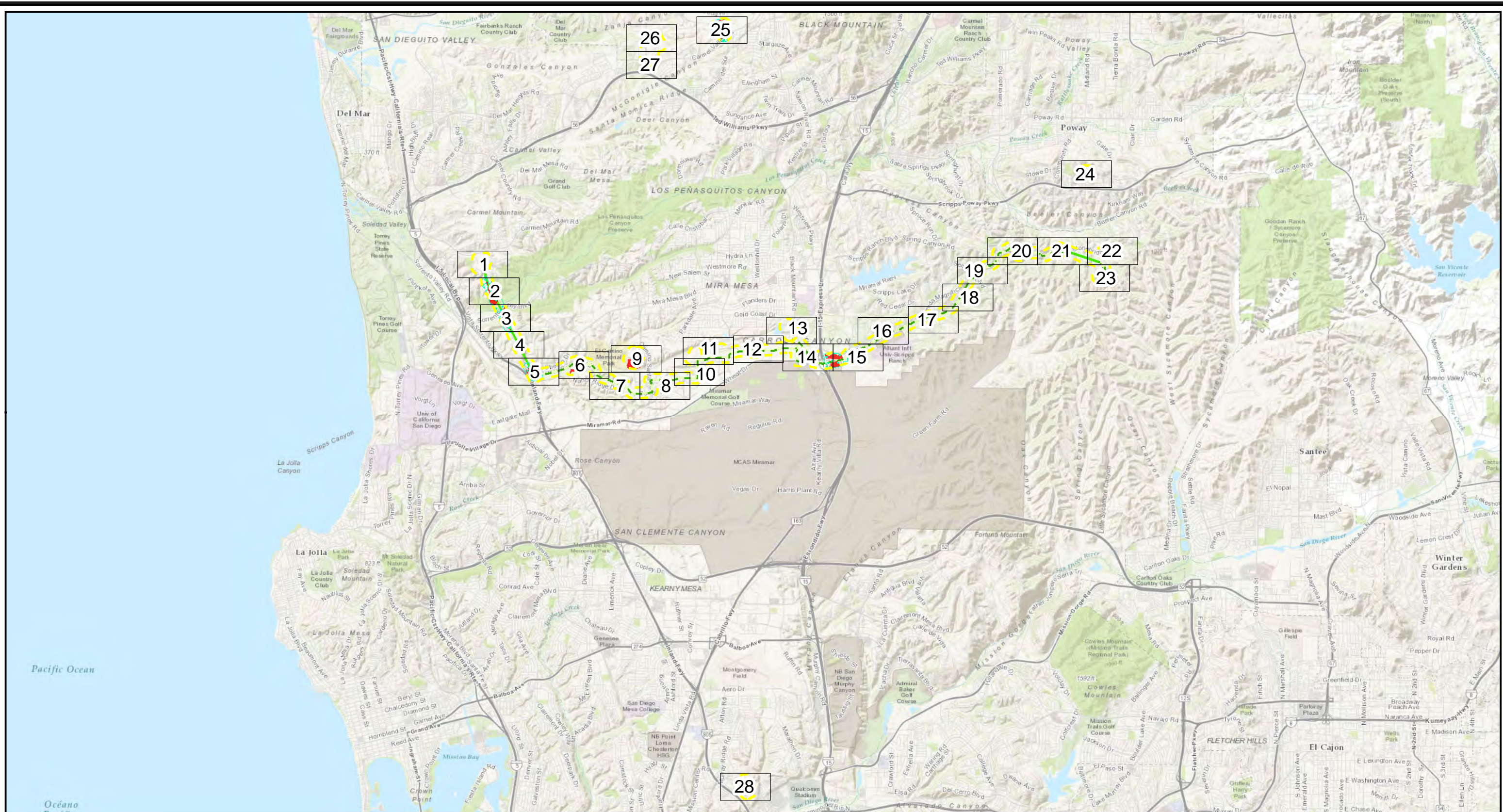
57. During a system emergency, unnecessary carelessness which results in environmental damage is prohibited.
58. Emergency repair of facilities is required in situations which potentially or immediately threaten the integrity of the SDG&E system, such as pipe leaks, or downed lines, slumps, slides, major subsidence, etc. During emergency repairs the Operational Protocols contained in this Subregional Plan shall continued to be followed to fullest extent possible.
59. Once the emergency has stabilized, any unavoidable environmental damage will be reported to the Environmental Surveyor by the foreman. The Environmental Surveyor will develop a mitigation plan and ensure its implementation is consistent with this Subregional Plan.

7.1.10 Activities of Underlying Fee Owners

60. Most SDG&E rights-of-way are held in easement only. The activities of underlying fee owners cannot be controlled by SDG&E and are not covered by this Subregional Plan.
61. When sensitive habitat exists on either side of a utility right-of-way, SDG&E will not oppose underlying fee owners dedicating said property to conservation purposes. Underlying fee owners are expected to comply with applicable federal, state, and local regulations.

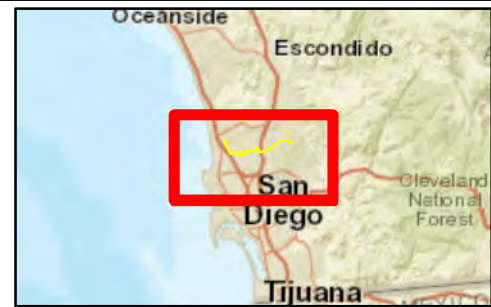
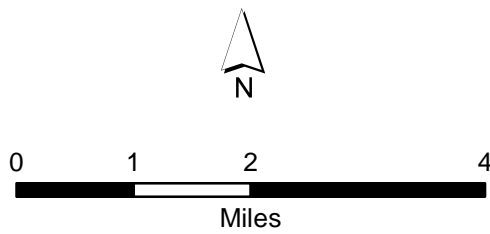
ATTACHMENT 2
Project Site and Vicinity Map

ATTACHMENT 3
BUOW Suitable Habitat and Survey Areas Map



Legend

- Map Book Page
- Biological Survey Area
- BUOW Suitable Habitat
- BUOW Focused Survey Area



Attachment 3

BUOW Suitable Habitat & Focused Survey Areas Map

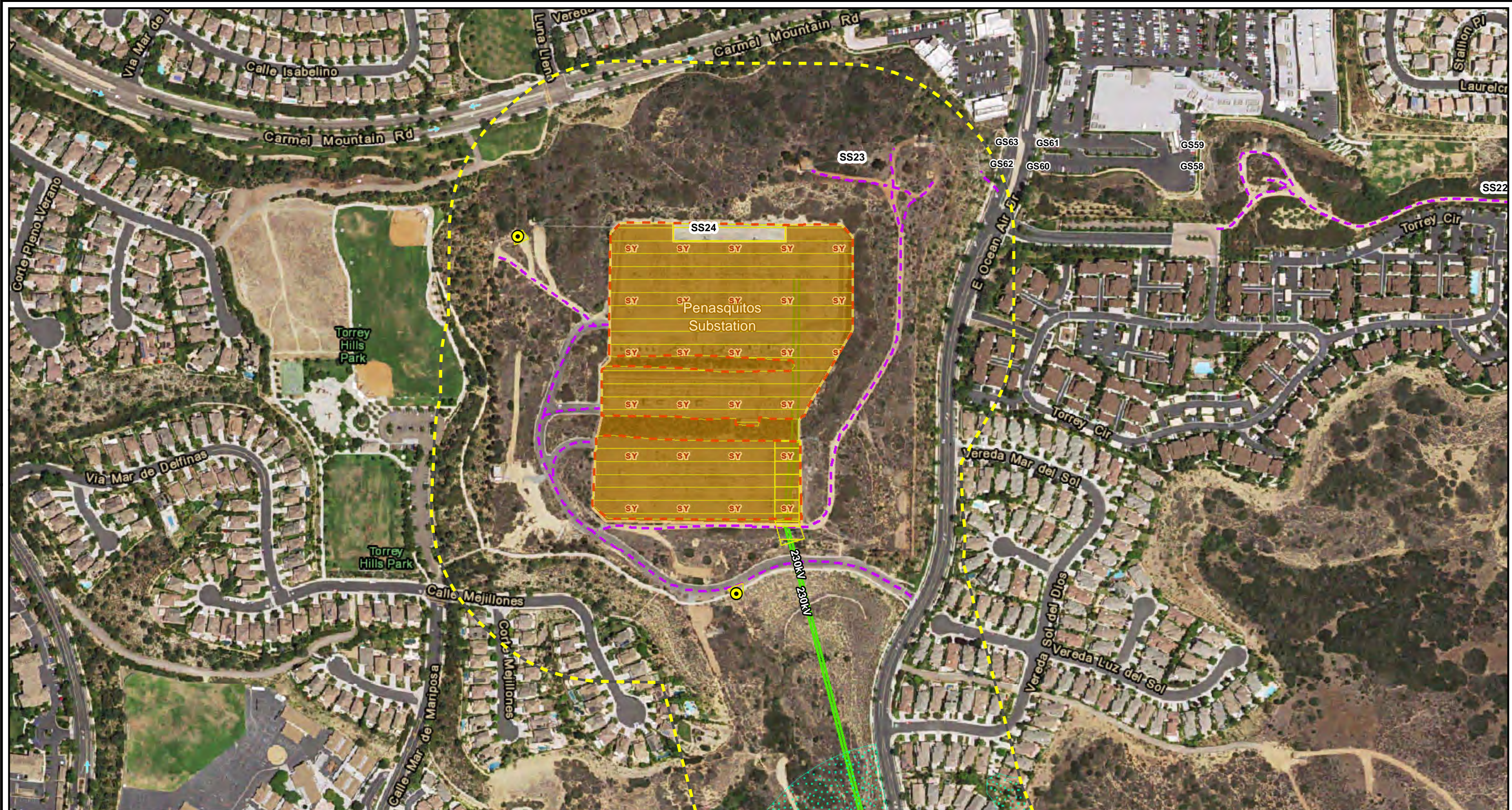
Sycamore to Peñasquitos 230kV Transmission Line Project

Overview Map









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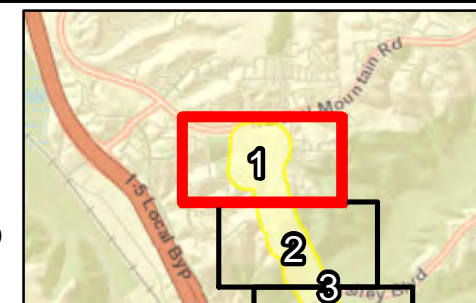
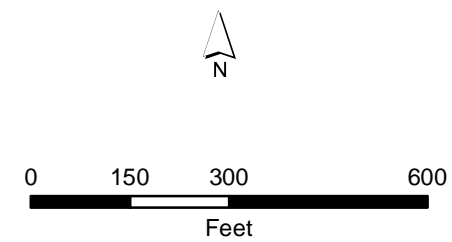




Legend

-  Project (Overhead)  Access Road  AC Mitigation - Deepwell
 Biological Survey Area  Temporary Impact Area
 Substations  BUOW Focused Survey Area
 Staging Yard

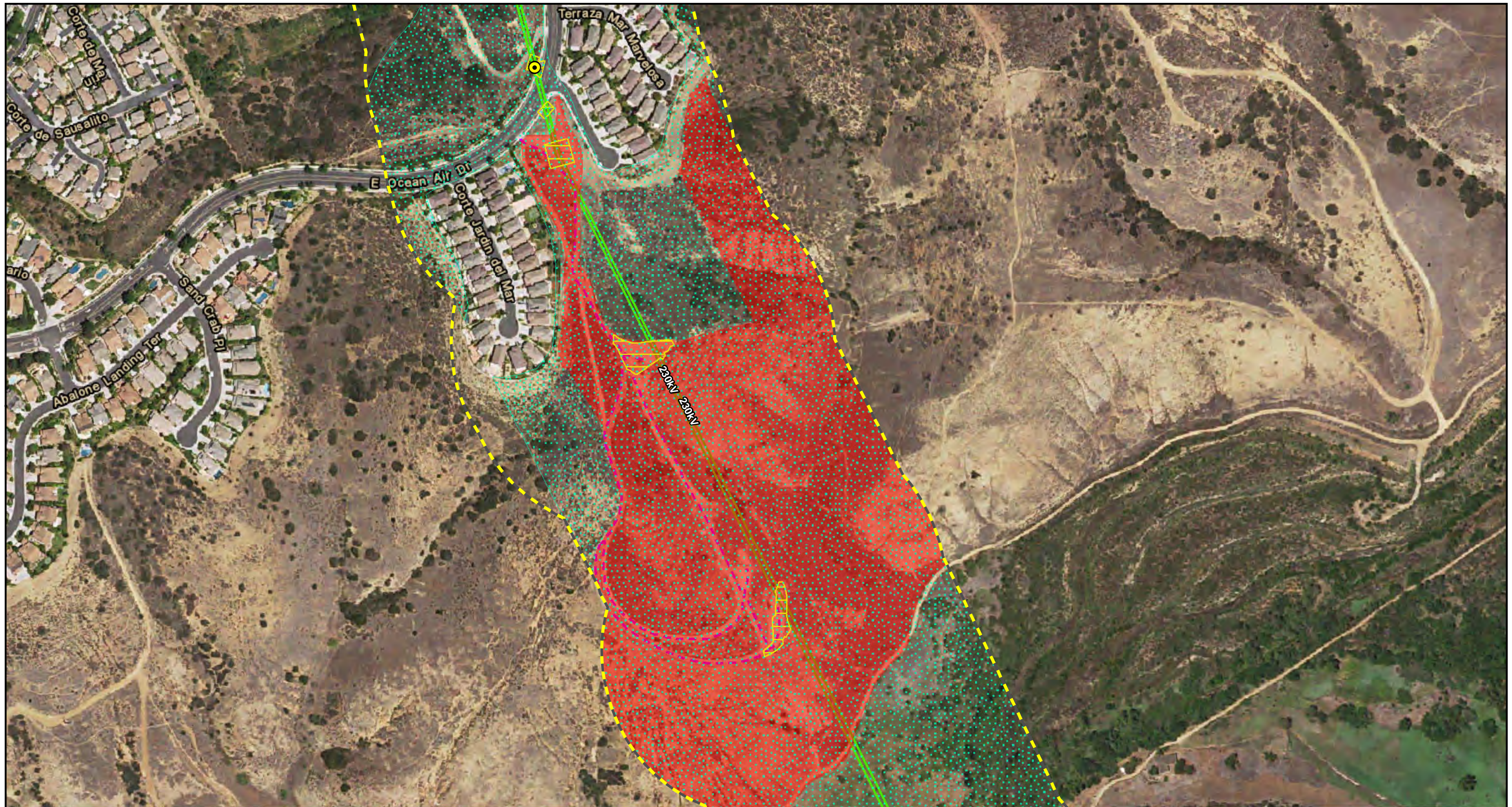
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Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
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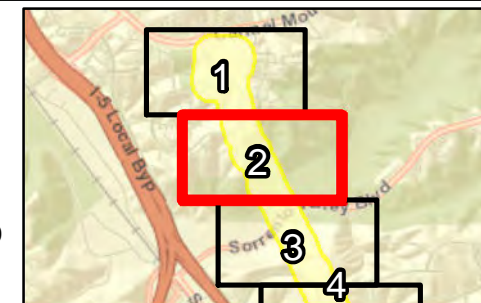
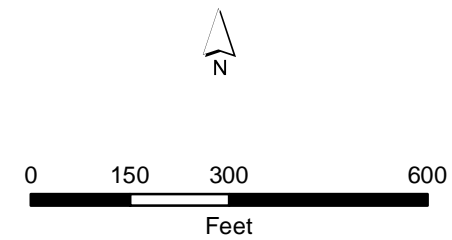
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Legend

- Project (Overhead)
- Temporary Impact Area
- AC Mitigation - Deepwell
- Biological Survey Area
- BUOW Suitable Habitat
- Staging Yard
- BUOW Focused Survey Area
- Access Road

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Attachment 3

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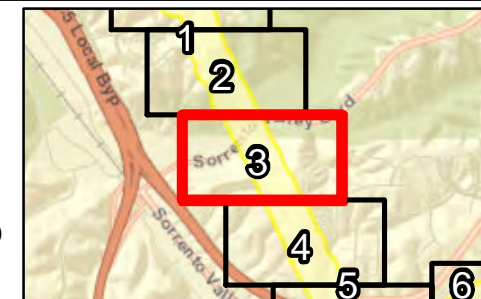
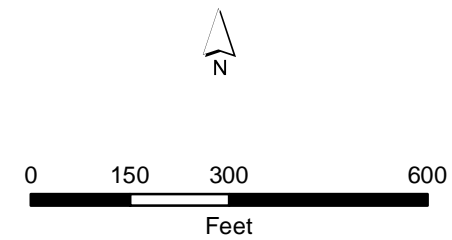




Legend

- Project (Overhead)
- Temporary Impact Area
- AC Mitigation - Deepwell
- Biological Survey Area
- BUOW Suitable Habitat
- Staging Yard
- BUOW Focused Survey Area
- Access Road

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Attachment 3

BUOW Suitable Habitat & Focused Survey Areas Map

Sycamore to Peñasquitos 230kV Transmission Line Project

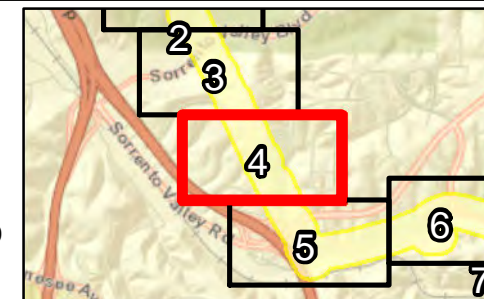
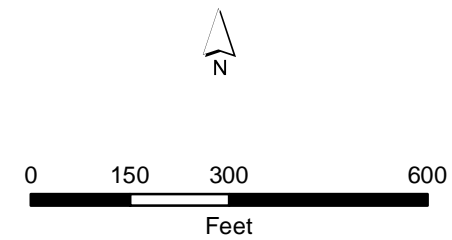
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Legend

- Project (Overhead)
- Temporary Impact Area
- Biological Survey Area
- BUOW Focused Survey Area
- SY Staging Yard
- Access Road

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Attachment 3

BUOW Suitable Habitat &
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Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 4 of 28

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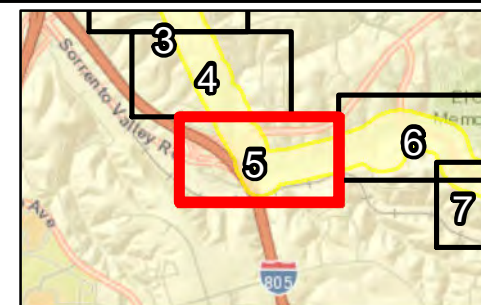
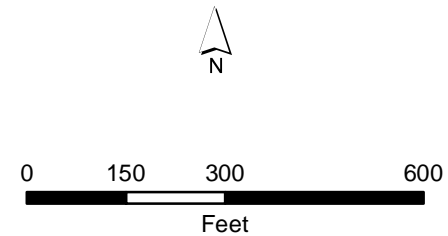




Legend

- | | | |
|---|--|--|
| — Project (Overhead) | — Access Road | BUOW Focused Survey Area |
| - - - Project (Underground) | Permanent Impact Area | AC Mitigation - Deepwell |
| Biological Survey Area | Temporary Impact Area | Proposed New ADSS Interset Structure |
| Staging Yard | BUOW Suitable Habitat | |

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Attachment 3

BUOW Suitable Habitat & Focused Survey Areas Map
Sycamore to Peñasquitos 230kV Transmission Line Project
Page 5 of 28

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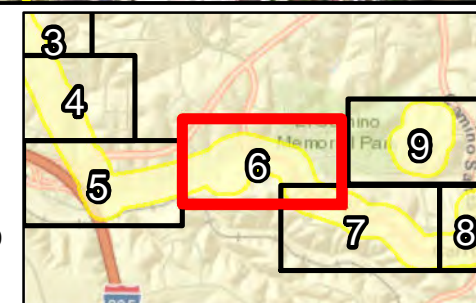
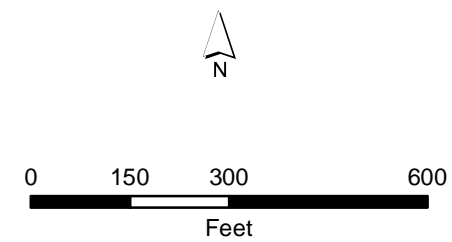




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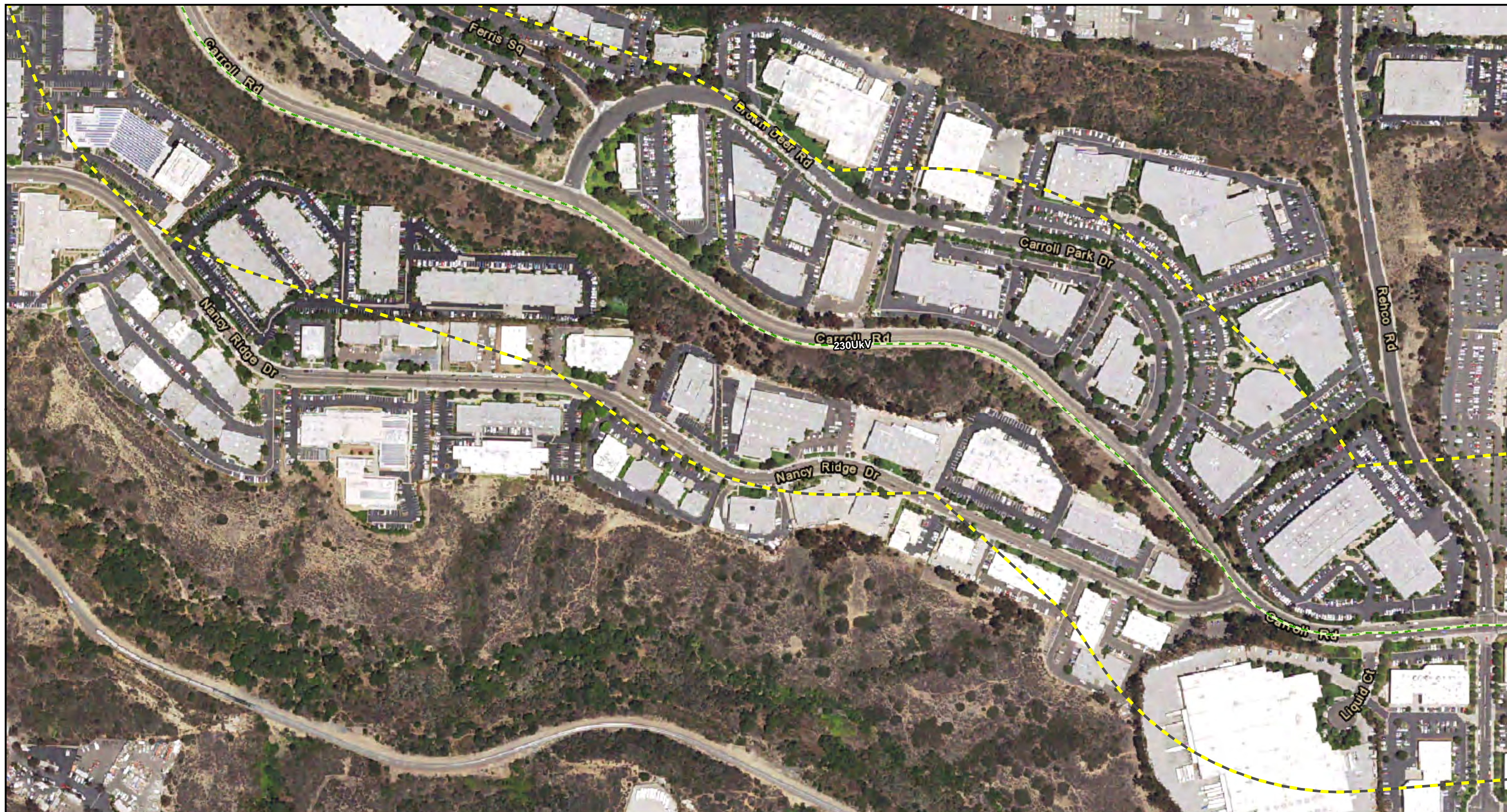
- Project (Underground)
- Biological Survey Area
- SY Staging Yard
- BUOW Suitable Habitat

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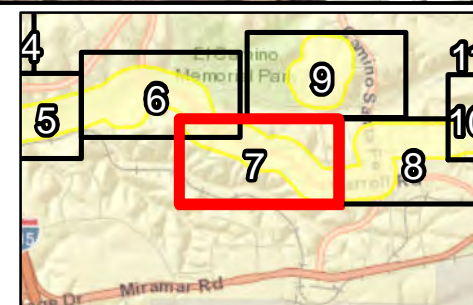
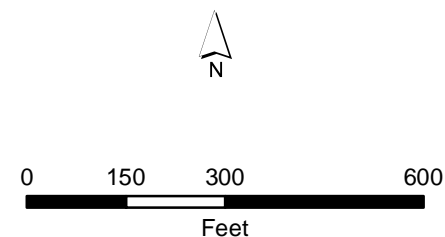
BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 6 of 28



Legend

- Project (Underground)
- Biological Survey Area
- Staging Yard

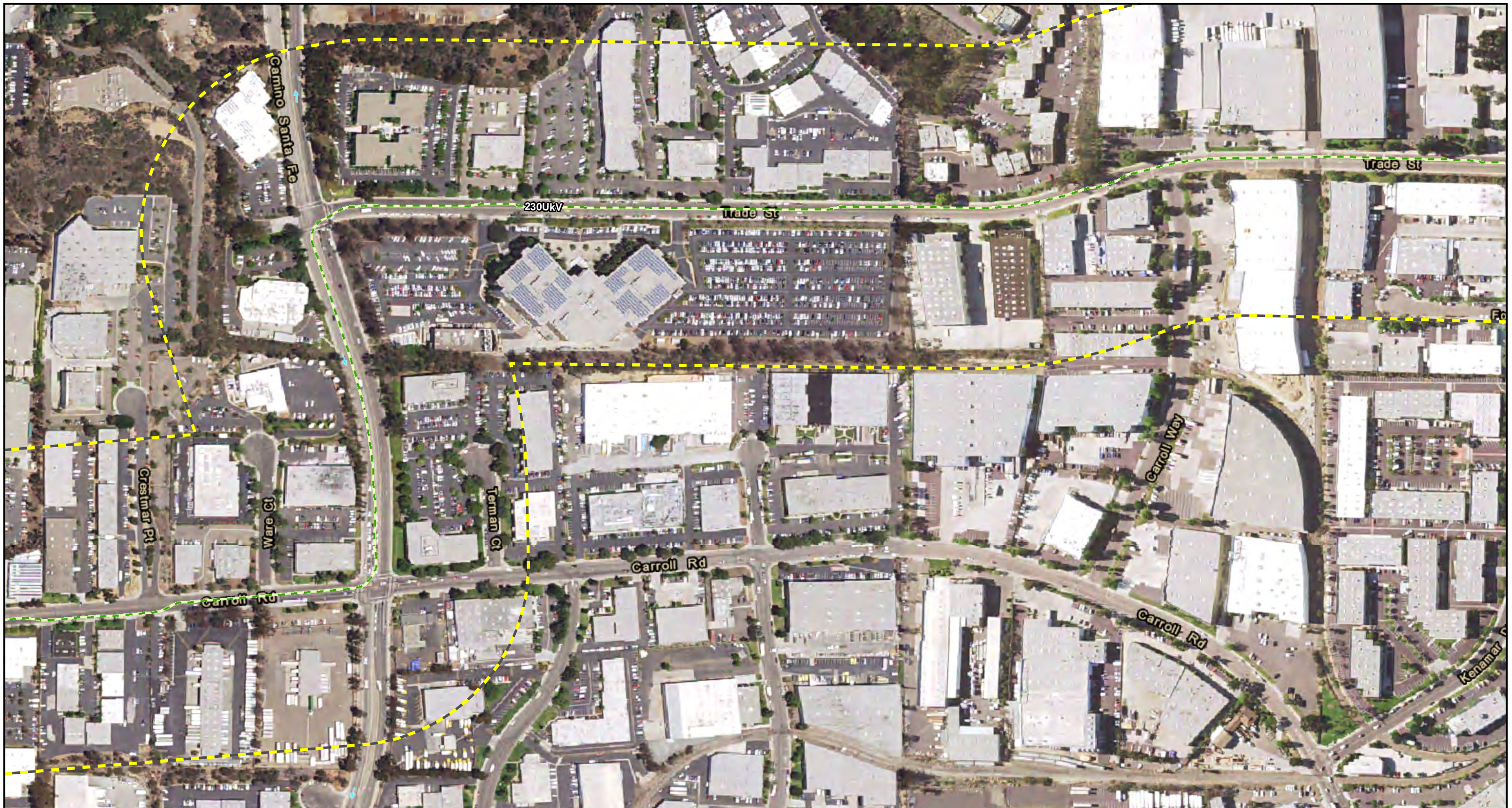
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Attachment 3 BUOW Suitable Habitat & Focused Survey Areas Map Sycamore to Peñasquitos 230kV Transmission Line Project Page 7 of 28

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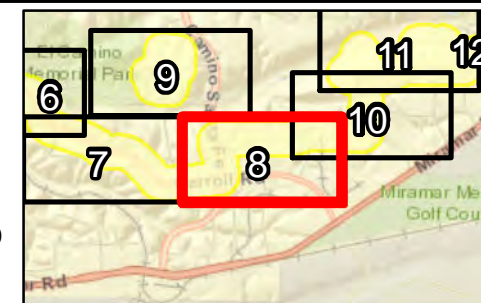
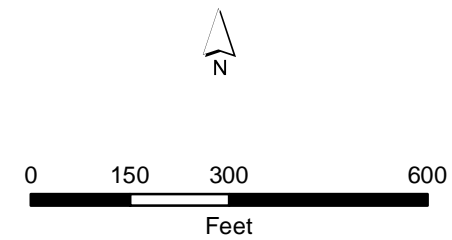




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard

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Page 8 of 28

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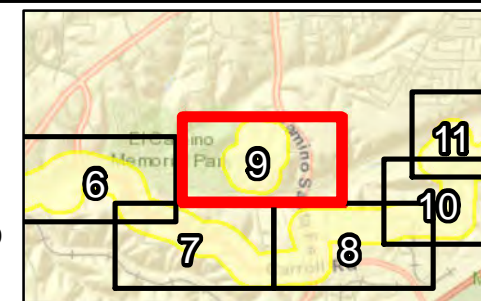
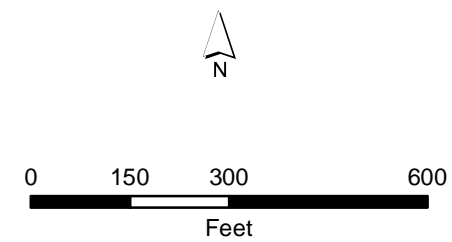




Legend

- Biological Survey Area
- SY Staging Yard
- Access Road
- BUOW Suitable Habitat

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 9 of 28

Name: 20807 BOMMP Atch3 Suitable Habitat rev3 prev impacts new yards.mxd
Print Date: 12/12/2016, Author: mainmon

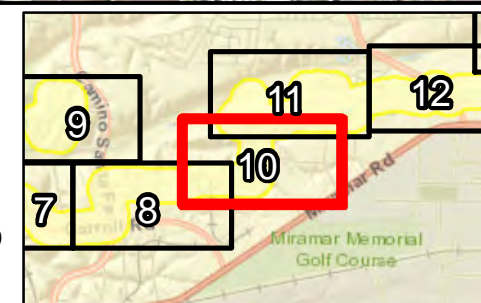
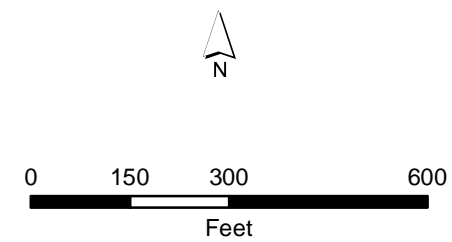




Legend

- Project (Underground)
- Biological Survey Area
- Staging Yard

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, Increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 10 of 28

Name: 20807 BOMMP Attach3 Suitable Habitat rev3 prev impacts new yards.mxd
Print Date: 12/12/2016 Author: mainmon

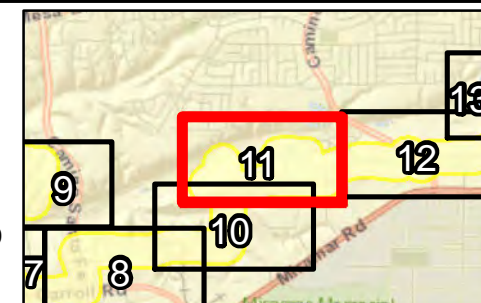
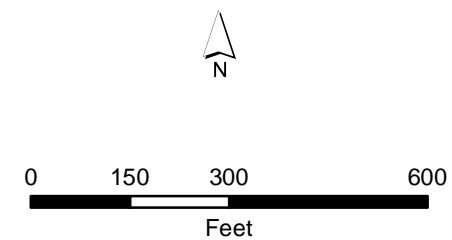




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard
- Access Road

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 11 of 28

Name: 20807 BOMMP Attach3 Suitable Habitat rev3 prep impacts new yards.mxd
Print Date: 12/12/2016 Author: mainmon@chambersgroup.com

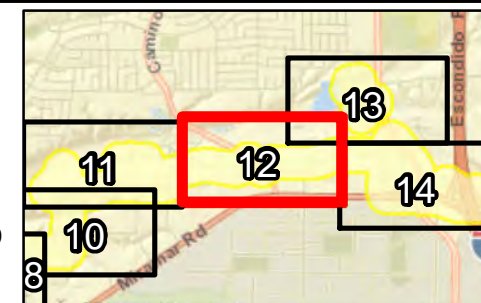
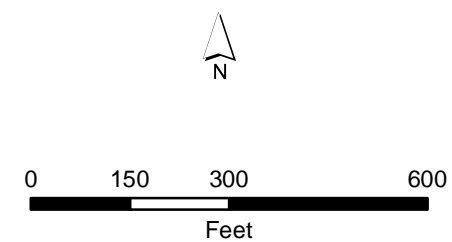




Legend

- Project (Underground)
- Biological Survey Area
- Staging Yard

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 12 of 28

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Print Date: 12/12/2016 Author: mainmon

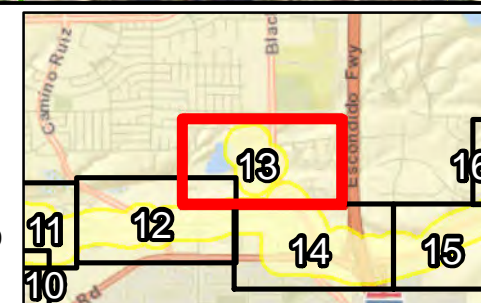
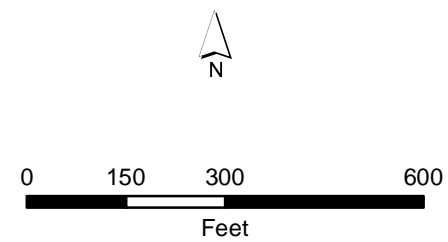




Legend

- Project (Underground)
- Biological Survey Area
- Staging Yard
- Access Road

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

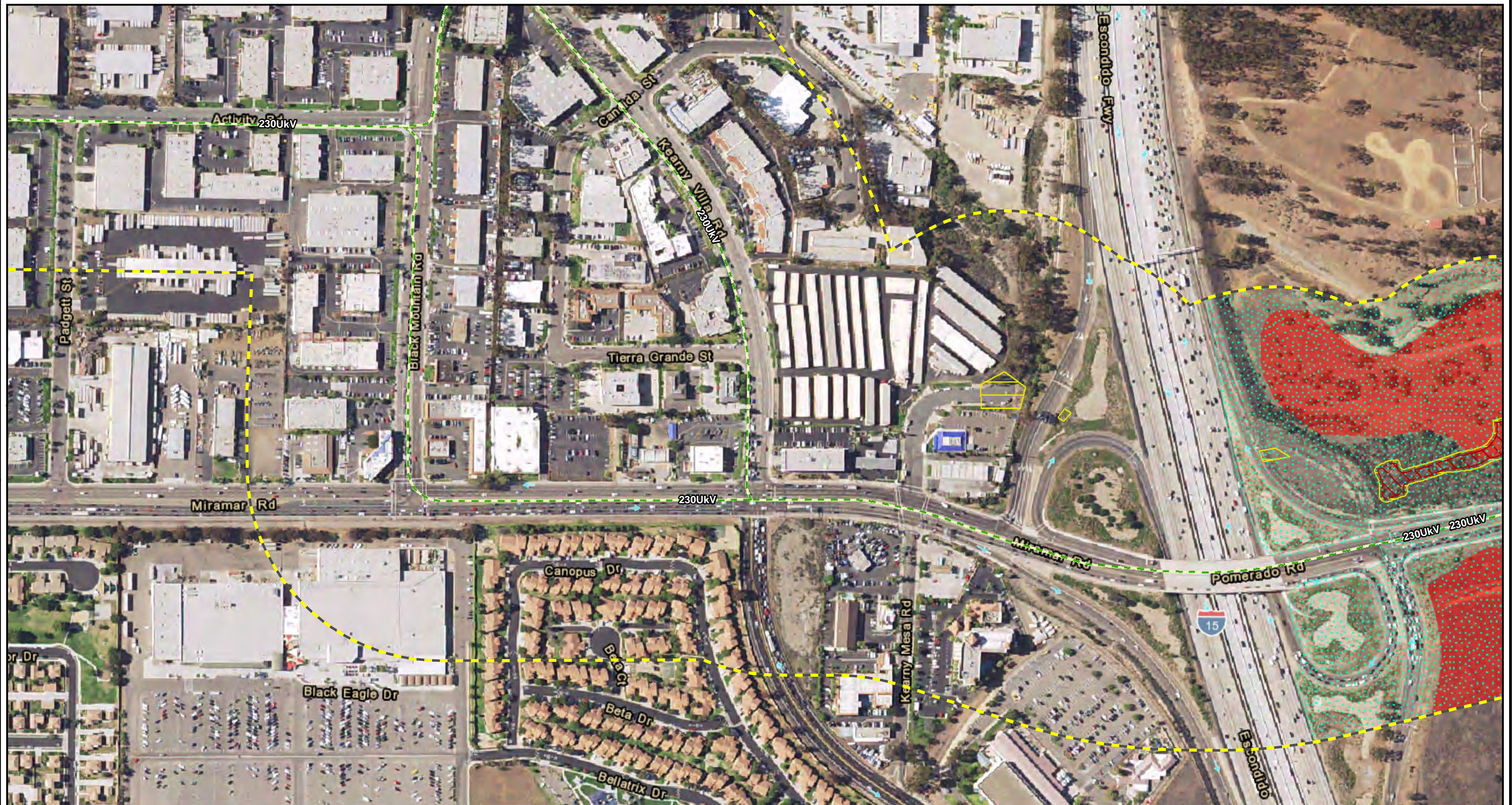


Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 13 of 28

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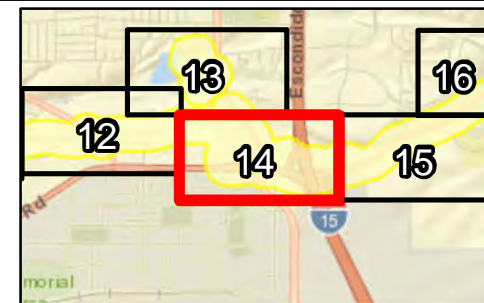
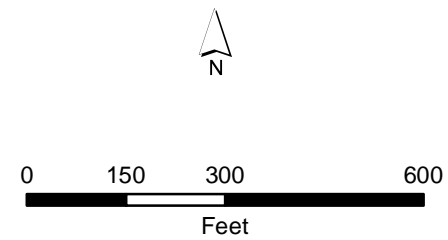




Legend

- Project (Underground)
- Temporary Impact Area
- Biological Survey Area
- BUOW Suitable Habitat
- Staging Yard
- BUOW Focused Survey Area
- Permanent Impact Area

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat & Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 14 of 28

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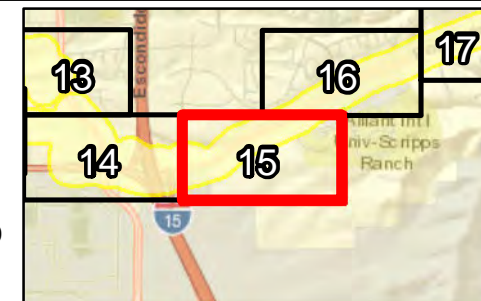
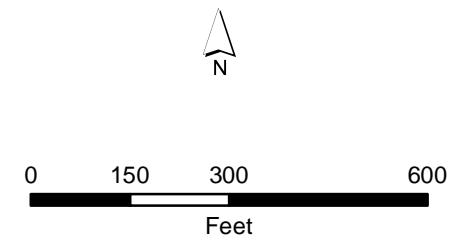




Legend

- Project (Underground)
- Temporary Impact Area
- Biological Survey Area
- BUOW Suitable Habitat
- Staging Yard
- BUOW Focused Survey Area
- Permanent Impact Area

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3 BUOW Suitable Habitat & Focused Survey Areas Map Sycamore to Peñasquitos 230kV Transmission Line Project Page 15 of 28

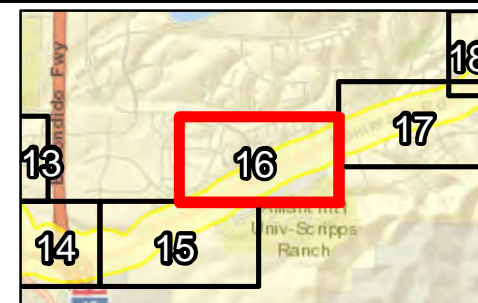
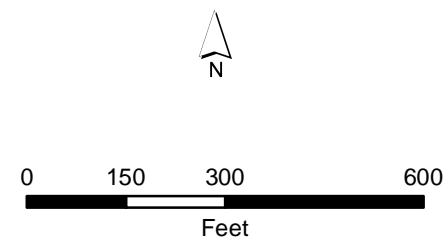
Name: 20807 BOMMP Arch3 Suitable Habitat rev3 prev impacts new yards.mxd
Print Date: 12/12/2016; Author: mainmon
CHAMBERS GROUP



Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard

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Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 16 of 28

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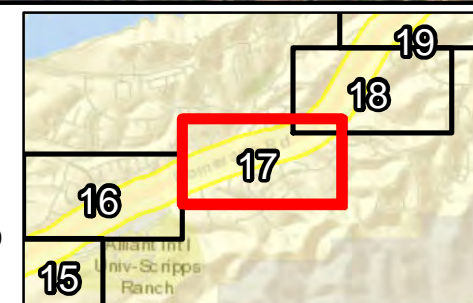
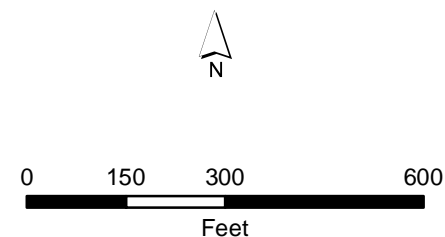




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard

Service Layer Credits: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community



Attachment 3

BUOW Suitable Habitat & Focused Survey Areas Map

Sycamore to Peñasquitos 230kV Transmission Line Project

Page 17 of 28

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Print Date: 12/12/2016; Author: mainmon@chambersgroup.com

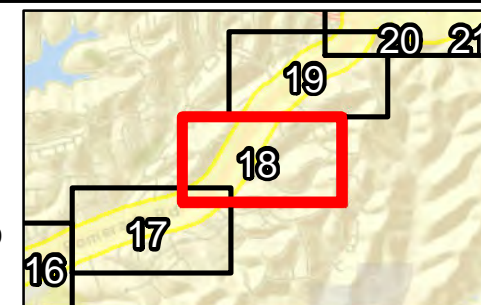
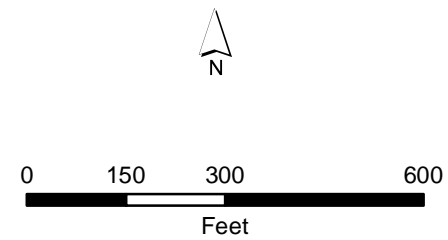




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard

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Attachment 3 BUOW Suitable Habitat & Focused Survey Areas Map Sycamore to Peñasquitos 230kV Transmission Line Project Page 18 of 28

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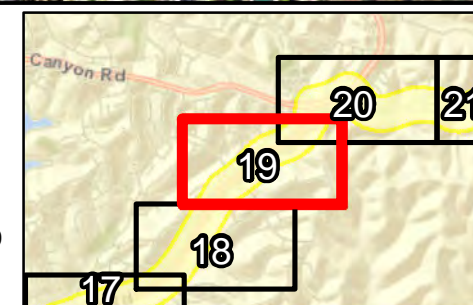
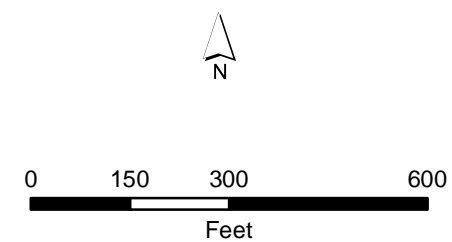




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard
- Access Road

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Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 19 of 28

Name: 20807 BOMMP Attach3 Suitable Habitat rev3 prep impacts new yards.mxd
Print Date: 12/12/2016; Author: mainmon@chambersgroup.com

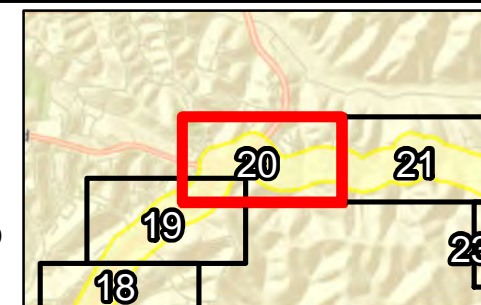
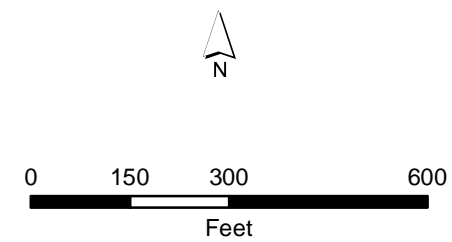




Legend

- Project (Underground)
- Biological Survey Area
- SY Staging Yard
- Access Road

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BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 20 of 28

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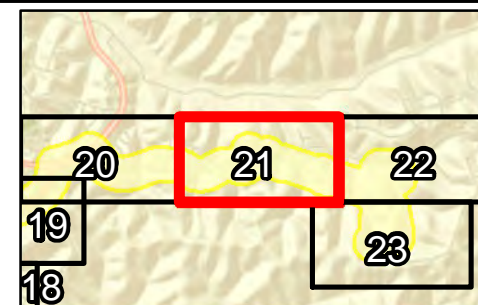
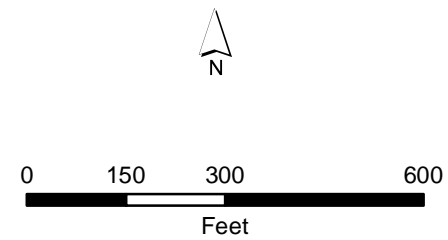




Legend

- Project (Overhead)
- Project (Underground)
- Biological Survey Area
- Staging Yard
- Access Road
- Permanent Impact Area
- Temporary Impact Area

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Attachment 3








BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 21 of 28

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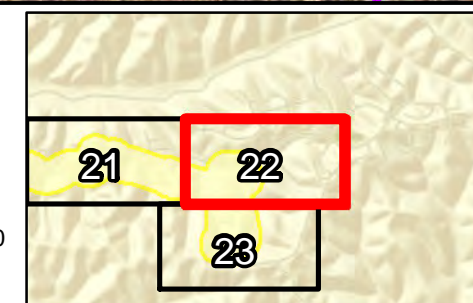
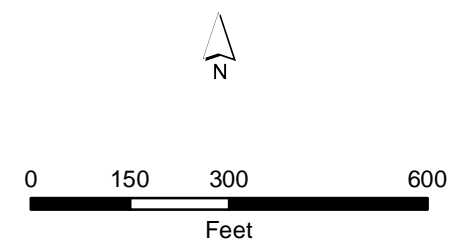




Legend

-  Project (Overhead)  Access Road
 Project (Underground)  Permanent Impact Area
 Biological Survey Area  Temporary Impact Area
 Staging Yard

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Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 22 of 28

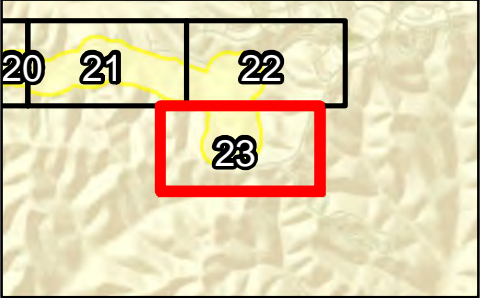
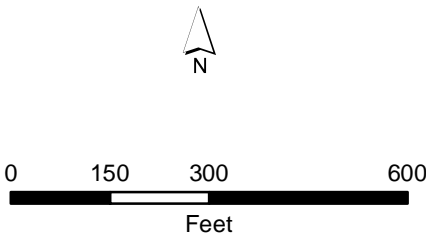
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Print Date: 12/12/2016. Author: msimmons



Legend

- Project (Underground) Access Road
- Biological Survey Area Temporary Impact Area
- Substations
- Staging Yard

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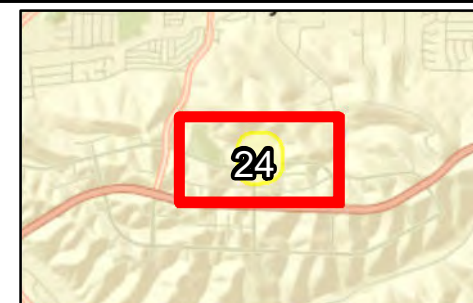
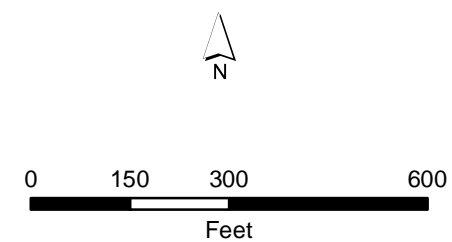


Attachment 3
BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
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Legend

- Biological Survey Area
- SY Staging Yard



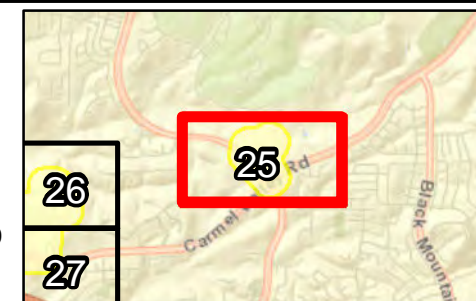
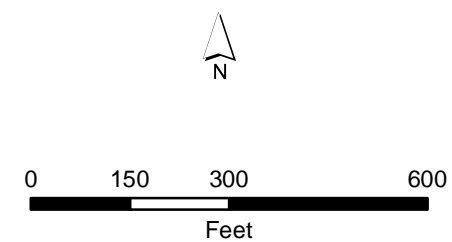
Attachment 3 BUOW Suitable Habitat & Focused Survey Areas Map Sycamore to Peñasquitos 230kV Transmission Line Project Page 24 of 28



Legend

- Biological Survey Area
- BUOW Focused Survey Area
- Staging Yard
- BUOW Suitable Habitat
- Species Observation**
- Transient BUOW (foraging)

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Attachment 3 BUOW Suitable Habitat & Focused Survey Areas Map Sycamore to Peñasquitos 230kV Transmission Line Project Page 25 of 28

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Print Date: 12/12/2016; Author: mainmon

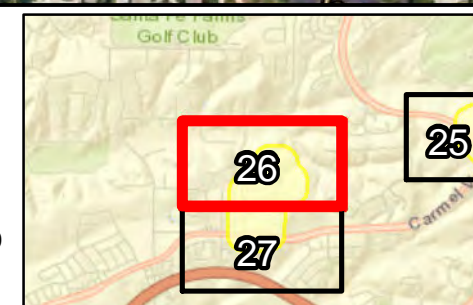
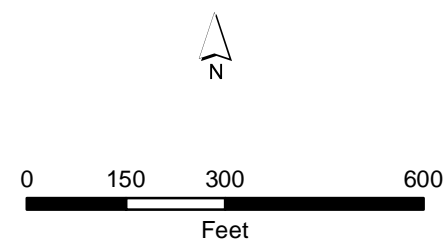




Legend

- Biological Survey Area
- SY Staging Yard

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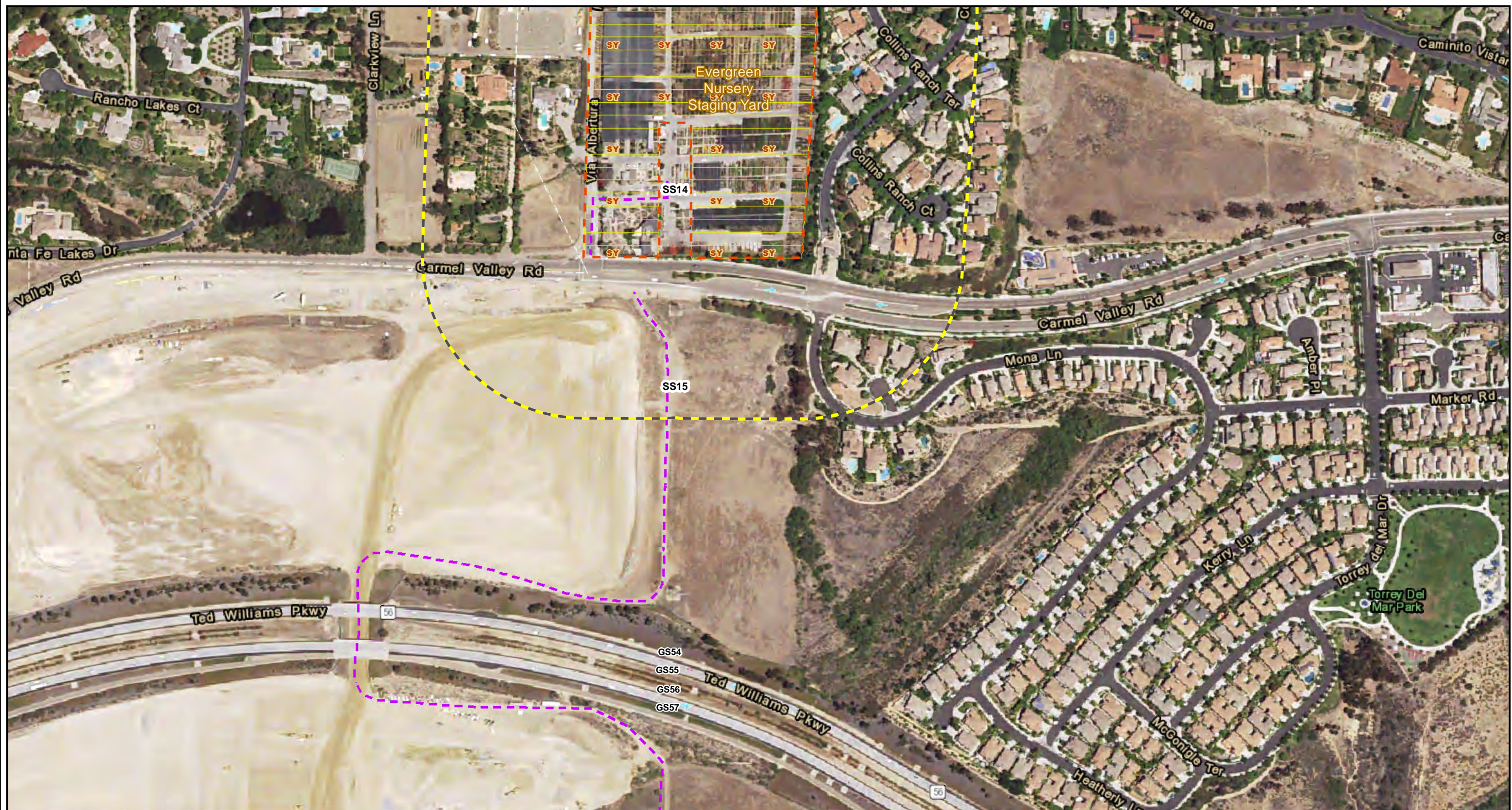
BUOW Suitable Habitat & Focused Survey Areas Map

Sycamore to Peñasquitos 230kV Transmission Line Project

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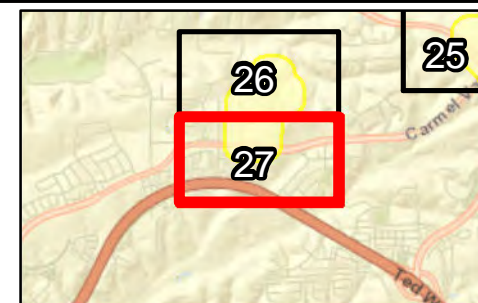
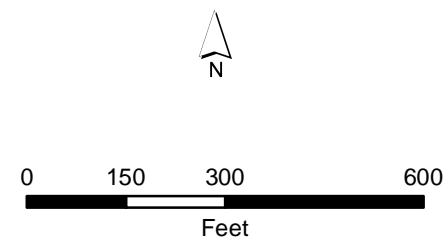




Legend

- Biological Survey Area
- SY Staging Yard
- Access Road

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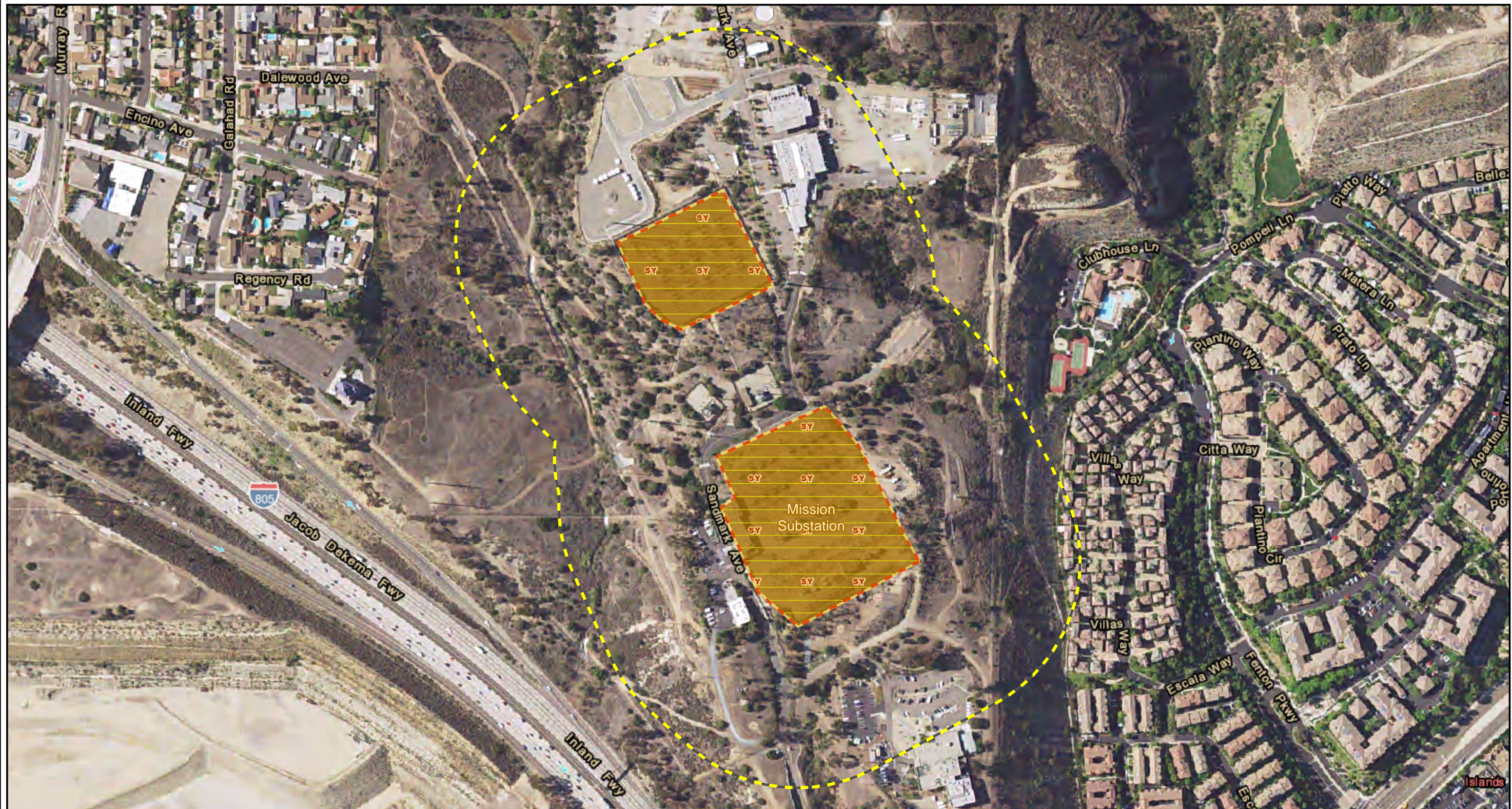


Attachment 3

BUOW Suitable Habitat &
Focused Survey Areas Map
Sycamore to Peñasquitos 230kV
Transmission Line Project
Page 27 of 28

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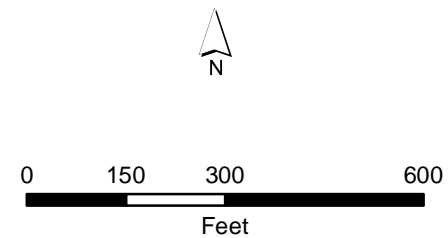




Legend

- Biological Survey Area
- Substations
- SY Staging Yard

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BUOW Suitable Habitat & Focused Survey Areas Map

Sycamore to Peñasquitos 230kV Transmission Line Project

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Name: 20807 BOMMP Attach3 Suitable Habitat rev3 pre impacts new yards.mxd
Print Date: 12/12/2016 Author: mainmon

