

DRAFT



Mitigation Monitoring, Compliance And Reporting Program

San Diego Gas & Electric Mira Sorrento Substation Project

(Application No. A 11-10-015); Decision (12-12-017)



JUNE 2013

PREPARED FOR:
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**SAN DIEGO GAS & ELECTRIC COMPANY
MIRA SORRENTO SUBSTATION PROJECT
MITIGATION MONITORING, COMPLIANCE
AND REPORTING PROGRAM**

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1.0 INTRODUCTION

The Final Initial Study/Mitigated Negative Declaration (IS/MND) for the Mira Sorrento Substation Project, as adopted by the California Public Utilities Commission (CPUC) on October 14, 2012 (with Permit to Construct (PTC) issued on December 27, 2012), includes procedures for preparing and implementing a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) to ensure compliance with mitigation measures approved in the Final IS/MND. Section 6.0 of the Final IS/MND provides the recommended framework for the implementation of the MMCRP by the California Environmental Quality Act (CEQA) lead agency, the CPUC, and describes the roles and responsibilities of government agencies in implementing and enforcing adopted mitigation measures. This MMCRP includes the information provided in Section 6.0, as well as specific protocols to be followed prior to and during construction by CPUC third-party environmental monitors (CPUC EMs) and San Diego Gas and Electric (SDG&E) project staff.

The project's MMCRP includes direct participation and commitment from SDG&E and CPUC EMs. The success of the program depends on the project management staff, monitors, and construction contractor personnel. Therefore, the goal of the MMCRP is to provide a clear understanding of the project's organization, establish lines of communication, and effectively document and report compliance with all of the mitigation measures.

The MMCRP was developed to provide guidelines and standardize procedures for environmental compliance on the project. The procedures have been developed in coordination with SDG&E, CPUC, and CPUC EMs to help define the reporting relationships, provide detailed information about the roles and responsibilities of the project's environmental compliance team members, define compliance reporting procedures, and establish a communication protocol.

1.1 Authority and Purpose of the Program

The California Public Utilities Code confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard practice of the CPUC, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval are implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Section 21081.6 of the Public Resources Code. Section 21081.6 requires a public agency to adopt a Mitigation Monitoring, Compliance, and Reporting Program when it approves a project that is subject to preparation of an Final IS/MND. CEQA Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring or reporting. The CPUC views the MMCRP as a working guide to facilitate not only the implementation of mitigation

measures by the project proponent, but also the monitoring, compliance, and reporting activities of the CPUC and any monitors it may designate.

1.2 Program Adoption Process

The mitigation measures proposed in the Final IS/MND and the framework for this MMCRP, as described in Section 6.0 of the Final IS/MND, were approved by the CPUC on December 27, 2012 (Decision 12-12-017). A draft version of the MMCRP was distributed to SDG&E, CPUC, and CPUC EMs for review and comment.

1.3 Project Description

1.3.1 Project Overview

Project facilities can be divided into two main components:

120-megavolt ampere (MVA) 69/12-kilovolt (kV) Mira Sorrento Distribution Substation (Location: Mira Mesa Boulevard)

The proposed substation at full buildout is planned to have 120 MVA capacity with four 30 MVA transformer banks, four 69 kV tie lines, sixteen 12 kV circuits, four 12 kV capacitors and four bays of standard steel rack approximately 30 feet tall of 69 kV bus, 69 kV transformer. The initial substation construction will include installation of six 12 kV distribution circuits. All six distribution circuits will be brought out underground to Mira Sorrento Place and extend northeast and southwest. The circuits will tie into the existing underground circuitry from the four existing substations feeding the area, and the circuitry will be rearranged as necessary. Circuit ties will be constructed to provide distribution reliability between circuits out of different substations.

- Access to the substation will be via two 30-foot-wide driveways from Mira Sorrento Place to the west of the substation.
- The substation will require construction of retaining walls and screening walls around the perimeter of the building pad.
- The retaining walls will range from 4 feet in height along Mira Sorrento Place to a maximum of 52 feet along the southeast side. The retaining walls will be constructed of a concrete keystone or verdura block to blend better with the surrounding area.
- The screening walls will be 10 feet in height, around the perimeter of the substation, and constructed of concrete masonry units. Landscaping will be installed with the initial development, and plants would be similar to the native and non-native plants, trees, and bushes already in the area.

69 kV Transmission Tie Line 665 (TL665) Loop-in (Location: City of San Diego)

The existing 69 kV line (TL 665) will be routed in and out of the proposed substation underground. Installation will require two new parallel trench alignments along Vista Sorrento Parkway across Mira Sorrento Place for a distance of 600 feet each of single-circuit 69 kV duct package. Trench installation will total approximately 1,200 feet for the two parallel trench alignments. The 69 kV duct package will have a standard depth of approximately 6 feet below grade to bottom of package. These new trench alignments will be established from an interception point at an existing duct package (TL 665) and proceed south along Vista Sorrento to the new Mira Sorrento Substation. Installation of approximately two 69 kV vaults along this trench alignment will be required, as well as associated vault racking, installation of approximately 4,000 circuit-feet of 69 kV 3,000 thousand circular mil (KCMIL CU) underground cable, telecommunications cable, 69 kV cable joints, and terminations. TL 665 will then be reconfigured as TL 6959 (Peñasquitos – Mira Sorrento) and TL 665 (Mira Sorrento – Genesee).

Schedule

Project-related construction activities will not begin until pre-construction mitigation measures and submittals have been satisfied. Once pre-construction mitigation measures have been completed, the CPUC will issue a Notice to Proceed (NTP), indicating that construction can commence. The NTP may include CPUC or other agency conditions or requirements that must be satisfied prior to the start of work or during construction. Section 4.3 of this MMCRP lists the mitigation measures, the timing for completion, and whether CPUC review or approval is required before construction can commence. A map of the construction elements are provided in Attachment A. Table 1 shows the estimated construction schedule by activity.

**Table 1
Estimated Construction Schedule**

Proposed Construction Schedule			
<i>Project Activity</i>		<i>Duration (Months)</i>	<i>Anticipated Start Date</i>
Mira Sorrento Substation	Substation Grading and Site Development	6	July 1, 2013
	Substation Below Grade Components	6	December 19, 2013
	Substation Above Grade Components	6	April 24, 2014
	Substation Equipment Construction	10	April 24, 2014
TL 665 Loop-in	Transmission Construction	2 –4	March 18, 2014

**Table 1
Estimated Construction Schedule**

Proposed Construction Schedule			
	<i>Project Activity</i>	<i>Duration (Months)</i>	<i>Anticipated Start Date</i>
Energization	Testing and Commissioning	5	August 25, 2014
	Energization	1	December 18, 2014

1.3.2 Construction Components

The mitigation measures listed in Section 4.3 of this MMCRP include the location and project component(s) in which the mitigation measure applies. In general, the mitigation measures are applicable to all project components; however, certain biological protection measures are component-specific. SDG&E will work closely with contractor staff to ensure that site-specific mitigation measures are clearly identified.

1.3.3 Project Documents

This document is intended to provide pertinent information necessary to successfully implement the MMCRP during construction. The mitigation measures listed in Section 4.3 of this MMCRP can be found in Section 6.0 of the Final IS/MND. Detailed discussions on the intent of each mitigation measure and potential impacts that could result if the mitigation measures are not implemented properly are provided in these sections as well. In addition to the Final IS/MND, construction activities must be conducted in accordance with the requirements stipulated in the following documents:

- SDG&E’s Natural Community Conservation Plan (NCCP)
- State Water Resources Control Board (SWRCB) Natural Pollutant Discharge Elimination System (NPDES) General Construction Permit; Utility Vault Dewatering NPDES Regional Water Quality Control Board (RWQCB): Waiver or Waste Discharge Requirement Permit
- City of San Diego Road Encroachment Permits
- City of San Diego Grading and Structural Wall Permits.

1.4 Agency Jurisdiction

In addition to the CPUC, several local, state, and federal agencies have jurisdiction over lands within the project area. The CPUC, as the lead agency, is responsible for ensuring that mitigation measures reviewed and approved by jurisdictional agencies during the Final

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IS/MND process are implemented throughout construction. However, jurisdictional agencies may visit the project site from time to time and request information regarding the status of a mitigation measure. In addition, SDG&E, under their NCCP, is required to submit survey results to the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW; formerly California Department of Fish and Game (CDFG)) and consult with these agencies when project changes affect the condition of their permit. SDG&E is responsible for satisfying requests from jurisdictional agencies and will notify and copy the CPUC on all correspondences related to final approvals and verifications for the project if not otherwise copied on the correspondence. Additional information on communication protocols can be found in Section 2.3 of this MMCRP. Table 2 lists jurisdictional agencies associated with the project:

**Table 2
Jurisdictional Agencies Associated with the Mira Sorrento Distribution Substation Project**

Required Permits and Approvals		
<i>Regulatory Authority</i>	<i>Agency</i>	<i>Jurisdiction/Purpose</i>
<i>Federal Agencies</i>		
Implementation of SDG&E's Subregional NCCP	USFWS	Activities within NCCP coverage areas that impact biological resources (required only for review of the proposed project; no approval or permit is involved)
<i>State Agencies</i>		
NPDES	California SWRCB	Stormwater discharge
NPDES General Construction Permit	SWRCB	Stormwater discharges associated with construction activities disturbing more than 1 acre of land
Utility Vault Dewatering NPDES	SWRCB	Used to discharge water from utility vaults
Waiver or Waste Discharge Requirement Permit	RWQCB	Discharge of groundwater from excavations
Implementation of SDG&E's NCCP	CDFW	Activities within NCCP coverage areas (required only for review of proposed project; no approval or permit is involved)
<i>Local Agencies</i>		
Road Encroachment Permit	City of San Diego	Construction, operation, and maintenance within, under, or over city road ROW
Grading and Structural Wall Permits	City of San Diego	On-site grading and wall construction activities

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2.0 ROLES AND RESPONSIBILITIES

This section describes the roles and responsibilities of key project personnel with respect to the MMCRP. Figure 1 provides an organizational chart of project members responsible for implementing the MMCRP and their relationship to other staff working on the project. The organization chart also establishes preliminary lines of communication between the project team.

2.1 Organization Overview

2.1.1 San Diego Gas & Electric Company

SDG&E Director Major Projects

SDG&E's director major projects referenced in the contact list (Attachment B) provides the overall direction, management, leadership, and corporate coordination for the construction project. The director's responsibilities related to the environmental program include, but are not limited to:

- Coordinate between financial, safety, public affairs, construction, engineering, land services, and environmental staff
- Provide direction by integrating environmental compliance into all levels of the project organization
- Communicate corporate coordination for all levels of the project organization
- Ensure financial support, corporate leadership, and management staff effectively to comply with all project policies, requirements, and procedures.

SDG&E Project Managers

SDG&E's project managers (PMs) referenced in the contact list (Attachment B) oversee the activities of the assigned construction components. Specific responsibilities of the PMs include, but are not limited to:

- Ensure compliance with project specifications, drawings, permit conditions, construction contracts, and applicable codes
- Notify environmental PM and environmental compliance lead of project schedule changes
- Work with SDG&E Environmental Project Management Team to evaluate and improve the implementation of the MMCRP as construction progresses
- Provide leadership for the engineering, procurement, and construction services by integrating environmental responsibility into the project organization

- Regularly facilitate project meetings
- Ensure all construction personnel receive environmental training (Safe Worker and Environmental Awareness Program (SWEAP))

SDG&E Construction Personnel

Construction activity will take place at any given time within multiple construction components. Construction contractors will have significant responsibilities for implementation of and compliance with the environmental requirements of the project. The contractors will be responsible for incorporating all project environmental requirements into their day-to-day construction activities. Key environmental responsibilities for contractors' staff include, but are not limited to:

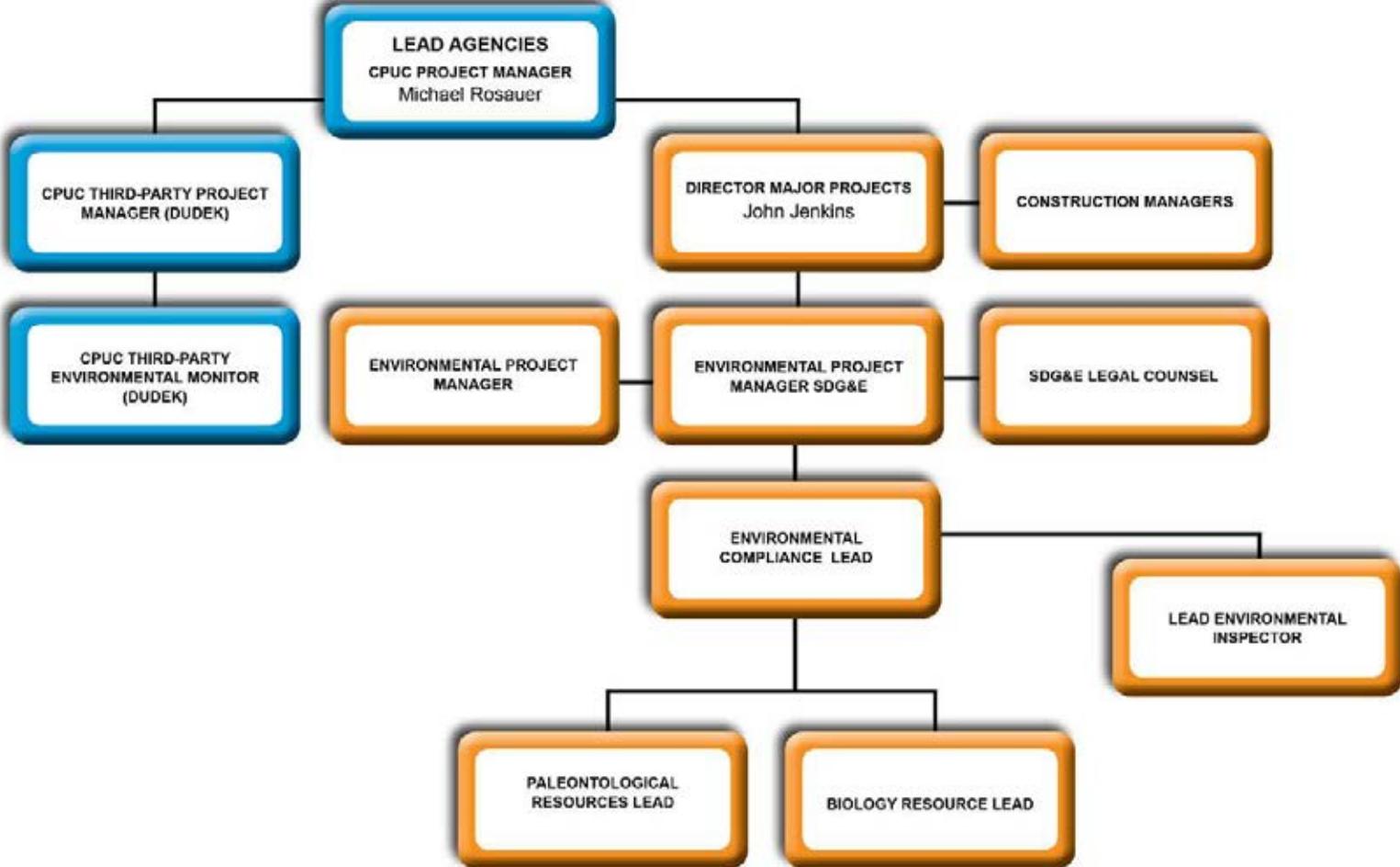
- Verifying that all construction workers attend the project's SWEAP training prior to beginning work on the project
- Reviewing and understanding the environmental requirements
- Implementing and maintaining mitigation measure requirements and conditions during construction
- Responding to requests by SDG&E environmental specialists and environmental monitors during construction.

SDG&E Environmental Project Manager

SDG&E's environmental project manager (EPM) referenced in the contact list (Attachment B) is responsible for providing the appropriate level of resources for successful implementation of the MMCRP. The EPM will provide management, direction, and leadership to the SDG&E Environmental Project Management Team. Specific responsibilities of the EPM, include, but are not limited to:

- Directing the development and implementation of the pre-construction environmental planning, permitting, and compliance activities
- Ensuring the development and implementation of the SWEAP
- Providing the leadership and resources to assure compliance with the MMCRP
- Actively communicating with the lead agencies, particularly in regards to the MMCRP
- Establishing and supporting the lines of communication between the SDG&E Environmental staff, construction personnel, agencies, and EMs.

Figure 1 Organizational Chart



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SDG&E Environmental Compliance Lead

SDG&E's environmental compliance lead (ECL) referenced in the contact list (Attachment B) will provide oversight of all activities required for compliance with the MMCRP. The ECL's responsibilities include, but are not limited to:

- Coordinating and tracking of the submittal process in order to receive NTPs
- Working closely with CPUC EMs to evaluate the effectiveness of mitigation measures
- Providing coordination with construction and engineering groups to ensure mitigation measures are understood and implemented
- Ensuring frequent and clear communication between SDG&E environmental staff, construction personnel, responsible resource agencies, and EMs
- Reviewing and approving daily inspection reports
- Submitting weekly and monthly summary reports to responsible resource agencies, as applicable.

SDG&E Environmental Specialist

SDG&E's environmental specialists referenced in the contact list (Attachment B) will support the ECL for successful implementation, planning, permitting, and compliance activities required under the MMCRP. The environmental specialists' responsibilities include, but are not limited to:

- Coordinating the activities of the biological, paleontological, cultural, air, water, visual, wilderness/recreation, and noise mitigation measure requirements
- Coordinating the development and implementation of the pre-construction environmental planning, permitting, and compliance activities
- Actively communicating with all agencies respective to the above mitigation measure requirements
- Providing technical assistance to the environmental monitors.

SDG&E Lead Environmental Inspector

SDG&E's lead environmental inspector (LEI) in the contact list (Attachment B) will support the ECL for successful day-to-day field implementation of MMCRP. The LEI's responsibilities include, but are not limited to:

- Coordinating with CPUC EMs as appropriate

- Coordinating the mobilization of other resource specialists, including cultural, Native American, paleontological, and a stormwater pollution prevention plan (SWPPP) specialist, as required
- Conducting daily inspection of construction activities
- Assessing work area conditions ahead of construction and providing advance notice of conditions and situations that require specific awareness, planning, or notifications
- Completing daily inspection reports
- Preparing Minor Project Refinement Requests or assisting SDG&E and its contractors with their preparation.

SDG&E Environmental Monitors

Several mitigation measures require a qualified specialty monitor during construction, as presented in Section 4.3. SDG&E is to provide an on-site specialty monitor to meet the conditions of the mitigation measures identified in Section 4.3. The information will be completed as it becomes available and as consultant and contract personnel are finalized. The environmental monitors will provide oversight, protection, and direction for compliance within their field of expertise for the applicable construction components.

Additional SDG&E Roles

SDG&E Public Affairs

The SDG&E regulatory case manager for Regulatory Affairs provides information and guidance to both the Project Construction Management and Environmental Management Teams, as needed.

SDG&E Environmental Law Department

The SDG&E senior counsel for the Environmental Law Department provides information and guidance to both the Project and Environmental Management teams, as needed.

Mitigation Compliance

SDG&E is responsible for successfully implementing all the adopted mitigation measures and Applicant Proposed Measures (APMs) in the MMCRP. The MMCRP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining nondiscretionary permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be imposed by applicable agencies with jurisdiction through the discretionary permit process.

2.1.2 CPUC

CPUC Project Manager

The CPUC project manager (see Attachment B, Project Contact List) has the overall responsibility for ensuring that mitigation measures are implemented as adopted by the CPUC. He will determine the effectiveness of the MMCRP based on the success criteria included in the mitigation monitoring program tables. The CPUC delegates field monitoring and reporting responsibilities to Dudek. The CPUC PM will oversee Dudek's work through telephone calls and review of daily and weekly status reports. The CPUC PM will be notified of all noncompliance situations immediately by telephone call or email and may suggest measures to help resolve the issue(s). All Minor Project Refinement Requests will be submitted to the CPUC PM for review and approval.

The CPUC PM will issue a NTP for construction. In the event the NTP covers CDFW or other jurisdictional lands, the CPUC's NTP does not authorize construction to start, but only documents compliance with all relevant mitigation measures and permit conditions. No construction may occur on other jurisdictional lands without specific approval (i.e., issuance of permits) by those agencies.

CPUC Environmental Monitors

The overall monitoring program will be administered under the direction and oversight of the CPUC PM. The CPUC has delegated daily monitoring and reporting responsibilities to Dudek, a third-party monitoring firm. Individual roles are defined in Attachment B, Project Contact List. The number of CPUC environmental monitors (EMs) and frequency of site inspections will depend on the number of concurrent construction activities and their locations with respect to sensitive resources and land uses, and compliance with project mitigation measures and permit conditions during construction.

SDG&E environmental monitors have primary responsibility for ensuring that construction activities are conducted in accordance with approved project mitigation measures, compliance plans, and permit conditions. The role of the CPUC EMs (Dudek) is to ensure and document that compliance is being achieved using verbal and written communications.

- **Dudek Monitoring Manager.** The monitoring manager supervises Dudek's EMs, as well as determines the appropriate level of inspection frequency, and is responsible for weekly report preparation. The monitoring manager also serves as the main point of contact with the CPUC PM for major issues and noncompliance discussions.

- **CPUC Environmental Monitors (CPUC EMs).** CPUC EMs will be an integral part of the project team and will stay apprised of construction activities and schedule changes, and will monitor construction activities for compliance with project mitigation measures, compliance plans, and permit conditions. The CPUC EMs will document compliance through maintaining daily logs and use of a mitigation measure tracking table. The CPUC EMs will also provide input for the draft weekly reports. The CPUC EMs shall note problems with monitoring, notify designated project members, and report the problems to the CPUC PM. The enforcement and shut-down authority of the CPUC EM in the field is limited to issues that address imminent safety issues or resource danger. All other issues will be brought to the attention of the SDG&E environmental monitors to address appropriately.

Enforcement Authority

The CPUC and other jurisdictional agencies are responsible for enforcing the procedures adopted for monitoring through the CPUC EMs assigned to each project component. Other jurisdictional agencies have the independent authority to halt construction, operation, or maintenance activity associated with the project within their respective jurisdictions if the activity is determined to be a deviation from the approved project or adopted mitigation measures or puts a sensitive resource at undue risk.

2.1.3 Mitigation Monitoring Program Contact List

A Project Contact List has been included as Attachment B. The contact list includes the names of SDG&E and CPUC monitors, project managers, supervisory staff, and other members of the project team. The list also includes phone numbers, fax numbers, and email addresses where project members can be reached during construction. The contact list will be updated periodically and redistributed to the project team.

2.2 Responsibilities

2.2.1 Monitoring

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures and APMs are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. As mentioned above, the CPUC has delegated monitoring responsibilities to a third-party monitoring program. The CPUC EMs will be in the field on a regular basis, particularly when construction activities have the potential to impact a sensitive resource. Responsible agencies, such as the USFWS, CDFW, and RWQCB, may elect to monitor construction or conduct a site visit during construction.

SDG&E may elect to have one or more full-time environmental monitors on site on a daily basis to coordinate specialty monitors and assist construction crews with interpreting mitigation measures and correcting compliance problems in a timely manner. Environmental monitors would also provide environmental training, as required under BIO-3 and HAZ-1, as new workers arrive on the project.

2.2.2 Enforcement

The CPUC is responsible for enforcing the procedures adopted for monitoring through the CPUC EMs assigned to each segment. The CPUC EMs shall note problems with monitoring, notify designated project members, and report the problems to the CPUC PM.

The CPUC has the authority to halt any construction activity associated with the Mira Sorrento Substation Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC has assigned this authority to the CPUC EM in the field.

2.2.3 Mitigation Compliance

SDG&E is responsible for successfully implementing all the adopted mitigation measures in the MMCRP. The MMCRP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds may be imposed by applicable agencies with jurisdiction through the permit process.

SDG&E shall inform the CPUC and its monitors in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC, in coordination with its monitors, will assess whether alternative mitigation is appropriate and specify to SDG&E the subsequent actions required.

2.3 Communication

Communication is a critical component of a successful environmental compliance program. In order to avoid project delays and possible shut-downs, environmental and construction representatives will need to interact regularly and maintain professional, responsive communications at all times. Similarly, SDG&E representatives will need to coordinate closely with CPUC EMs to address and resolve issues in a timely manner. Therefore, this section of the MMCRP provides a communication protocol to accurately disseminate information about on-going surveys and mitigation measures, construction activities, contractors, and planned or upcoming work to all levels of the project.

Pre-construction Kickoff Meeting

A pre-construction meeting will be held with the CPUC, SDG&E, and CPUC EMs to review the MMCRP and mutually agree on the project's communication protocol. Based on discussion at the meeting and input from each party, Section 2 of this document will be finalized and incorporated into the MMCRP.

2.3.1 Construction Progress Meetings

SDG&E will conduct field meetings with construction managers, contract administrators, contractor supervisors, and SDG&E's environmental representatives to discuss work completed, work anticipated for the following period, and the status of mitigation measures. The field meetings will also be a forum for discussing environmental compliance issues or concerns with the construction contractors. SDG&E may request CPUC's EM(s) to participate in the meeting to help resolve any issue that may have arisen during the previous period. Alternatively, SDG&E or CPUC's EM(s) may recommend a separate meeting to discuss mitigation, variance requests, or other project-related issues.

In addition to construction progress meetings conducted at the field level, the SDG&E PM, SDG&E construction manager, SDG&E EM, and the CPUC Lead EM and/or CPUC PM may participate in a teleconference calls. The teleconference calls would be similar to construction progress meetings; however, the conference calls would focus on the MMCRP.

2.3.2 Daily Communication

Many of the problems that come up during construction can be resolved in the field through regular communication between CPUC EMs, SDG&E, and construction contractors. Field staff will be equipped with cell phones and available to receive phone calls at all times during construction. A Project Contact List has been included in Attachment B. The organization chart (Figure 1) provided in Section 2.0 generally shows the lines of communication to be used during construction. The following sections provide additional guidelines to ensure effective communication in the field.

CPUC EM

The CPUC EM's primary point of contact in the field is SDG&E's field representative. The CPUC EM will contact SDG&E's field representative if an activity is observed that conflicts with one or more of the mitigation measures, so that the situation can be corrected. If the CPUC EM cannot immediately reach SDG&E's field representative, then the SDG&E EM or SDG&E environmental manager will be contacted to address the problem. Similarly, the CPUC EM will contact SDG&E's EM for information on where construction crews are working, the status of mitigation measures, and schedule forecasts. The CPUC EM will not

direct the contractor; however, the EM has the authority to stop work, assuming it is safe to do so, if an activity poses an imminent threat or puts a sensitive resource at undue risk (e.g., stopping a clearing crew from unknowingly cutting coastal sage scrub in an exclusion area).

SDG&E

SDG&E will provide the CPUC EM with a list of construction monitoring personnel and construction supervisory staff to contact regarding compliance issues. The contact list will include each person's title, responsibility, and whether their position is segment-specific. The contact list will be updated as new project personnel are assigned to the project and redistributed as necessary.

SDG&E will prepare and distribute a weekly environmental compliance status report to key project members, including the CPUC. The weekly environmental compliance status reports may be reduced to bi-weekly if construction activities warrant a reduction and is approved by the CPUC PM. The CPUC PM will review the report to ensure that the status of mitigation measures is consistent with observations in the field. Any questions regarding the status of mitigation measures will be directed to the SDG&E field representative. The environmental compliance status report will also be a tool to keep all parties informed of construction progress and schedule changes.

2.3.3 Communicating Compliance Issues

Section 3.1.2 below describes procedures to communicate incidences and noncompliances identified by the CPUC EMs during site inspections.

2.3.4 Coordination with Other Agencies

As discussed in Section 1.4, several local, state, and federal agencies have jurisdiction over portions of the project. In addition, many of the mitigation measures were derived from specific permit conditions or agency input. SDG&E will be responsible for contacting resource agencies and immediately notifying them of issues regarding their jurisdiction. The CPUC EM may request copies of email correspondences, phone logs, or other documentation between SDG&E and resource agencies to avoid direct involvement from CPUC EMs. However, if there is an unresolved issue regarding compliance with a mitigation measure or permit requirement under the jurisdiction of a resource agency, the CPUC EM may elect to contact the agency to discuss resolution. The CPUC EM will coordinate this call with SDG&E and provide the opportunity to participate in the call.

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3.0 ENVIRONMENTAL COMPLIANCE AND FIELD PROCEDURES

3.1 Mitigation Measures Compliance and Reporting

3.1.1 Pre-Construction Compliance Verification

SDG&E is required by the terms of the mitigation measures and the permitting requirements of various other regulating agencies to prepare plans and obtain approval of these documents, in addition to performing various surveys and studies prior to construction. Copies of this documentation will be retained by the CPUC EMs and provided to the CPUC with all files at the completion of the project. The plans, surveys, studies, and other documentation required to be completed by SDG&E before construction are listed in the mitigation measure and APM tables in Sections 4.3 and 4.4.

While these documents are being reviewed by the approving agencies, they are also reviewed by the CPUC. Compliance with all pre-construction mitigation measures and APMs presented will be verified prior to construction, and construction may not start on any segment before SDG&E receives a written NTP from the CPUC PM.

The CPUC EMs, including project management staff and the technical experts, will review all mitigation plans and reports and provide comments. Resource agencies will also be involved in the review of applicable plans and reports, primarily restoration-related, and will provide comments. Comments on these documents will be provided to SDG&E to ensure that they adequately accomplish the intended reduction in impacts. For required local and state agency permitting/consultations, the CPUC EMs will track SDG&E's progress as it relates to SDG&E's construction plans and project mitigation and permitting requirements. Based on SDG&E's construction plans, CPUC may authorize construction to begin on a phased basis, and the CPUC EMs will handle pre-construction compliance review accordingly. CPUC may issue NTPs for construction of each phase separately, as soon as pre-construction compliance is satisfactorily accomplished for that phase.

The CPUC will not authorize construction to begin until all pre-construction requirements have been fulfilled for a given phase. To save time, SDG&E should identify extra work space needs required for each phase of construction prior to the start of active construction, so that the locations and their use can be included in the NTP.

3.1.2 Notice to Proceed Procedures

The CPUC PM and Dudek will ensure that the NTP process is consistent with the adopted CEQA document. The NTP approval shall document that pre-construction mitigation measure requirements, applicable surveys and studies, as well as project permit requirements have been met.

In general, an NTP request must include the following information:

- A description of the work
- Detailed description of the location, including maps, photos, and/or other supporting documents
- Verification that all mitigation measures and APMs have been met or do not apply to the work covered by the NTP request
- Verification that all applicable permit conditions or requirements, project parameters, or other project stipulations have been met for the work covered by the NTP request
- In the case where some outstanding compliance items cannot be met prior to issuance of the NTP, a request shall be submitted that outlines what submittals are outstanding and how they will be met and approved in a timely manner prior to construction
- Up-to-date biological resource surveys or a commitment to survey and submit results prior to construction
- Cultural resource surveys or verification that no cultural resources would be significantly impacted
- All applicable jurisdictional permits or agency approvals (if necessary)
- Date of expected construction and duration of work.

CPUC will review the NTP request and pre-construction requirement submittals per the steps outlined below to ensure that all of the information required to process the approval is included.

1. SDG&E submits NTP to the CPUC PM. CPUC will distribute the NTP request for review as follows:
 - a. To the team biological resources expert for review for biological resources. Review questions/comments will be provided in a letter or email.
 - b. To the team cultural resources expert for review of cultural resources. Review questions/comments will be provided in a letter or email.
 - c. The remaining portions of the NTP request will be sent to issue-area reviewers where appropriate.
2. CPUC will also review and, if needed, will prepare a bullet list of outstanding requirements and where additional information or clarification is needed.
3. All questions and comments, as well as required additional information or clarifications, shall be sent to SDG&E by CPUC in an email.

4. SDG&E will supply clarifications and/or additional information to be added to the NTP request in a memo or letter format along with responses addressing all comments and questions forwarded by CPUC.
5. CPUC will complete a Compliance Status Table documenting compliance and any outstanding requirements that can be made conditions of the NTP.
6. CPUC will review the draft NTP approval letter and send the approval and an updated compliance table to SDG&E.
7. CPUC will then post the approved NTP documentation on the public CPUC project website.

3.1.3 Compliance Reporting

As described in Section 2.0, the CPUC EMs will perform compliance inspection throughout the construction period to ensure compliance with all applicable mitigation measures, plans, permits, and conditions of approval of the CPUC. Site visits may be coordinated with SDG&E or conducted unannounced. Supplemental information provided by SDG&E, including pre-construction submittals, survey reports, weekly reports, meeting notes, and agency correspondences, will also be used to verify compliance.

The CPUC EMs will document observations on site through the use of field notes and digital photography. The photos will be provided in the weekly reports and correlate to a discussion of specific construction or compliance activity. In addition, field inspection forms will be utilized in the field to document compliance of specific crews, construction activities, or resource protection measures. The forms will provide a standardized checklist to facilitate inspections, as well as list mitigation measures that were verified during the site visit. Information gathered from the inspection forms and field notes will be used to generate weekly status reports and update the status of mitigation measures listed in Sections 4.3 and 4.4. A sample site inspection form has been included in Attachment C. Weekly reports will be provided to all permitting agencies via email and/or posted on a CPUC public website during construction.

Separate enforcement actions by the regulatory agencies may not follow these steps.

3.1.4 Compliance Levels

The CPUC/ EM and SDG&E LEI shall document all observations and communications in a logbook and will determine whether the observed construction activities are consistent with mitigation measures, APMs, and project parameters, as adopted by the CPUC. All compliance issues regardless of level will be documented in the daily/weekly reports, which will be provided to all agencies upon request.

The CPUC EM shall not direct the work of a construction contractor or subcontractor. A construction activity that deviates from permit conditions or mitigation measures, particularly when the activity puts a resource at risk, would be considered a noncompliance. A noncompliance issue may also be reported by the SDG&E LEI and/or CPUC EM if a mitigation measure is not implemented according to the timing restrictions listed in the mitigation measure tables. Examples of noncompliances include, but are not limited to:

- Use of new access roads, staging areas, or extra workspaces not identified on the project drawings or approved for use during construction
- Encroachment into an exclusion zone or sensitive resource area designated for avoidance
- Brush clearing outside the approved work limits
- Activity during seasonal activity restrictions
- Grading, foundation, or line work without required biological pre-construction surveys or biological monitor on site
- Failure of erosion or sediment control structures if it puts a sensitive resource at risk
- Discharge of sediment-laden trench or foundation hole water into a waterbody or storm drain.

SDG&E will immediately notify the CPUC EM and the CPUC PM if any noncompliance events occur, verbally or through email. SDG&E will follow up with a detailed written report of the event within 24 hours or at a time agreed upon with the CPUC PM. In the event the noncompliance is observed by a CPUC EM, the CPUC EM will immediately notify the designated SDG&E representative of a noncompliance that requires immediate corrective action. A noncompliance report will be sent to SDG&E from the CPUC PM that outlines the incident. The NCR shall list all actions required to bring the activity back into compliance, and provide a timeline for follow-up. All NCRs and Project Memoranda will be made available upon request to agencies with resources that were potentially affected by activities reported in the NCR. If a construction activity or observed resource protection measure only slightly deviates from project requirements and does not put a resource at immediate risk, the CPUC EM and/or SDG&E LEM may elect to issue a Project Memorandum to get the issue corrected. Construction activities that could result in a Project Memorandum include, but are not limited to:

- Failure to properly maintain an erosion or sediment control structure, but structural failure has not occurred
- Use of an existing unapproved access road (first offense)

- Project personnel begin work on site without proof of training
- Work outside the approved work limits where the incident is within a previously disturbed area, such as a gravel lot.

Through the issuance of Project Memoranda and NCRs, patterns of compliance issues can be discerned; preventative measures can be developed; and remedial work, if needed, can be scheduled.

Incident reports (e.g., reportable spills) would also be tracked in the Weekly Reports. Repeated events that individually might not be considered noncompliance may become noncompliance if continued occurrence after initial incident is observed and documented. In other words, repeated incidents will result in noncompliance.

Compliance and Noncompliance Violation Levels

Project compliance and noncompliance violation levels and the specific corrective actions are defined below. The compliance and noncompliance violation levels should be utilized by both SDG&E LEIs and CPUC EMs to document compliance levels throughout construction.

- ***Level 0 Compliance.*** This level indicates that all mitigation measures and permit conditions are being complied with and there are no violations. No corrective action is necessary.
- ***Level 1 Minor Deviation.*** This level indicates that a minor deviation from a mitigation measure has been identified and action is being taken in the field to immediately remedy the situation. No resources are being impacted and no potential for resource damage exists. If a minor deviation is not expeditiously corrected, it would become a Level 2 Noncompliance issue.
- ***Level 2 Noncompliance.*** One or more aspects of a mitigation measure have not been complied with, making the mitigation ineffective and resulting in minor impacts. If allowed to continue, this noncompliance could result in a significant impact over time. A noncompliance may also include one or more of the aspects of a mitigation measure are not complied with and the implementation of a mitigation measure is deficient or nonexistent, resulting in significant impact(s), or there is immediate threat of major, irreversible environmental damage or property loss. The protocol outlined above for an NCR shall be completed in the event noncompliance is identified by a CPUC EM and/or SDG&E LEI.

All noncompliance activity will be reported by Dudek and/or SDG&E LEI to the CPUC PM via immediate notification or daily or weekly reporting based on the severity of the non-compliance.

Based on the severity or pattern of noncompliance activity, the CPUC PM has the authority to shut down project construction activities. If a shutdown of construction activity occurs, construction shall not resume until the CPUC PM authorizes it to do so. No Dudek personnel has the authority to shut down or restart construction activities on a component- or project-wide scale. However, the CPUC EM has the authority to redirect work if an immediate threat to safety or a sensitive resource is imminent.

3.2 Project Changes

At various times throughout the project, the need for extra workspace or additional access roads may be identified. Similarly, changes to the project requirements (e.g., mitigation measures, specifications) may be needed to facilitate construction or provide more effective protection of resources. The project team should work together to find solutions when variations or adjustments are necessary for specific field situations to avoid conflicts with adopted mitigation measures or specifications.

The CPUC PM along with the CPUC EMs will ensure that any variance process or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements. No project variance will be approved by the CPUC if it creates new significant impacts. A variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure.

A proposed project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project, adopted mitigation measures, APMs, and correction of such deviation, will be reported immediately to the CPUC EM for their review. The CPUC EM will review the variance request to ensure that all of the information required to process the variance is included and then forward the request to the CPUC PM for review and approval. The CPUC PM may request a site visit from the CPUC EM or need additional information to process the variance. In some cases, a variance may also require approval by jurisdictional agencies. In general a variance request must include the following information:

- A detailed description of the proposed refinements, including an explanation of why the refinements are necessary, and a reference to the approved documents
- Photos, maps, and other supporting documentation illustrating the difference between the existing conditions in the area, the approved project, and the proposed refinements
- The potential impacts of the proposed refinements, including a discussion of each environmental issue area that could be affected by the refinements with accompanying

verification that there will be no substantial increase in the severity of any previously identified significant impacts to resources affected by the project and no new significant impacts, after application of previously adopted mitigation

- Whether the refinements conflict with any APMs or mitigation measures
- Whether the refinements conflict with any applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy
- Water/wetland/stormwater related resource information if the refinements would result in any additional land disturbance, road distance or width, changes to jurisdictional delineation of waters, or changes to water protection best management practices (BMPs)
- Date of expected construction at the refinements site area.

The CPUC PM may request additional information or a site visit in order to process the request.

A sample variance request form is included as Attachment D.

3.3 Records Management

Daily inspection and weekly status reports will be filed and used by the CPUC third-party EM to prepare a final environmental compliance report following the completion of construction. The final report will provide a discussion on how each mitigation measure was implemented and include copies of submittals required for compliance. In addition, the success criteria will be evaluated and used for future projects.

3.4 Public Access to Records

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available by the CPUC for public inspection on request. In order to facilitate the public's awareness, the CPUC will make weekly reports and other pertinent project documents available on the project, accessible at <http://www.dudek.com/cpuc/sdge-mira-sorrento/>.

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4.0 MITIGATION MONITORING PROGRAM TABLE

4.1 Using the Table

Section 4.3 below lists the mitigation measures included in the Final IS/MND and the CPUC Decision dated December 27, 2012. The Mitigation Monitoring Program table is the core document for environmental requirements on the project and will be the primary guideline for determining compliance with the MMCRP. A copy of the table should be kept with each crew working on site, and all supervisory staff working on the project should be familiar with its contents.

The CPUC will use a modified version of the mitigation measure tables during the pre-construction planning and construction monitoring phases of the project to accurately track the status of mitigation measures. The tables will be sorted and divided into pre-construction measures and measures to be implemented during construction. Similarly, a separate table listing mitigation measures that require CPUC approval may be generated. The modified tables will also include a status column that will be updated on a regular basis. Attachment E provides an example of a mitigation table that has been modified for tracking purposes.

4.2 Effectiveness Review

The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate. If in review the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts. These reviews will be conducted in a manner consistent with the CPUC's rules and practices.

4.3 Mitigation Measures

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
<i>Aesthetics</i>						
Operation of the proposed project could result in long-term visual impacts.		APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the substation components. The conceptual landscape plan would provide partial screening of views of the substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities. The Mira Mesa Community Planning Group will review any changes made to the conceptual landscaping plan prior to approval.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify proposed shrub and tree planting locations through review of pre-construction plans. CPUC to verify measure implementation in the field. Effectiveness measure is that the visibility of the substation is partially screened by surrounding landscaping.	During and following construction. Measure applies to landscaping installed at the Mira Sorrento Substation.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
Operation of the proposed project could result in long-term visual impacts.		APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to verify proposed color palette of substation perimeter wall through review of pre-construction plans. CPUC to verify in the field. Effectiveness criteria – wall color blends with the existing site features and is consistent with the existing landscape setting.	During and following construction. Measure applies to Mira Sorrento perimeter wall.
<i>Biological Resources</i>						
Construction of the proposed project could result in temporary and/or permanent loss of native vegetation, direct or indirect loss of listed/ sensitive plants or habitat for sensitive plants, and direct or indirect loss of listed/sensitive wildlife or habitat of sensitive wildlife.		APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM-BIO-2.	SDG&E to implement NCCP Operational Protocols as defined and incorporate commitments into construction contracts.	CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Operational Protocols.	Prior to and during construction at the Mira Sorrento Substation Project site.
Construction of the proposed project could result in direct or indirect loss of		APM-BIO-2	In accordance with the NCCP, SDG&E will conduct the following: Whenever practicable, all grading or brushing occurring	SDG&E to implement measure as defined and incorporate	SDG&E to provide survey report documentation to CPUC regarding avoidance and USFWS/	Prior to and during construction for all areas

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
listed/sensitive plants or habitat for sensitive plants and direct or indirect loss of listed/sensitive wildlife or habitat for sensitive wildlife.			<p>within occupied CAGN habitat shall be conducted from September 1st through February 28, which is outside of the CAGN breeding season.</p> <p>When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply:</p> <p>A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area.</p> <p>If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest.</p> <p>If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the vicinity. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in</p>	commitments into the construction contracts.	CDFW concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible implementation of USFWS/CDFW-approved measures deemed necessary.	identified as having CAGN.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			<p>other areas until the young have fledged.</p> <p>With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.</p>			
Construction activities could impact rare plants species.	BIO-1		<p>Prior to construction, SDG&E shall retain a qualified biologist to conduct a focused rare plant survey for the entire proposed impact area within the project area during the time period when the special-status plant species are detectable. Locations of rare/special-status plants shall be identified and inventoried. If special-status plants are identified during surveys, then SDG&E shall retain a qualified biologist to supervise construction activities within the vicinity of the special-status plant species. If impacts to special-status plant species are unavoidable, the biologists shall recommend avoidance or mitigation approaches. Alternatively, if the special-status plant species in question is a covered species within the SDG&E Subregional NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified on site shall be provided to CPUC prior to any construction activities including clearing, staging, grading, etc.</p>	SDG&E to implement measure as defined.	CPUC to review and verify completion of rare plant survey. If rare plants are identified, CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. Alternatively, if special-status plant in question is a covered species within the SDG&E Subregional NCCP, CPUC to inspect periodically during construction to ensure SDG&E is conducting activities in accordance with NCCP Operational Protocols.	CPUC to review survey prior to construction and if rare plants are identified and a monitor is required, CPUC to inspect site periodically during construction.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
Construction activities could impact sensitive wildlife species.	BIO-2		<p>SDG&E shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor project construction. Monitors shall be hired and trained prior to construction and shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.), on-site monitoring, documentation of violations and compliance, coordination with construction inspectors, and post-construction documentation. The SDG&E on-site biological monitors shall prepare weekly reports during ground-disturbance activities and send them to the CPUC and the CPUC monitors. The SDG&E on-site biological monitors shall prepare a post-construction compliance report within 60 days of the end of ground-disturbance activities and send it to the CPUC.</p> <p>SDG&E's monitors shall be responsible for obtaining clearance from the CPUC and, if necessary, resource agencies for project modifications. All project modifications variances will be documented and none will be allowed with verbal approval only. Project modifications that are considered minor with little risk to sensitive resources by the SDG&E on-site biological monitors and the CPUC biological monitors may be approved on the site but will be documented. Project modifications that could affect sensitive resources but are required to ensure the health and safety of work crews shall also be documented.</p>	SDG&E to implement measure as defined.	CPUC to inspect periodically during construction to ensure on-site monitor presence and successful avoidance of sensitive species. SDG&E to provide weekly reports to CPUC and CPUC monitors regarding avoidance of sensitive species. SDG&E to provide post-construction compliance report to CPUC within 60 days of end of ground-disturbing activities.	Prior to and during construction.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
Construction of the proposed project could impact sensitive wildlife species.	BIO-3		SDG&E shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foremen) before construction activities begin within any of the sensitive habitat areas. The WEAP shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area (including their habitat requirements and an identification of portions of the project site and adjacent areas where they might be found) and their legal status and protection. The program shall cover all mitigation measures; environmental permits and proposed project plans, such as best management practices (BMPs); erosion control and sediment plan; reclamation plan; and any other required plans. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period. A list of all personnel who have attended the WEAP training shall be kept by the biological monitor and shall be available for CPUC review in the field at all times, and a copy shall be submitted to the CPUC. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide a copy of the worker training program for review and approval at least 30 days prior to start of construction. SDG&E to provide verification to CPUC of implementation of worker training program and compliance with measure as defined through providing sign-in sheets from each scheduled training session. All construction personnel that have been trained shall receive a sticker for their hard hat indicating they have completed environmental awareness training.	Prior to and during construction.
Construction of the proposed project could	BIO-4		At the end of each workday, any open holes shall be fully covered, after they have been inspected by the	SDG&E to implement measure	SDG&E to provide verification to CPUC of	Prior to and during

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
result in the potential for wildlife to be trapped in ditches during trenching activities.			on-site biologist, with steel plates or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. SDG&E shall specify this requirement in its agreements with all construction contractors.	as defined and incorporate commitments into construction contracts.	measure including submittal of construction contract. Survey efforts will be documented by the biologist in the daily log and reported to the CPUC at the end of each week.	construction.
Construction of the proposed project could impact nesting birds.	BIO-5		If construction activities including but not limited to grading or site disturbance are to occur between March 1 and September 1, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 100 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA. If an active nest (defined by the presence of eggs or young) is identified, grading or site disturbance within a 100-foot buffer of the nest shall be monitored by a qualified biologist daily until project activities are no longer	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	SDG&E to provide survey report documentation to CPUC regarding avoidance and CDFW concurrence as necessary. CPUC to inspect periodically during construction in order to ensure successful avoidance if possible/or if not possible,	Prior to and during construction for all areas within 100 feet of construction activities.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			occurring within 100 feet of the nest or until fledglings become independent of the nest. The monitoring biologist may increase the buffer radius if he or she determines it is necessary. The monitoring biologist may decrease the buffer radius if he or she determines that the construction activities are not disturbing the nesting activities and a smaller buffer is more appropriate. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the California Public Utilities Commission.		implementation of additional mitigation shall occur.	
Construction of the proposed project could	BIO-6		Where impacts to Diegan coastal sage scrub and native grasslands cannot be avoided, SDG&E shall	SDG&E to implement measure	SDG&E to provide documentation of habitat	Prior to, during, and

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
impact sensitive habitat.			restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFW, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary	as defined and incorporate commitments into construction contracts.	credit deductions to CPUC. CPUC to ensure that commitments have been incorporated into contract specifications. CPUC to inspect periodically to ensure that disturbed areas have been restored to pre-construction conditions. SDG&E to provide documentation to CPUC regarding revegetation status and USFWS/CDFW concurrence as necessary. Effectiveness criteria: temporarily disturbed areas are revegetated and meet identified success criteria. Permanent impacts to sensitive natural communities are mitigated through deduction of habitat credits.	following construction. This measure applies to all areas where impacts to sensitive natural communities are unavoidable and to all areas where habitat restoration is proposed.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			<p>impacts, restoration/hydroseeding may not be necessary. This applies to impacts 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's mitigation credits at a 1:1 ratio.</p> <p>In addition, SDG&E shall mitigate for permanent impacts to Diegan coastal sage scrub (all subtypes) and native grassland at a ratio of 1:1 for all permanent impacts that would result from construction activities. Evidence shall be provided to the CPUC that 0.9 acre of coastal sage scrub and 0.1 acre of native grasslands have been deducted from NCCP credits.</p>			
<i>Cultural Resources</i>						
Construction of the proposed project could affect paleontological resources.		APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	SDG&E to provide CPUC documentation demonstrating qualifications of identified paleontologist.	Prior to and during construction.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
Construction of the proposed project could affect paleontological resources.		APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	CPUC to inspect periodically during construction to ensure on-site monitor presence.	Prior to and during construction.
Construction of the proposed project could affect paleontological resources.		APM-CUL-3	In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth,	SDG&E to provide a qualified paleontologist and incorporate monitoring requirements into construction plans.	CPUC and SDG&E monitor to ensure work is diverted/temporarily suspended upon discovery of resources to allow timely recovery of fossil remains. CPUC to review the evaluation of significance and ensure implementation of evaluation procedures. SDG&E to provide summary report of mitigation program to CPUC.	During construction in all work areas where fossils are encountered.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.			
Construction of the proposed project could affect undiscovered cultural resources.	CUL-1		<p>In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of SDG&E, California Public Utilities Commission (CPUC), and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards.</p> <p>In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine</p>	If necessary during monitoring, SDG&E's archaeologist to prepare Archaeological Data Recovery Program (ADRP) and meet with and submit to CPUC for review within 2 weeks of discovery. SDG&E to implement data recovery as specified in ADRP.	CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. CPUC to review completed ADRP. SDG&E to provide summary report of mitigation program to CPUC. The qualifications of the archaeologist shall be approved by the CPUC.	During construction in all work areas where prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			<p>whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:</p> <p>Redesign the project to avoid any adverse effect on the significant archaeological resource</p> <p>If the resource is significant, implement an archaeological data recovery program (ADRP) as mitigation. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the</p>			

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the archaeological resource that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.			
Construction of the proposed project could affect undiscovered Native American human remains.	CUL-2		If human remains are discovered, there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until the project applicant has immediately notified the county coroner and otherwise complied with the provisions of State CEQA Guidelines, Section 15064.5(e). If the remains are found to be Native American, the county coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the NAHC and given the opportunity to make proper disposition of human remains. If the NAHC is unable to identify the most likely descendant (MLD), or if no recommendations are made by the MLD within 48 hours, human remains and any associated burial items shall be reinterred with appropriate dignity in a location not subject to further subsurface disturbance. If recommendations for a reburial location are made by SDG&E and not accepted by the MLD, the NAHC will mediate to reach agreement.	SDG&E to provide qualified archaeologist to monitor during ground-disturbing activities. SDG&E to contact county coroner if human remains are found. Coroner to contact NAHC if appropriate.	CPUC and NAHC to review extraction plan if needed. CPUC and SDG&E monitor to ensure work is suspended upon discovery of resources to ensure avoidance of all significant cultural resources. If avoidance is not possible upon conclusion of evaluations, data recovery research program exhausts potential of site to yield further important information. The qualifications of the qualified archaeologist shall be provided to the CPUC.	During groundbreaking activities in all construction areas.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
<i>Geology and Soils</i>						
Construction of the proposed project could expose people or structures to potential substantial adverse seismic effects and the proposed project would be located on unstable and expansive soils.		APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's geotechnical engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.	SDG&E to implement measure as defined and incorporate commitments into construction contracts. SDG&E to provide copies of geotechnical investigation reports to the CPUC prior to construction of the proposed project.	CPUC to verify incorporation of recommendations and findings on preconstruction plans (if necessary).	Prior to construction. This measure applies to all components of the proposed project.
<i>Hazards and Hazardous Materials</i>						
Construction of the proposed project could result in hazardous substance spills during transport, use or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.		APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	Plans to be submitted to CPUC, County of San Diego Department of Environmental Health (DEH), and City of San Diego Fire Department – Hazardous Materials Division.	CPUC to verify submittal of plans. CPUC to verify and ensure that potential exposure of workers, the public, or the environment to hazardous materials in contaminated soil and/or groundwater has been minimized.	Prior to and during construction.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
Construction of the proposed project could result in hazardous substance spills during transport, use, or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-1a		Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.	SDG&E to conduct training program as described and incorporate measure into construction contracts. SDG&E to provide documentation of contractor and subcontractor training to the CPUC.	SDG&E to submit evidence of training in order for CPUC to verify.	Prior to construction.
Construction of the proposed project could result in hazardous substance spills during transport, use, or disposal and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.	HAZ-1b		The hazardous substance management and emergency response plan proposed by APM-HAZ-1 shall be reviewed and approved by the California Public Utilities Commission (CPUC) and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code §25503.4, §25503.5, and §25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division, guidance on Hazardous Materials Business Plans.	Plans to be submitted to CPUC and San Diego County DEH.	SDG&E to submit plans in order for CPUC and San Diego County DEH to verify.	Prior to construction.
Construction of the proposed project could result in hazardous	HAZ-1c		SDG&E shall prepare and submit a copy of the Spill Prevention, Control, and Countermeasure plan, as required by Title 40 CFR, Section 112.7, to the	Plan to be submitted to CPUC and San Diego County DEH.	SDG&E to prepare plan and submit in order for CPUC and San Diego	Plan submitted 60 days prior to

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
substance spills during transport, use, or disposal, and construction could create a significant hazard to the public through accident conditions involving the release of hazardous material.			California Public Utilities Commission for review and approval at least 60 days before the start of operation of the Mira Sorrento Substation.		County DEH to verify.	the start of operation of the Mira Sorrento Substation.
Construction of the proposed project could result in significant risk of loss, injury, or death involving wildland fires.	HAZ-2		Wildfires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire. In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fires extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.	SDG&E to implement measure as defined and incorporate compliance requirements into construction contracts.	CPUC to verify through review of preconstruction plans. CPUC to verify in the field.	Prior to and during construction.
<i>Hydrology and Water Quality</i>						
Construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.		HYD-1	SDG&E will prepare an SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	SDG&E to implement measure as defined and incorporate commitments into construction contracts.	CPUC to ensure that commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure minimization of disturbance and erosion. SDG&E to	Prior to and during construction. This measure applies to grading activities and substation

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
					submit SWPPP to CPUC in order to verify.	operations.
Potential dewatering activities during construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HY-1		SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering all of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.	SDG&E to implement measure as defined.	CPUC to review documentation of coordination with RWQCB. If necessary, SDG&E to provide applicable permit/waiver to CPUC to verify.	Prior to construction.
Potential dewatering activities during construction of the proposed project could result in a violation of water quality standards or waste discharge requirements.	HY-2		SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.	SDG&E to implement measure as defined and incorporate into construction plans. Monitoring procedure to be incorporated into construction contracts.	SDG&E to provide dewatering drawing to CPUC in order to verify.	Prior to construction.
<i>Noise</i>						
Construction of the proposed project could result in a substantial temporary or periodic increase in ambient noise levels in the	NOI-1		SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all property owners within 300 feet of construction. The announcement shall state specifically the construction start date, anticipated completion date, and hours of construction.	SDG&E shall conduct public notification as defined.	SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given.	Notification provided prior to construction to all property owners

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
project vicinity.						within 300 feet of construction.
Construction of the proposed project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity.	NOI-2		SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighborhood receptors, including residents, about construction noise disturbance. Procedures for reaching the public liaison office via telephone or in person shall be included in notices distributed to the public in accordance with MM NOI-1. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the California Public Utilities Commission).	SDG&E to implement measure as defined.	CPUC to verify SDG&E employ of public liaison person and ensure procedures for reaching the public liaison are in place. SDG&E to provide CPUC with construction notices for review and approval to ensure advance notice has been given.	Prior to and during construction. Notification provided to CPUC prior to construction.
<i>Transportation/Traffic</i>						
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the circulation system, and construction activities could increase hazards due to a design feature or incompatible use.	TT-1		Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City of San Diego as part of the required traffic encroachment permits. Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the California Public Utilities Commission (CPUC) prior to the start of construction. The TMPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) Traffic Manual for Construction and Maintenance Work Zones	SDG&E to prepare TMPs as defined.	SDG&E to implement the measure as defined subject to the following clarifications. SDG&E will prepare Traffic Control Plans (TCPs) in accordance with the requirements of the City of San Diego, which may include references to guidelines outlined in the Traffic Manuals listed.	Prior to construction.

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
			<p>(Caltrans 1996), the Standard Specifications for Public Works Construction (Caltrans 2009a), and the Work Area Traffic Control Handbook (WATCH) (Caltrans 2009b). Measures identified in the TMPs to include but not be limited to:</p> <p>The proposed gates must be located and operated so there will not be traffic backed up onto Mira Sorrento Place during peak times.</p> <p>No lane closure will be allowed to occur on Mira Sorrento Place or Vista Sorrento Parkway during the AM and PM peak hours to minimize disruption from construction traffic.</p> <p>The traffic control plan shall ensure that access remains available to all private properties at all times.</p> <p>Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.</p>		<p>Measures identified in the TCPs will include all those defined in the mitigation measure. All TCP approval documentation from the City of San Diego will be provided to the CPUC prior to the start of construction; however, it is uncertain that the City will issue an approval letter with the approved TCPs. Regarding lane closure, The TCPs may include temporarily shifting the northbound travel lanes over to the center turn lane which would be considered to be a travel lane diversion and not a lane closure.</p>	
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the	TT-2		<p>SDG&E shall stagger work shifts during the peak period of construction activity, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak hours (7:30–8:30 a.m. and 4:30–5:30 p.m.). Construction-related truck traffic shall also be scheduled to avoid travel during peak periods</p>	<p>SDG&E to implement measure as defined and incorporate commitments into construction</p>	<p>CPUC to verify commitments have been incorporated into construction contracts. CPUC to inspect periodically to ensure truck traffic avoids peak</p>	<p>Prior to and during construction.</p>

**Table 3
Mitigation Measures**

Mitigation Monitoring Program Table						
<i>Impact</i>	<i>MM</i>	<i>APM No.</i>	<i>Mitigation Measure/Applicant Proposed Measure</i>	<i>Implementation Actions</i>	<i>Monitoring Requirements and Effectiveness Criteria</i>	<i>Timing of Action and Location</i>
circulation system.			of traffic on the surrounding roadways.	contracts.	traffic periods on surrounding roadways.	
Construction of the proposed project could conflict with an applicable plan, ordinance, or policy regarding the performance of the circulation system.	TT-3		Construction workers shall be encouraged to carpool to the job site to the extent feasible.	SDG&E to implement measure as defined.	CPUC to verify.	During construction.

Applicant Proposed Measure (APM) – As part of project design and in order to avoid certain environmental impacts, SDG&E has included design features (e.g., APMs) in the project design. The APMs are considered part of the project design, but project approval is contingent upon SDG&E’s adherence to all aspects of the Proposed Project as described in this document, including project description, APM and mitigation measures (MM) proposed by the CPUC.

4.4 Applicant Proposed Measures

**Table 4
Applicant Proposed Measures (APMs) for Each Issue Area**

Applicant Proposed Measures for Each Issue Area	
<i>Issue Area</i>	<i>APM Number</i>
Aesthetics	AES-1 and 2
Biological Resources	BIO-1 and 2
Cultural Resources	CUL-1, 2, and 3
Geology and Soils	GEO-1
Hazards and Hazardous Materials	HAZ-1
Hydrology and Water Quality	HYD-1

**Table 5
Applicant Proposed Measures (APMs) for Each Issue Area per Proposed Project Component**

Applicant Proposed Measures			
<i>APM Number</i>	<i>Description</i>	<i>Proposed Project Component</i>	
		<i>Mira Sorrento Substation</i>	<i>TL 665 Loop-In</i>
<i>Aesthetics</i>			
APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the substation components. The conceptual landscape plan would provide partial screening of views of the substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities. The Mira Mesa Community Planning Group will review any changes made to the conceptual landscaping plan prior to approval.	✓	✓
APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.	✓	✓

**SDG&E Mira Sorrento Distribution Substation Project
Mitigation Monitoring, Compliance, and Reporting Program**

**Table 5
Applicant Proposed Measures (APMs) for Each Issue Area per Proposed Project Component**

Applicant Proposed Measures			
APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	TL 665 Loop-In
<i>Biological Resources</i>			
APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM-BIO-2.	✓	✓
APM-BIO-2	<p>In accordance with the NCCP, SDG&E will conduct the following:</p> <p>Whenever practicable, all grading or brushing occurring within occupied CAGN habitat shall be conducted from September 1st through February 28, which is outside of the CAGN breeding season.</p> <p>When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply:</p> <p>A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area.</p> <p>If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest.</p> <p>If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the vicinity. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in other areas until the young have fledged.</p> <p>With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.</p>	✓	✓
<i>Cultural Resources</i>			
APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	✓	✓

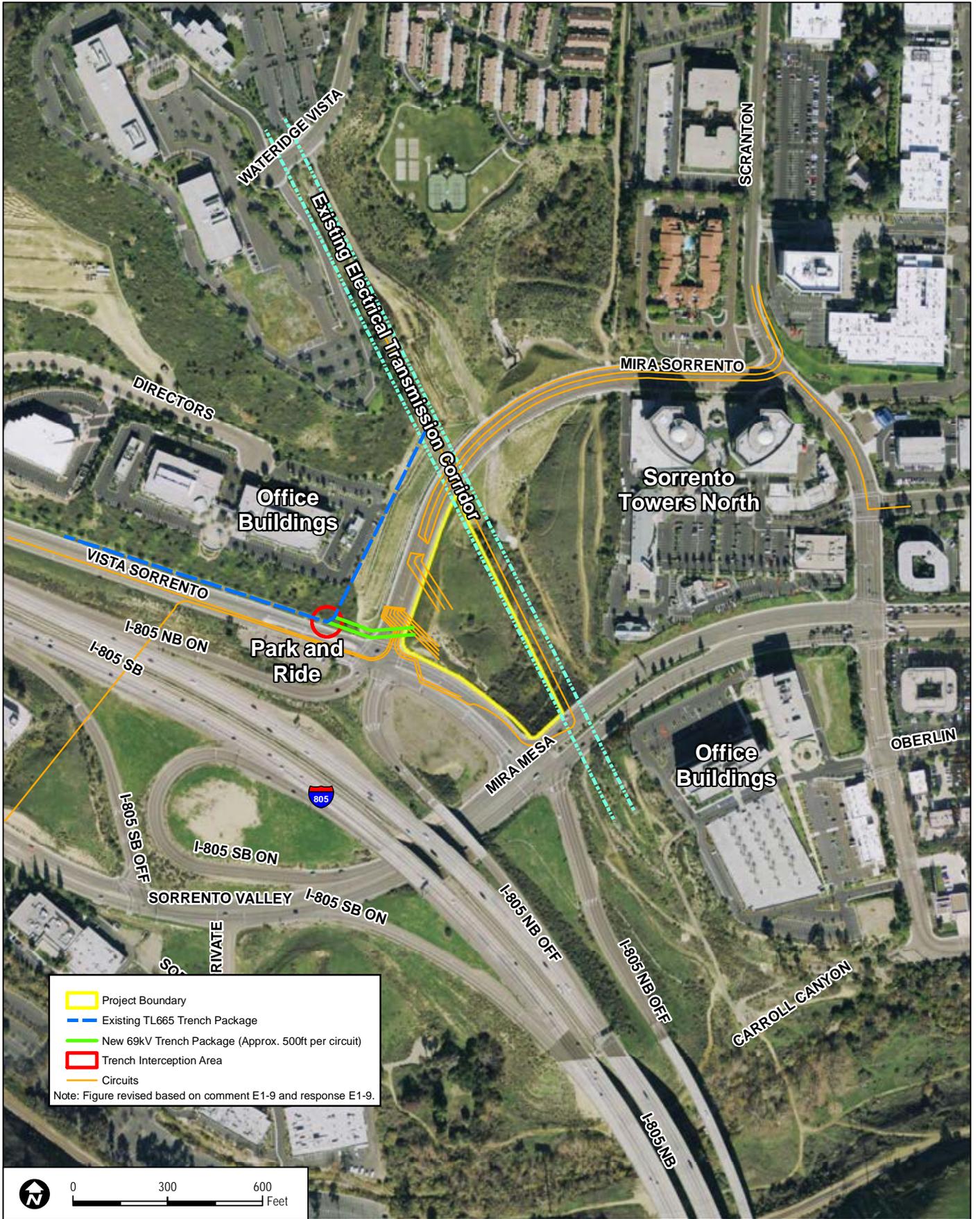
**Table 5
Applicant Proposed Measures (APMs) for Each Issue Area per Proposed Project Component**

Applicant Proposed Measures			
APM Number	Description	Proposed Project Component	
		Mira Sorrento Substation	TL 665 Loop-In
APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	✓	✓
APM-CUL-3	<p>In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume.</p> <p>Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.</p>	✓	✓
<i>Geology and Soils</i>			
APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's geotechnical engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.	✓	✓

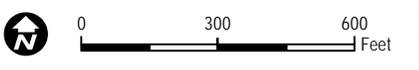
**Table 5
Applicant Proposed Measures (APMs) for Each Issue Area per Proposed Project Component**

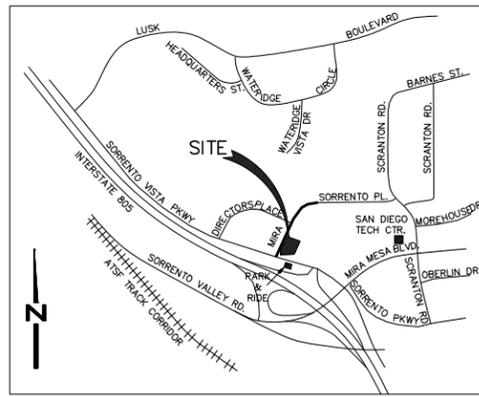
Applicant Proposed Measures			
<i>APM Number</i>	<i>Description</i>	<i>Proposed Project Component</i>	
		<i>Mira Sorrento Substation</i>	<i>TL 665 Loop-In</i>
<i>Hazards and Hazardous Materials</i>			
APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	✓	✓
<i>Hydrology and Water Quality</i>			
APM-HYD-1	SDG&E will prepare an SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	✓	✓

ATTACHMENT A
Project Map



- Project Boundary
 - Existing TL665 Trench Package
 - New 69kV Trench Package (Approx. 500ft per circuit)
 - Trench Interception Area
 - Circuits
- Note: Figure revised based on comment E1-9 and response E1-9.



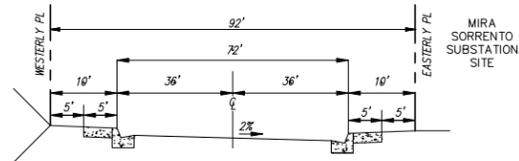


VICINITY MAP
NO SCALE

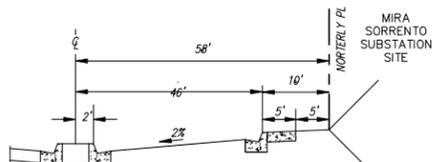
SITE SUMMARY

APN: 340-090-65, 340-090-67
 PORTION OF 304-090-64
 GROSS AREA: 3.74 AC
 SUBSTATION AREA: 1.43 AC
 (WITHIN SCREEN WALL)
 PRESENT USE: VACANT
 EXISTING ZONING: IP-1-1
 FOR EASEMENTS AND PROPERTY LINE
 DATA, SEE: MTO-S-905
 FOR DETAILED GRADING & DRAINAGE,
 SEE: MTO-S-901
 NOTE: ALL PROPERTY LINE AND AREA DATA
 TO BE VERIFIED BY BOUNDARY SURVEY.

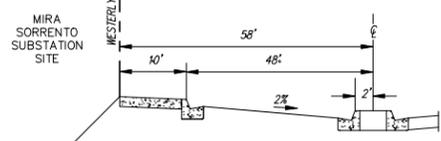
TYPICAL SECTIONS:



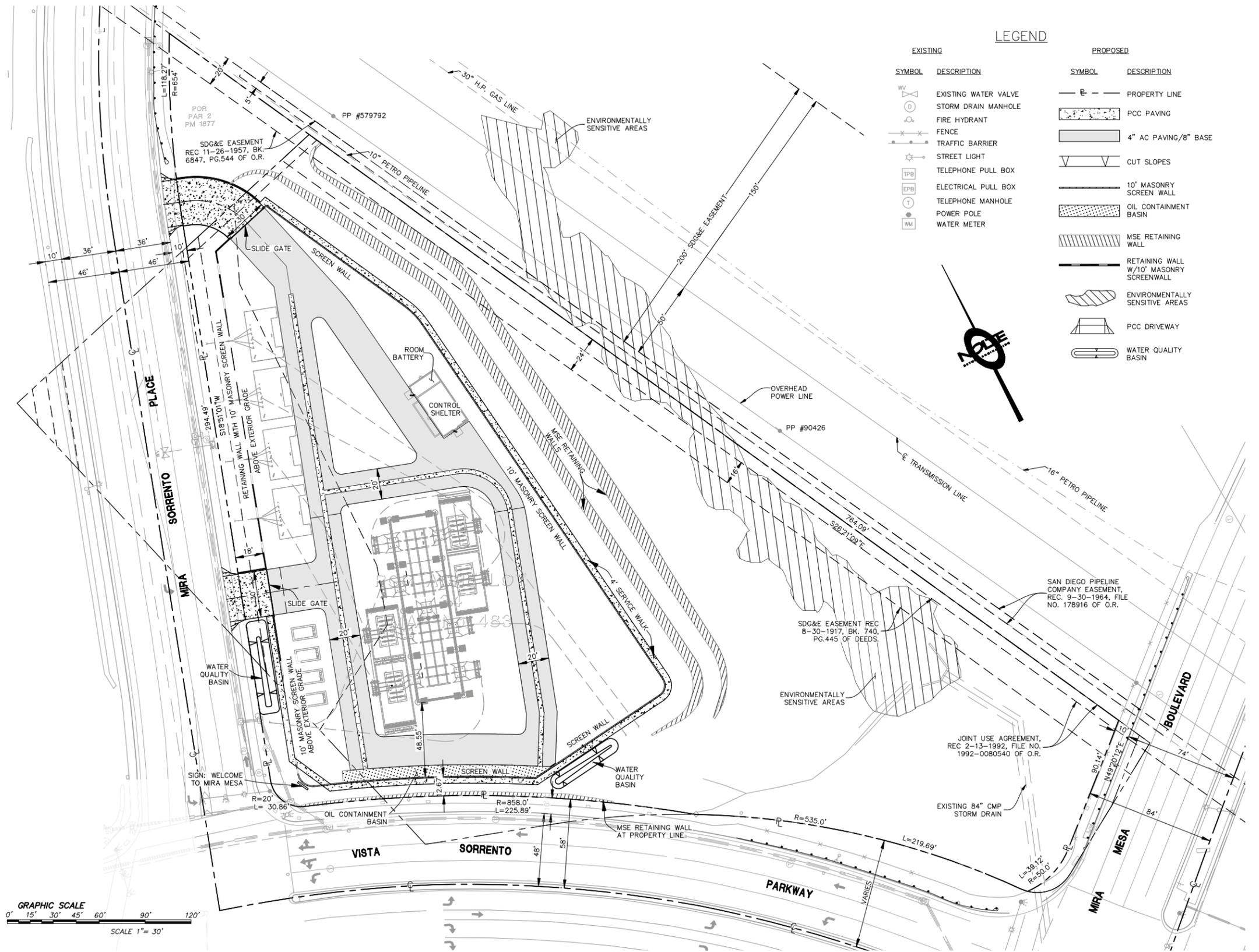
MIRA SORRENTO PLACE
NO SCALE



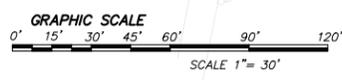
HALF SECTION
VISTA SORRENTO PARKWAY
NO SCALE



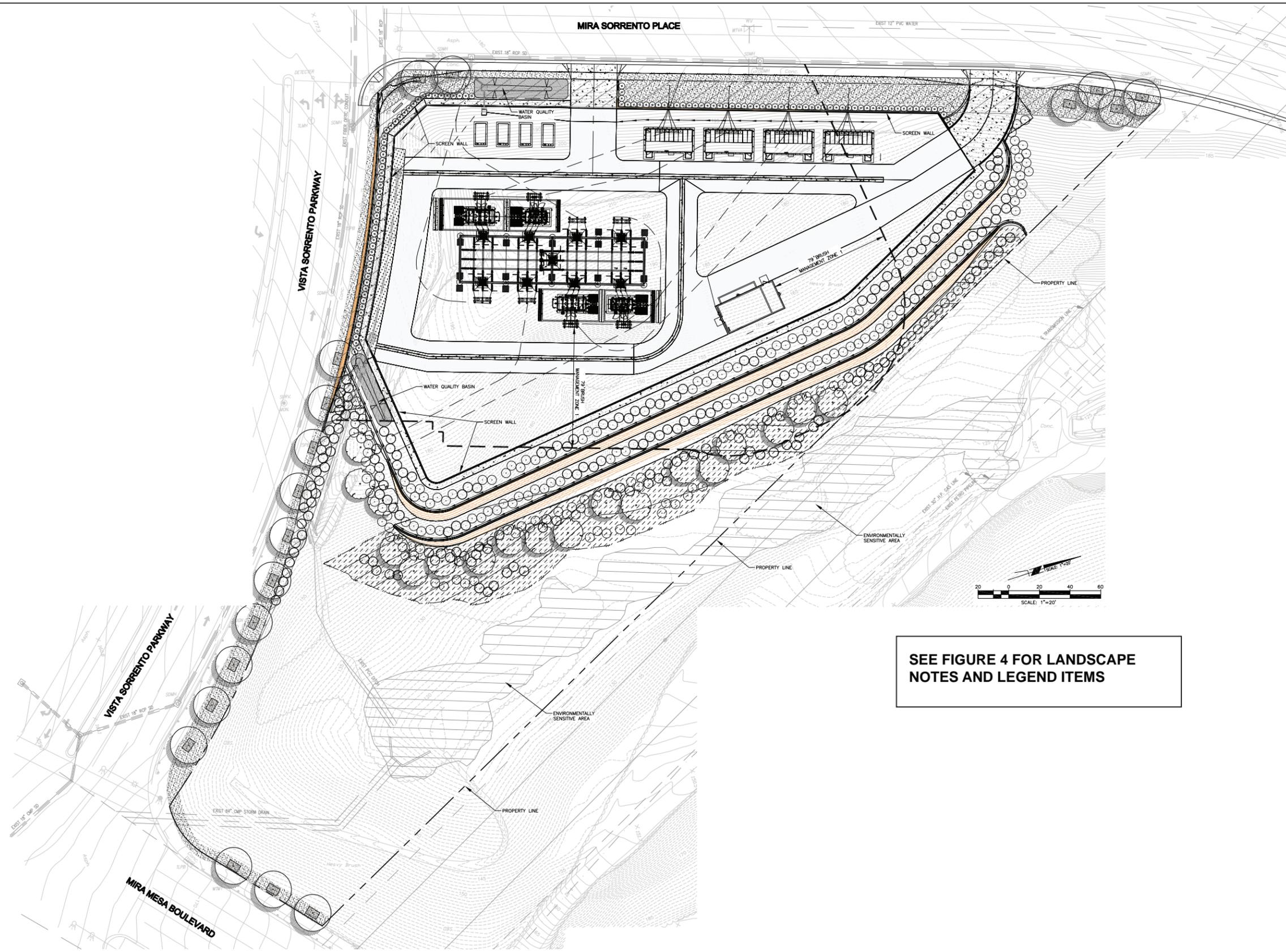
HALF SECTION
MIRA MESA BOULEVARD
NO SCALE



EXISTING		PROPOSED	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
WV	EXISTING WATER VALVE	— P —	PROPERTY LINE
SD	STORM DRAIN MANHOLE	[Pattern]	PCC PAVING
FH	FIRE HYDRANT	[Pattern]	4" AC PAVING/8" BASE
F	FENCE	[Pattern]	CUT SLOPES
TB	TRAFFIC BARRIER	—	10' MASONRY SCREEN WALL
SL	STREET LIGHT	[Pattern]	OIL CONTAINMENT BASIN
TPB	TELEPHONE PULL BOX	[Pattern]	MSE RETAINING WALL
EPB	ELECTRICAL PULL BOX	—	RETAINING WALL W/10' MASONRY SCREENWALL
TM	TELEPHONE MANHOLE	[Pattern]	ENVIRONMENTALLY SENSITIVE AREAS
PP	POWER POLE	[Pattern]	PCC DRIVEWAY
WM	WATER METER	[Pattern]	WATER QUALITY BASIN



Z:\Projects\13401\MAP\DOCMAPS\MIMCRP



SEE FIGURE 4 FOR LANDSCAPE NOTES AND LEGEND ITEMS

LANDSCAPE DESIGN STATEMENT

THE INTENT OF THE LANDSCAPE DESIGN IS TO BLEND THE PROJECT LANDSCAPING WITH THE SURROUNDING, NATURAL VEGETATION AND SCREEN THE PERIMETER WALLS AND RETAINING WALLS.

PLANTING NOTES

- ALL LANDSCAPED AREAS AND IRRIGATION WILL CONFORM TO THE STANDARDS OF THE CITY-WIDE LANDSCAPE REGULATIONS, THE CITY OF SAN DIEGO LAND DEVELOPMENT MANUAL, LANDSCAPE STANDARDS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), THE CITY OF SAN DIEGO SUPPLEMENTAL AMENDMENTS, AND OTHER LANDSCAPE RELATED CITY AND REGIONAL STANDARDS.
- THE EXISTING PLANT HABITAT OF THE SURROUNDING VEGETATION GENERALLY CONSISTS OF COASTAL SAGE SCRUB BRUSH ON STEEP SLOPES AND VALLEYS.
- CONTAINER STOCK PLANT MATERIAL AND HYDROSEED MAY BE INSTALLED AT ANY TIME DURING THE YEAR UNDER THE CONDITIONS OUTLINED IN THE GREENBOOK.
- ALL PLANTING AREAS, EXCLUDING SLOPES, SHALL BE COVERED WITH BARK MULCH TO A 2" DEPTH.
- ALL PLANT MATERIAL SHALL BE ESTABLISHED FOR A MINIMUM OF 90 CALENDAR DAYS.
- TREE ROOT BARRIERS SHALL BE INSTALLED WHERE TREES ARE PLACED WITHIN 5 FEET OF PUBLIC IMPROVEMENTS INCLUDING WALKS, CURBS, OR STREET PAVEMENT. ROOT BARRIERS WILL NOT BE WRAPPED AROUND THE ROOTBALL.

BRUSH MANAGEMENT PROGRAM

BRUSH MANAGEMENT IS A COMPREHENSIVE PROGRAM THAT REDUCES FIRE HAZARDS AROUND STRUCTURES BY PROVIDING AN EFFECTIVE FIRE BREAK BETWEEN ALL STRUCTURES AND CONTIGUOUS AREAS OF NATIVE OR NATURALIZED VEGETATION. THIS FIRE BREAK SHALL CONSIST OF TWO DISTINCT BRUSH MANAGEMENT AREAS CALLED "ZONE ONE" AND "ZONE TWO".

BRUSH MANAGEMENT ZONE ONE IS THE AREA ADJACENT TO THE STRUCTURE, SHALL BE LEAST FLAMMABLE, AND SHALL TYPICALLY CONSIST OF PAVEMENT AND PERMANENTLY IRRIGATED ORNAMENTAL PLANTING. BRUSH MANAGEMENT ZONE TWO IS THE AREA BETWEEN ZONE ONE AND ANY AREA OF NATIVE OR NATURALIZED VEGETATION AND TYPICALLY CONSISTS OF THINNED, NATIVE OR NATURALIZED NON-IRRIGATED VEGETATION.

ZONE ONE REQUIREMENTS

- THE REQUIRED ZONE ONE WIDTH SHALL BE PROVIDED BETWEEN NATIVE OR NATURALIZED VEGETATION AND ANY STRUCTURE AND SHALL BE MEASURED FROM THE EXTERIOR OF THE STRUCTURE TO THE VEGETATION.
- ZONE ONE SHALL CONTAIN NO HABITABLE STRUCTURES, STRUCTURES THAT ARE DIRECTLY ATTACHED TO HABITABLE STRUCTURES, OR OTHER COMBUSTIBLE CONSTRUCTION THAT PROVIDES A MEANS FOR TRANSMITTING FIRE TO THE HABITABLE STRUCTURES. STRUCTURES SUCH AS FENCES, WALLS, PALAPAS, PLAY STRUCTURES, AND NONHABITABLE GAZEBOS THAT ARE LOCATED WITHIN BRUSH MANAGEMENT ZONE ONE SHALL BE OF NONCOMBUSTIBLE CONSTRUCTION.
- PLANTS WITHIN ZONE ONE SHALL BE PRIMARILY LOW-GROWING AND LESS THAN 4 FEET IN HEIGHT WITH THE EXCEPTION OF TREES. PLANTS SHALL BE LOW-FUEL AND FIRE-RESISTIVE.
- TREES WITHIN ZONE ONE SHALL BE LOCATED AWAY FROM STRUCTURES TO A MINIMUM DISTANCE OF 10 FEET AS MEASURED FROM THE STRUCTURES TO THE DRIP LINE OF THE TREE AT MATURITY IN ACCORDANCE WITH THE LANDSCAPE STANDARDS OF THE LAND DEVELOPMENT MANUAL.
- PERMANENT IRRIGATION IS REQUIRED FOR ALL PLANTING AREAS WITHIN ZONE ONE EXCEPT AS FOLLOWS:
 - WHEN PLANTING AREAS CONTAIN ONLY SPECIES THAT DO NOT GROW TALLER THAN 24 INCHES IN HEIGHT, OR
 - WHEN PLANTING AREAS CONTAIN ONLY NATIVE OR NATURALIZED SPECIES THAT ARE NOT SUMMER-DORMANT AND HAVE A MAXIMUM HEIGHT AT PLANT MATURITY OF LESS THAN 24 INCHES.

- ZONE ONE IRRIGATION OVERSPRAY AND RUNOFF SHALL NOT BE ALLOWED INTO ADJACENT AREAS OF NATIVE OR NATURALIZED VEGETATION THROUGH THE USE RADIUS CONTROL NOZZLES AND IRRIGATION CHECK VALVES.
- ZONE ONE SHALL BE MAINTAINED ON A REGULAR BASIS BY PRUNING AND THINNING PLANTS, CONTROLLING WEEDS, AND MAINTAINING IRRIGATION SYSTEMS.

ZONE TWO REQUIREMENTS

- THE REQUIRED ZONE TWO WIDTH SHALL BE PROVIDED BETWEEN ZONE ONE AND THE UNDISTURBED, NATIVE OR NATURALIZED VEGETATION, AND SHALL BE MEASURED FROM THE EDGE OF ZONE ONE THAT IS FARTHEST FROM THE HABITABLE STRUCTURE, TO THE EDGE OF UNDISTURBED VEGETATION.
- NO STRUCTURES SHALL BE CONSTRUCTED IN ZONE TWO.
- WITHIN ZONE TWO, 50 PERCENT OF THE PLANTS OVER 24 INCHES IN HEIGHT SHALL BE CUT AND CLEARED TO A HEIGHT OF 6 INCHES.
- WITHIN ZONE TWO, ALL PLANTS REMAINING AFTER 50 PERCENT ARE REDUCED IN HEIGHT, SHALL BE PRUNED TO REDUCE FUEL LOADING IN ACCORDANCE WITH THE LANDSCAPE STANDARDS OF THE LAND DEVELOPMENT MANUAL. NON-NATIVE PLANTS SHALL BE PRUNED BEFORE NATIVE PLANTS ARE PRUNED.

IRRIGATION NOTE

1. THE IRRIGATION SHALL BE A FULLY AUTOMATIC, ELECTRICALLY CONTROLLED SYSTEM THAT USES A COMBINATION OF OVERHEAD SPRAY AND BUBBLERS. LOW PRECIPITATION RATE SPRAY AND BUBBLER HEADS, ACCURATELY PROGRAMMABLE CONTROLLERS, AND A RAIN SENSING DEVICE WILL BE UTILIZED TO PROMOTE CONSERVATIVE WATER USE.

MAINTENANCE NOTE

1. ALL LANDSCAPED AREAS SHALL BE MAINTAINED BY SAN DIEGO GAS & ELECTRIC IN A HEALTHY AND VIGOROUS CONDITION. THE MAINTENANCE SHALL INCLUDE A PROGRAM OF REGULAR IRRIGATION, FERTILIZATION, PRUNING, WEEDING, AND LITTER REMOVAL.

MINIMUM TREE SEPARATION DISTANCE

IMPROVEMENT	MINIMUM DISTANCE TO STREET TREE
TRAFFIC SIGNAL, STOP SIGN	20 FEET
UNDERGROUND UTILITY LINES	5 FEET (SEWER 10 FEET)
ABOVE GROUND UTILITY STRUCTURES (TRANSFORMERS, HYDRANTS, UTILITY POLES, ETC.)	10 FEET
DRIVEWAYS	10 FEET
INTERSECTIONS (INTERSECTING CURB LINES OF TWO STREETS)	25 FEET

WATER BUDGET CALCULATION

WATER BUDGET = 47(0.62)(0.7)(40,600)
= 828,159 GAL/YR

BRUSH MANAGEMENT PROGRAM CONTINUED

(5) ZONE TWO SHALL BE MAINTAINED ON A REGULAR BASIS BY PRUNING AND THINNING PLANTS, REMOVING INVASIVE SPECIES, AND CONTROLLING WEEDS.

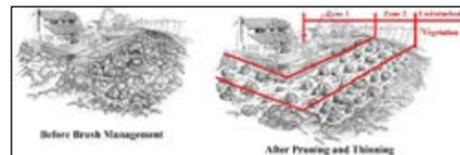
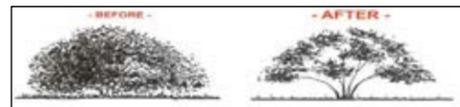
(A) SEASONAL MAINTENANCE IN THIS ZONE SHOULD INCLUDE REMOVAL OF DEAD WOODY PLANTS, ERADICATION OF WEEDY SPECIES, AND PERIODIC PRUNING AND THINNING OF TREES AND SHRUBS. REMOVAL OF WEEDS SHOULD NOT BE DONE WITH HAND TOOLS SUCH AS HOES, AS THIS REMOVES VALUABLE SOIL. THE USE OF WEED TRIMMERS OR OTHER TOOLS WHICH RETAIN SHORT STUBBLE THAT PROTECTS THE SOIL IS RECOMMENDED. NATIVE SHRUBS SHOULD BE PRUNED IN THE SUMMER AFTER THE MAJOR PLANT GROWTH OCCURS. WELL PRUNED, HEALTHY SHRUBS SHOULD TYPICALLY REQUIRE SEVERAL YEARS TO BUILD UP EXCESSIVE LIVE AND DEAD FUEL.

(B) ON SLOPES, ALL DRAINAGE DEVICES MUST BE KEPT CLEAR. RE-INSPECT AFTER EACH MAJOR STORM SINCE MINOR SOIL SLIPS CAN BLOCK DRAINS. VARIOUS GROUNDCOVERS SHOULD BE PERIODICALLY SHEARED AND THATCH REMOVED. DISEASED AND DEAD WOOD SHOULD BE PRUNED FROM TREES. FERTILIZING TREES AND SHRUBS IS NOT TYPICALLY RECOMMENDED AS THIS MAY STIMULATE EXCESSIVE GROWTH.

BRUSH MANAGEMENT ZONE WIDTH

CRITERIA	ZONE WIDTH
ZONE ONE WIDTH	35 FEET
ZONE TWO WIDTH	65 FEET

BRUSH MANAGEMENT MAINTENANCE DIAGRAMS



PLANT LEGEND

SYMBOL	CATEGORY/DESCRIPTION	BOTANICAL NAME	COMMON NAME	MATURE HT. & SP.	IRRIGATION
	TREES - ROUND HEADED CANOPY, EVERGREEN STREET TREES WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	GEJERA PARVIFLORA	AUSTRALIAN WILLOW	25' X 20'	100% TO BE 24" BOX
		MAGNOLIA GRANDIFLORA 'MAJESTIC BEAUTY'	MAJESTIC BEAUTY SOUTHERN MAGNOLIA	35' X 20'	
		METROSIDEROS EXCELSUS	NEW ZEALAND CHRISTMAS TREE	30' X 25'	
		PRUNUS LICIFOLIA	HOLLYLEAF CHERRY	20' X 20'	
		RHUS LANCEA	AFRICAN SUMAC	25' X 25'	
		STENOCARPUS SINUATUS	FIREWHEEL TREE	30' X 15'	
	TREES - SLOPE EROSION CONTROL TREES WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	CERCIS OCCIDENTALIS	WESTERN REDBUD	15' X 10'	100% TO BE 15 GAL
		MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	10' X 10'	
		PRUNUS LICIFOLIA	HOLLYLEAF CHERRY	20' X 20'	
		QUERCUS AGRIFFOLIA	COAST LIVE OAK	40' X 50'	
		RHUS LANCEA	AFRICAN SUMAC	25' X 25'	
		RHUS LAURINA	LAUREL SUMAC	15' X 15'	
	SHRUBS - SCREENING FOR PERIMETER WALL WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	ESCALLONIA FRADESII	ESCALLONIA	6' X 6'	100% TO BE 5 GAL
		GREVILLEA 'NOELLII'	GREVILLEA	4' X 5'	
		MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	4' X 5'	
		RHAMNUS CALIFORNICA 'EVE CASE'	EVE CASE COFFEEBERRY	6' X 6'	
		RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	4' X 4'	
		ROSMARINUS OFFICINALIS	ROSEMARY	5' X 5'	
WESTRINGIA FRUTICOSA	COAST ROSEMARY	4' X 5'			
	SHRUBS - SCREENING FOR RETAINING WALLS WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	BACCHARIS SALICIFOLIA	MULEFAT	8' X 12'	100% TO BE 5 GAL
		CEANOTHUS SPECIES	WILD LILAC	8' X 12'	
		HETEROMELES ARBUTIFOLIA	TOYON	8' X 10'	
		LAVATERA ASSURGENTIFLORA	TREE MALLOW	12' X 12'	
		MYRICA CALIFORNICA	PACIFIC WAX MYRTLE	10' X 10'	
		RHAMNUS CALIFORNICA	COFFEEBERRY	12' X 8'	
RHAMNUS CROCEA	REDBERRY	3' X 6'			
RHUS INTEGRIFOLIA	LEMONADE BERRY	10' X 10'			
	SMALL SHRUBS AND GROUNDCOVERS - STREET FRONTAGE WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	AGAVE SHAWII	SHAW ACACIA	2' X 2'	100% TO BE 1 GAL @ APPROX. 30" O.C.
		BACCHARIS PILULARIS 'TWIN PEAKS'	TWIN PEAKS COYOTE BRUSH	2' X 8'	
		COTONEASTER DAMMERI	BEARBERRY COTONEASTER	1' X 6'	
		CISTUS PURPUREUS	ORCHID ROCKROSE	4' X 4'	
		LANTANA SPECIES	LANTANA	3' X 6'	
		MUHLENBERGIA RIGENS	DEER GRASS	3' X 3'	
MYOPORUM 'PACIFICUM'	PACIFIC MYOPORUM	2' X 15'			
PYRACANTHA COCCINEA 'LOW BOY'	LOW BOY FIRETHORN	3' X 6'			
SALVIA SPECIES	SAGE	4' X 4'			
SENECIO MANDRALISCAE	BLUE CHALK STICKS	1' X 3'			
	NATIVE GRASSES/RUSHES/SEDGES - WATER QUALITY BASIN WITH AUTOMATIC, BELOW GRADE, PERMANENT IRRIGATION	CAREX SPISSA	SAN DIEGO SEDGE	3' X 4'	100% TO BE 1 GAL @ 24" O.C.
		FESTUCA CALIFORNICA	CALIFORNIA FESCUE	3' X 3'	
		JUNCUS PATENS	CALIFORNIA GREY RUSH	2' X 3'	
		LEYMUS CONDENSATUS	GIANT WILD RYE	3' X 5'	
		LEYMUS TRITICOIDES	CREeping WILD RYE	2' X 3'	
	HYDROSEED - EROSION CONTROL FOR GRADED SLOPES WITH AUTOMATIC, ABOVE GRADE, PERMANENT IRRIGATION	CASTILLEJA EXSERTA	PURPLE OWL	0.50	PURE LIVE SEED LBS./ACRE
		DICHELSTEMMA CAPITATUM	BLUE DICKS	0.50	
		ENCELIA CALIFORNICA	BUSH SUNFLOWER	1.00	
		ERIOPHYLLUM CONFERTIFLORUM	GOLDEN YARROW	1.00	
		ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	1.00	
		ISOCOMA MENZIESII	COAST GOLDENBUSH	1.00	
		IVA HAYESIANA	SAN DIEGO POVERTY WEED	0.20	
		LASTHENIA CALIFORNICA	DWARF GOLDFIELDS	0.50	
		LOTOS SCOPARIUS SCOPARIUS	DEERWEED	4.00	
		LUPINUS TRUNCATUS	NUTTALL	1.00	
		MELICA IMPERFECTA	COAST RANGE MELIC	1.00	
		MIMULUS AURANTIACUS PUNICEUS	STICKY MONKEYFLOWER	0.10	
		MUHLENBERGIA MICROSPERMA	LITTLESEED MULEY	2.00	
		NASSELLA PULCHRA	PURPLE NEEDLEGRASS	6.00	
		VULPIA MICROSTACHYS	SMALL FESCUE	8.00	
				28.3	

*NOTE PURE LIVE SEED = PURITY X GERMINATION

LANDSCAPE CALCULATIONS

STREET YARD	PLANTING AREA REQUIRED	PLANTING AREA PROVIDED	EXCESS AREA PROVIDED
	12,680 SQ. FT. X 25% = 3,170 SQ. FT.	7,200 SQ. FT.	4,030 SQ. FT.
	PLANT POINTS REQUIRED 12,680 SQ. FT. X 0.05 = 634 POINTS	PLANT POINTS PROVIDED 1,452 POINTS	EXCESS POINTS PROVIDED 818 POINTS
PERIMETER PLANTING AREA (WITHIN STREET YARD)			
NOT APPLICABLE - CORNER LOT ADJACENT TO UNDEVELOPED LAND ZONED AS AR-1-1			
FACADE PLANTING AREA (ALTERNATE COMPLIANCE 142.0405 (D)(2)(A))			
	PLANT POINTS REQUIRED 12,680 SQ. FT. X 0.1 = 1,268 POINTS	PLANT POINTS PROVIDED 1,452 POINTS	EXCESS POINTS PROVIDED 184 POINTS
REMAINING YARD			
NOT APPLICABLE - CORNER LOT ADJACENT TO UNDEVELOPED LAND ZONED AS AR-1-1			

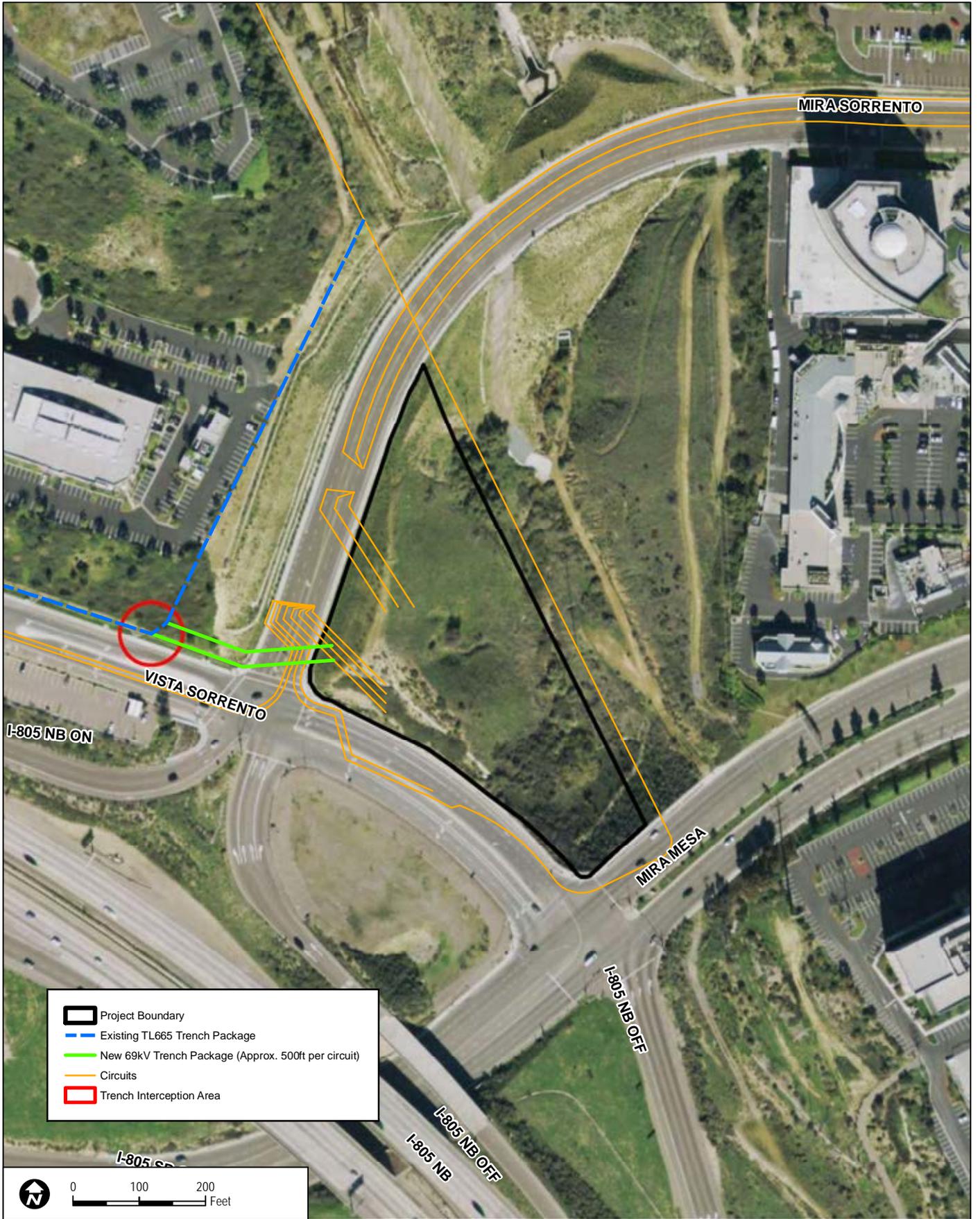


FIGURE 5
Loop-in of TL 665

DUDEK

SOURCE: SDGE 2011

4134-01

Mira Sorrento Distribution Substation Project

ATTACHMENT B
Project Contact List

**Appendix B
Project Contact List**

Contact Name & Title	Address	Phone	Cell	Email Address
<i>San Diego Gas & Electric Company (SDG&E) Team</i>				
<i>SDG&E Project Managers</i>				
Mary Turley, SDG&E Project Manager	8315 Century Park Court San Diego, California 92123	858.654.1749	619.954.3483	MTurley@semprautilities.com
Richard Quasarano, , SDG&E Environmental Lead	8315 Century Park Court San Diego, California 92123	858.654.8211	619.507.8003	RQuasarano@semprautilities.com
Michael Gonzales, Environmental Compliance, RBF Consulting	9755 Clairemont Mesa Boulevard San Diego, California 92124	858.614.5087	760.917.7082	MGonzales@rbf.com
Dale L. Shrum, Construction Manager, NV5	15070 Avenue of Science, Suite 100 San Diego, CA 92128		619.654.0403	dale.shrum@nv5.com
<i>SDG&E Environmental Resource Specialists and Monitors</i>				
Leslie Nelson, SDG&E Environmental Specialist, Natural Resources	8315 Century Park Court San Diego, California 92123	858.541.5065	760.703.2869	LNelson1@semprautilities.com
Tamara Spear, SDG&E Environmental Specialist, Aquatic Resources	8315 Century Park Court San Diego, California 92123	858.637.3740	858.472.9165	TSpear@semprautilities.com
Willie Gaters, SDG&E Environmental Specialist, Water Resources / SWPPP	8315 Century Park Court San Diego, California 92123	858.637.3726	858.805.5023	WGaters@semprautilities.com
Rachel Ruston, SDG&E Environmental Specialist, Cultural Resources	8315 Century Park Court San Diego, California 92123	858.637.3788	619.822.6786	RRuston@semprautilities.com
Hashim Navrozali, SDG&E Environmental Specialist, Air Resources	8315 Century Park Court San Diego, California 92123	858.650.4087	619.980.7154	HNavrozali@semprautilities.com
Jayne Caddick, SDG&E Environmental Specialist, Hazardous Materials	5488 Overland Avenue San Diego, California 92123	858.541.5009	858.997.5336	JCaddick@semprautilities.com
<i>SDG&E Additional Roles</i>				
Claudia Valenzuela, SDG&E Public Affairs Manager	8330 Century Park Court San Diego, California 92123	858.654.8307	858.539.9573	CValenzuela@semprautilities.com
<i>California Public Utilities Commission (CPUC) Team</i>				
<i>CPUC Manager</i>				
Michael Rosauer, CPUC Project Manager	505 Van Ness, 4th Floor San Francisco, California 94102	415.703.2579	N/A	michael.rosauer@cpuc.ca.gov

**Appendix B
Project Contact List**

Contact Name & Title	Address	Phone	Cell	Email Address
<i>CPUC Monitors</i>				
David Hochart, Environmental Compliance Director, Dudek	605 Third Street Encinitas, California 92024	760.479.4259	760.415.2864	dhochart@dudek.com
Keith Carwana, Environmental Compliance Manager, Dudek	605 Third Street Encinitas, California 92024	949.373.8325	760.889.9498	kcarwana@dudek.com
Brock Ortega, Monitoring Manager, Dudek	605 Third Street Encinitas, California 92024	760.479.4254	619.884.0467	bortega@dudek.com
Marshall Paymard, Lead Environmental Monitor, Dudek	605 Third Street Encinitas, California 92024	N/A	760.846.5559	mpaymard@dudek.com
Jon Walker, Environmental Monitor, Dudek	605 Third Street Encinitas, California 92024	N/A	760.846.1811	jwalker@dudek.com
Shane Valiere, Environmental Monitor, Dudek	605 Third Street Encinitas, California 92024	N/A	760.846.5558	svaliere@dudek.com
<i>United States Fish and Wildlife Service</i>				
Patrick Gower, Wildlife Biologist	U.S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office 6010 Hidden Valley Road, Suite 101 Carlsbad, California 92011	760.431.9440 ex 352	N/A	Patrick_Gower@fws.gov
<i>Air Pollution Control District</i>				
	10124 Old Grove Road San Diego, California 92131		N/A	
<i>County of San Diego</i>				
The County of San Diego DEH Inspector will be assigned once the substation equipment is stored onsite. This is scheduled for April 2014.	Dept. of Environmental Health (DEH) County Operations Center 5500 Overland Avenue, Suite 170 San Diego, California 92123	DEH Duty Desk 858.505.6657	N/A	hmdutyeh@sdcounty.ca.gov
<i>California Department of Fish and Wildlife</i>				
Stephanie R. Ponce, Environmental Scientist, NCCP, California Dept. of Fish & Wildlife	South Coast Region 3883 Ruffin Road San Diego, California 92123	858.467.4237	N/A	Stephanie.Ponce@Wildlife.ca.gov

Appendix B
Project Contact List

Contact Name & Title	Address	Phone	Cell	Email Address
<i>San Diego Regional Water Quality Control Board</i>				
Ben Neill, Acting Senior Water Resource Control Engineer	Groundwater Discharge Permit NPDES Program 9174 Sky Park Court, Suite 100 San Diego, California 92123-4340	858.467.2983	N/A	Ben.Neill@waterboards.ca.gov

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ATTACHMENT C
Sample Site Inspection Form

**MITIGATION MONITORING
COMPLIANCE AND
REPORTING PROGRAM**



Site Inspection Form

Project: Mira Sorrento Distribution Substation Project
(Application A.11-10-015)

Date: _____

Owner: San Diego Gas & Electric

Project Component: _____

Project Manager: Michael Rosauer

Report: _____

Lead Agency: California Public Utilities Commission

Representative: _____

Location : On Site
 Off Site (List Location Below)

Project Phase: Design
 Construction
 Operation

SITE INSPECTION CHECKLIST

Air Quality	Yes	No
Is dust control being implemented (i.e., access roads watered, haul trucks covered, streets cleaned on a regular basis)?		
Do vehicles or equipment appear to be idling unnecessarily?		
Biology		
Are appropriate measures in place to protect sensitive habitat (i.e., flagging, signage, exclusion fencing, biological monitor)?		
Are all activities being conducted within the approved work limits?		
Have impacts occurred to adjacent habitat (sensitive or non-sensitive)?		
Cultural and Paleontological Resources		
Are known cultural resources clearly marked for exclusion?		
Is a cultural monitor on site if grading is occurring near known cultural sites?		
Is a paleontological monitor on site if grading is occurring (see mitigation measure for specifications)?		
Hazardous Materials		
Is a 40-hour certified HAZWOPER on site if abatement or remediation activities are occurring (including handling of potentially contaminated soils)?		
Have all spills been cleaned up in accordance with the project's SPCC?		
Are fuels, oils, lubricants, and other hazardous materials on site labeled and stored in appropriate containers?		
Water Quality		
Have temporary erosion and sediment control measures been installed?		
Are BMPs in good condition and functional?		
Is mud tracked onto roadways cleaned up in accordance with the project's SWPPP?		

DESCRIPTION OF OBSERVED ACTIVITY

MITIGATION MEASURES VERIFIED (provide Mitigation Measures and description)

ISSUES REQUIRING CORRECTIVE ACTION

COMPLIANCE

- Incident Report** (Mitigation Measure not fully implemented, however, no eminent resource threat or damage.)
- Noncompliance** (Violates the project's environmental requirements and places environmental resources at risk. A noncompliance situation may occur when minor incidents are repeated, and show a trend toward placing resources at unnecessary risk.)

Note: If no compliance level is checked, all applicable mitigations measure where being implemented at the time of inspection.

ITEMS REQUIRING FOLLOW-UP

Completed by:

Distribution:

Name: _____

Firm: Dudek _____

Date: _____

ATTACHMENT D
Variance Request Form



**MIRA SORRENTO SUBSTATION PROJECT
REFINEMENT / VARIANCE
REQUEST FORM**

Request #:		Date Submitted:	
Landowner:		Date Approval Required:	
Date of Expected Construction at Refinement / Variance Location:			
Refinement / Variance from (check all that apply):			
<input type="checkbox"/> Mitigation Measure (MM)	<input type="checkbox"/> APM	<input type="checkbox"/> Project Description	<input type="checkbox"/> Drawing <input type="checkbox"/> Other
<p>Description of Refinement / Variance. Provide a detailed description of the proposed refinements, including an explanation of why the refinements are necessary, and a reference to the approved documents. Attach photos, maps, and other supporting documentation illustrating the difference between the existing conditions in the area, the approved project, and the proposed refinements. Attach additional sheet(s) if necessary.</p>			
<p>Impacts. Describe the impacts of the proposed refinements, including a discussion of each environmental issue area that could be affected by the refinements. Must include verification that there will be no substantial increase in the severity of any previously identified significant impacts to resources affected by the project, and no new significant impacts after application of previously adopted mitigation.</p>			

Conflicts with MM or APMs: Describe whether the refinement / variance conflicts with any Applicant Proposed Measures (APMs) or Mitigation Measures contained in the MMCRP.

--

Conflicts with Rules / Ordinances: Describe whether the refinement / variance conflicts with any applicable guideline, ordinance, code, rule, regulation, order, decision, statute, or policy.

--

Conflicts with Water / Wetlands / Stormwater: Describe whether the refinement / variance would result in any additional land disturbance, road distance or width, changes to jurisdictional delineation of waters, or changes to water protection best management practices (BMPs).

--

Attachments (check all that apply):

<input type="checkbox"/> Detailed Assessment	<input type="checkbox"/> Photos	<input type="checkbox"/> Maps	<input type="checkbox"/> Other
--	---------------------------------	-------------------------------	--------------------------------

SDG&E Approvals

Title	Name	Approver Initials	Date	Conditions (see attached)	
Project Manager	Mary Turley			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Environmental Project Manager	Rich Quasarano			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Environmental Compliance Lead	Mike Gonzales			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Natural Resource Specialist	Leslie Nelson			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Water Quality Specialist	Willie Gaters			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Aquatics Resource Specialist	Tamara Spear				
Cultural Resource Specialist	Rachel Ruston			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Land Manager	Kathy Babcock			<input type="checkbox"/> Yes	<input type="checkbox"/> No

Resource Agency Coordination / Approvals

Resource Agency	Name	Date	Documentation (see att. if yes)	
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No

ATTACHMENT E
Pre-construction Mitigation Measures

Appendix E Pre-Construction Mitigation Measures

Mitigation Measures and APMs		Timing			Project Component	
<i>MM/APM</i>	<i>Measure</i>	<i>Prior</i>	<i>During</i>	<i>After</i>	<i>Substation</i>	<i>TL665 Loop- In</i>
APM-AES-1	PEA Figure 3-8: Conceptual Landscape Plan (IS/MND, Figure 4-4) provides the conceptual landscape mitigation plan for the Mira Sorrento Substation. The landscape plan would be implemented as part of the proposed project following construction of the substation components. The conceptual landscape plan would provide partial screening of views of the substation site from view locations to the west, south, and east. Landscaping would include plantings within the retaining walls and small, informal groupings of small shrubs and trees on the flatter areas created by the walls. The Conceptual Landscape Plan includes a list of recommended plant species. All suggested trees appear on the City of San Diego Street Tree Selection Guide. Drought-tolerant plants, including California native species, are suggested. Proposed project landscaping would receive regular watering during the initial two years following installation in order to ensure the establishment of the plants. All planting would be consistent with SDG&E operational requirements for landscaping in proximity to electric transmission facilities. The Mira Mesa Community Planning Group will review any changes made to the conceptual landscaping plan prior to approval.		X	X	X	X
APM-AES-2	The color of the substation perimeter wall would be chosen to blend with the existing site features (i.e., a dull grey, light brown, or dull green) in order to minimize visual contrast with the landscape setting.		X	X	X	
APM-BIO-1	SDG&E will conduct activities in accordance with NCCP Operational Protocols to avoid, minimize, or mitigate impacts to biological resources. See APM-BIO-2.	X	X		X	X
APM-BIO-2	In accordance with the NCCP, SDG&E will conduct the following: Whenever practicable, all grading or brushing occurring within occupied CAGN habitat shall be conducted from September 1st through February 28, which is outside of the CAGN breeding season. When conducting all other project construction activities during the CAGN breeding season of March 1 through August 31 within habitat in which CAGN are known to or have a high potential to occur, the following avoidance measures shall apply: A qualified biologist will conduct a preconstruction survey for CAGN within 1 week prior to initiating project construction activities in an area. If CAGN are present but not nesting, a qualified biologist will survey for nesting CAGN approximately once per week in the vicinity of project activities for the duration of the activity in that area. If an active CAGN nest is located in the vicinity of project activities, a biologist qualified for CAGN nest monitoring will monitor the nest daily until: (1) Project activities are no longer in the vicinity of the nest, or (2) the fledglings become independent of their nest. If the CAGN nest monitor determines that the project activities are disturbing or disrupting the nesting activities, the monitor will make practicable recommendations to reduce the noise or disturbance in the	X	X		X	X

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
<i>MM/APM</i>	<i>Measure</i>	<i>Prior</i>	<i>During</i>	<i>After</i>	<i>Substation</i>	<i>TL665 Loop- In</i>
	vicinity. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, and (2) working in other areas until the young have fledged. With these avoidance and minimization measures in place, any incidental take of coastal California gnatcatcher is covered by the SDG&E NCCP.					
BIO-1	Prior to construction, SDG&E shall retain a qualified biologist to conduct a focused rare plant survey for the entire proposed impact area within the project area during the time period when the special-status plant species are detectable. Locations of rare/special-status plants shall be identified and inventoried. If special-status plants are identified during surveys, then SDG&E shall retain a qualified biologist to supervise construction activities within the vicinity of the special-status plant species. If impacts to special-status plant species are unavoidable, the biologists shall recommend avoidance or mitigation approaches. Alternatively, if the special-status plant species in question is a covered species within the SDG&E Subregional NCCP, mitigation consistent with measures established in the NCCP shall be provided. The results of the focused plant surveys and measures outlined above that will be implemented by SDG&E in the event special-status plant species are identified on site shall be provided to CPUC prior to any construction activities including clearing, staging, grading, etc.	X	X		X	X
BIO-2	SDG&E shall retain qualified biologists and other qualified resource specialists, as necessary, to monitor project construction. Monitors shall be hired and trained prior to construction and shall be responsible for preconstruction surveys, work area delineations (i.e., staking, flagging, etc.), on-site monitoring, documentation of violations and compliance, coordination with construction inspectors, and post-construction documentation. The SDG&E on-site biological monitors shall prepare weekly reports during ground-disturbance activities and send them to the CPUC and the CPUC monitors. The SDG&E on-site biological monitors shall prepare a post-construction compliance report within 60 days of the end of ground-disturbance activities and send it to the CPUC. SDG&E's monitors shall be responsible for obtaining clearance from the CPUC and, if necessary, resource agencies for project modifications. All project modifications variances will be documented and none will be allowed with verbal approval only. Project modifications that are considered minor with little risk to sensitive resources by the SDG&E on-site biological monitors and the CPUC biological monitors may be approved on the site but will be documented. Project modifications that could affect sensitive resources but are required to ensure the health and safety of work crews shall also be documented.	X	X		X	X
BIO-3	SDG&E shall conduct Worker Environmental Awareness Program (WEAP) training for construction crews (primarily crew and construction foremen) before construction activities begin within any of the sensitive	X	X		X	X

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
<i>MM/APM</i>	<i>Measure</i>	<i>Prior</i>	<i>During</i>	<i>After</i>	<i>Substation</i>	<i>TL665 Loop- In</i>
	habitat areas. The WEAP shall include a brief review of the special-status species and other sensitive resources that could occur in the proposed project area (including their habitat requirements and an identification of portions of the project site and adjacent areas where they might be found) and their legal status and protection. The program shall cover all mitigation measures; environmental permits and proposed project plans, such as best management practices (BMPs); erosion control and sediment plan; reclamation plan; and any other required plans. The designated biological monitor shall be responsible for ensuring that construction personnel adhere to the guidelines and restrictions. WEAP training sessions shall be conducted as needed for new personnel brought onto the job during the construction period. A list of all personnel who have attended the WEAP training shall be kept by the biological monitor and shall be available for CPUC review in the field at all times, and a copy shall be submitted to the CPUC. During WEAP training, construction personnel shall be informed of the importance of avoiding ground-disturbing activities outside of the designated work area.					
BIO-4	At the end of each workday, any open holes shall be fully covered, after they have been inspected by the on-site biologist, with steel plates or other effective coverings to prevent entrapment of wildlife species. If fully covering the excavations is impractical, ramps will be used to provide a means of escape for wildlife that enter the excavations, or open holes will be securely fenced with exclusion fencing. If common wildlife species are found in a hole, the designated biological monitor shall immediately be informed and the animal(s) shall be removed. If the animal(s) is/are a sensitive species that require(s) special handling authorization, a qualified biologist (agency-permitted or approved to handle a specific species) shall remove the animal before resumption of work in that immediate area. SDG&E shall specify this requirement in its agreements with all construction contractors.	X	X		X	X
BIO-5	If construction activities including but not limited to grading or site disturbance are to occur between March 1 and September 1, a nesting bird survey shall be conducted by a qualified biologist to determine the presence of nests or nesting birds within 100 feet of the construction activities. The nesting bird surveys shall be completed no more than 72 hours prior to any construction activities. The survey will focus on special-status species known to use the area as well as other nesting birds that are protected under the MBTA. If an active nest (defined by the presence of eggs or young) is identified, grading or site disturbance within a 100-foot buffer of the nest shall be monitored by a qualified biologist daily until project activities are no longer occurring within 100 feet of the nest or until fledglings become independent of the nest. The monitoring biologist may increase the buffer radius if he or she determines it is necessary. The monitoring biologist may decrease the buffer radius if he or she determines that the construction activities are not	X	X		X	X

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
MM/APM	Measure	Prior	During	After	Substation	TL665 Loop- In
	disturbing the nesting activities and a smaller buffer is more appropriate. The monitoring biologist shall halt construction activities if he or she determines that the construction activities are disturbing the nesting activities. The monitor shall make practicable recommendations to reduce the noise or disturbance in the vicinity of the nest. This may include recommendations such as (1) turning off vehicle engines and other equipment whenever possible to reduce noise, (2) working in other areas until the young have fledged, or (3) placing noise barriers to maintain the noise at the nest to 60 dBA leq hourly or less or to the preconstruction ambient noise level if that exceeds 60 dBA leq hourly. The on-site biologist will review and verify compliance with these nesting boundaries and will verify that the nesting effort has finished. Unrestricted construction activities can resume when no other active nests are found. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the California Public Utilities Commission.					
BIO-6	Where impacts to Diegan coastal sage scrub and native grasslands cannot be avoided, SDG&E shall restore temporarily disturbed areas to preconstruction conditions following construction and deduct credits from the SDG&E Mitigation Credits for permanent impacts to sensitive communities, as stated in the SDG&E NCCP. Where on-site restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, the applicant shall identify a habitat restoration specialist to be approved by the CPUC or that the resource agencies have indicated is acceptable to determine the most appropriate method of restoration. Restoration techniques can include hydroseeding, handseeding, imprinting, and soil and plant salvage, as discussed in Section 7.2.1 of the NCCP. Monitoring will include visual inspection of restored areas after 1 year. A second application may be made. If, after the second year, restoration is deemed unsuccessful, the USFWS and CDFG, in cooperation with SDG&E, shall determine whether the remaining loss shall be mitigated through a deduction from the SDG&E Mitigation Credits, or whether a third application would better achieve the intended purpose. The mitigation objective for impacted sensitive vegetation communities shall be restoration to preconstruction conditions as measured by species cover, species diversity, and exotic species cover. The cover of native species should increase while the cover of non-native or invasive species should decrease. Success criteria shall be established by comparison with reference sites. If, however, roots are not grubbed during temporary impacts, restoration/hydroseeding may not be necessary. This applies to impacts 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's mitigation credits at a 1:1 ratio. In addition, SDG&E shall mitigate for permanent impacts to Diegan coastal sage scrub (all subtypes) and native grassland at a ratio of 1:1 for all permanent impacts that would result from construction activities.	X	X	X	X	X

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
MM/APM	Measure	Prior	During	After	Substation	TL665 Loop- In
	Evidence shall be provided to the CPUC that 0.9 acre of coastal sage scrub and 0.1 acre of native grasslands have been deducted from NCCP credits.					
APM-CUL-1	A qualified paleontologist shall attend preconstruction meetings, as needed, to consult with the excavation contractor concerning excavation schedules, paleontological field techniques, and safety issues. A qualified paleontologist is defined as an individual with a Master of Science or Doctor of Philosophy in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology and paleontology of Southern California, and who has worked as a paleontological mitigation project supervisor in the region for at least one year. The requirements for paleontological monitoring shall be noted on the construction plans.	X	X		X	X
APM-CUL-2	A paleontological monitor shall work under the direction of the qualified project paleontologist and shall be on site to observe excavation operations that involve the original cutting of previously undisturbed deposits with high or moderate paleontological resource sensitivity. A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.	X	X		X	X
APM-CUL-3	In the event that fossils are encountered, the project paleontologist shall have the authority to divert or temporarily halt construction activities in the area of discovery to allow recovery of fossil remains in a timely fashion. The paleontologist shall contact SDG&E's cultural resource specialist and environmental project manager at the time of discovery. The paleontologist, in consultation with SDG&E's cultural resource specialist, shall determine the significance of the discovered resources. SDG&E's cultural resource specialist and environmental project manager shall concur with the evaluation procedures to be performed before construction activities are allowed to resume. Because of the potential for recovery of small fossil remains, it may be necessary to set up a screen-washing operation on site. When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them along with pertinent stratigraphic data. Because of the potential for recovery of small fossil remains, such as isolated mammal teeth, recovery of bulk-sedimentary-matrix samples for off-site wet screening from specific strata may be necessary, as determined in the field. Fossil remains collected during monitoring and salvage shall be cleaned, repaired, sorted, cataloged, and deposited in a scientific institution with permanent paleontological collections.		X		X	X
CUL-1	In the event that any prehistoric or historic subsurface cultural resources are discovered during ground-disturbing activities, such as chipped or ground stone, historic debris, building foundation, or human bones, all work within 50 feet of the resources shall be halted, and a qualified archaeologist shall be consulted to assess the significance of the find. If any find is determined to be significant, representatives of SDG&E, California Public Utilities		X		X	X

Appendix E Pre-Construction Mitigation Measures

Mitigation Measures and APMs		Timing			Project Component	
MM/APM	Measure	Prior	During	After	Substation	TL665 Loop- In
	<p>Commission (CPUC), and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis; professional museum curation, as necessary; and a report prepared by a specialist according to current professional standards.</p> <p>In considering any suggested mitigation proposed by the consulting archaeologist to mitigate impacts to historical resources or unique archaeological resources, the CPUC and SDG&E shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for historical resources or unique archaeological resources is carried out. If the CPUC, in consultation with the qualified archaeologist, determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, SDG&E will:</p> <p>Redesign the project to avoid any adverse effect on the significant archaeological resource</p> <p>If the resource is significant, implement an archaeological data recovery program (ADRP) as mitigation. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archaeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to portions of the archaeological resource that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.</p>					
CUL-2	<p>If human remains are discovered, there shall be no further excavation or disturbance of the discovery site or any nearby area reasonably suspected to overlie adjacent human remains until the project applicant has immediately notified the county coroner and otherwise complied with the provisions of State CEQA Guidelines, Section 15064.5(e). If the remains are found to be Native American, the county coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The most likely descendant of the deceased Native American shall be notified by the NAHC and given the opportunity to make proper disposition of human remains. If the NAHC is unable to identify the most likely descendant (MLD), or if no recommendations are made by the MLD within 48 hours, human remains and any associated burial items</p>		X		X	X

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
<i>MM/APM</i>	<i>Measure</i>	<i>Prior</i>	<i>During</i>	<i>After</i>	<i>Substation</i>	<i>TL665 Loop- In</i>
	shall be reinterred with appropriate dignity in a location not subject to further subsurface disturbance. If recommendations for a reburial location are made by SDG&E and not accepted by the MLD, the NAHC will mediate to reach agreement.					
APM-GEO-1	SDG&E will consider the recommendations and findings of the final Geotechnical Investigation Reports prepared by Kleinfelder Inc. and the contractor's geotechnical engineer in the final design of all project components to ensure that the potential for landslides, expansive soils, and slope instability is compensated for in the final design and construction techniques. In addition, SDG&E will comply with all applicable codes and seismic standards, as appropriate, to minimize the potential for damage from a seismic event. The final project design will be reviewed and approved by a professional engineer registered in the State of California, prior to commencement of construction.	X			X	X
APM-HAZ-1	SDG&E would prepare a project-specific Hazardous Substance Management and Emergency Response Plan during the construction period to reduce or avoid potentially hazardous materials, for the purposes of worker safety, protection from groundwater contamination, and proper disposal of hazardous materials.	X	X		X	X
HAZ-1a	Prior to construction, all SDG&E, contractor, and subcontractor project personnel would receive training regarding the appropriate work practices necessary to effectively implement hazardous materials procedures and protocols and to comply with the applicable environmental laws and regulations, including, without limitation, hazardous materials spill prevention and response measures. A sign-in sheet of contractor and subcontractor project personnel who have received training shall be provided to California Public Utilities Commission on a regular basis depending on the level of construction activity.	x			x	x
HAZ-1b	The hazardous substance management and emergency response plan proposed by APM-HAZ-1 shall be reviewed and approved by the California Public Utilities Commission (CPUC) and San Diego County Department of Environmental Health (DEH), Hazardous Materials Division. The plan shall meet the requirements identified in California Health and Safety Code §25503.4, §25503.5, and §25504 and specifically addressed for the County of San Diego in the County of San Diego DEH, Hazardous Material Division, guidance on Hazardous Materials Business Plans.	x			x	x
HAZ-1c	SDG&E shall prepare and submit a copy of the Spill Prevention, Control, and Countermeasure plan, as required by Title 40 CFR, Section 112.7, to the California Public Utilities Commission for review and approval at least 60 days before the start of operation of the Mira Sorrento Substation.	x			x	x
HAZ-2	Wildfires shall be prevented or minimized by exercising care when operating utility vehicles within the right-of-way and access roads and by parking vehicles away from dry vegetation where hot catalytic converters can ignite a fire. In times of high fire hazard, it may be necessary for construction vehicles to carry water and shovels or fires	x	x		x	x

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
MM/APM	Measure	Prior	During	After	Substation	TL665 Loop- In
	extinguishers. Fire protective mats or shields would be used during grinding or welding to prevent or minimize the potential for fire.					
HYD-1	SDG&E will prepare an SWPPP under the State General Construction Permit, and implement BMPs from the SDG&E Water Quality Construction Best Management Practices Manual in order to avoid and minimize potential impacts to water quality.	x	x		x	x
HY-1	SDG&E shall consult with the San Diego Regional Water Quality Control Board (RWQCB) to determine whether an individual discharge permit is required for dewatering all of the project areas anticipated to encounter groundwater. A copy of the permit or a waiver from the RWQCB, if required, shall be provided to the California Public Utilities Commission prior to dewatering activities.	x			x	x
HY-2	SDG&E shall submit to California Public Utilities Commission prior to construction a typical dewatering drawing that shall be implemented during dewatering activities. The drawing shall include the location of pumps within secondary containment, fuel storage areas, anticipated discharge point, scour protection measures, intake hose screening, and monitoring procedures to ensure that hazardous materials spills are addressed in a timely manner and discharge hoses are frequently inspected for leaks.	x			x	x
NOI-1	SDG&E or its construction contractor shall provide advance notice, between 2 and 4 weeks prior to construction, by mail to all property owners within 300 feet of construction. The announcement shall state specifically the construction start date, anticipated completion date, and hours of construction.	x			x	x
NOI-2	SDG&E shall identify and provide a public liaison person before and during construction to respond to concerns of neighborhood receptors, including residents, about construction noise disturbance. Procedures for reaching the public liaison office via telephone or in person shall be included in notices distributed to the public in accordance with MM NOI-1. SDG&E shall also establish a toll-free telephone number for receiving questions or complaints during construction and develop procedures for responding to callers (procedures to be approved by the California Public Utilities Commission).	x	x		x	x
TT-1	Prior to the start of construction, SDG&E shall submit traffic management plans (TMPs) to the City of San Diego as part of the required traffic encroachment permits. Input and approval from the City shall be obtained, and copies of an approval letter from the City must be provided to the California Public Utilities Commission (CPUC) prior to the start of construction. The TMPs shall define the use of flag persons, warning signs, lights, barricades, cones, etc., according to standard guidelines outlined in the California Department of Transportation (Caltrans) <i>Traffic Manual for Construction and Maintenance Work Zones</i> (Caltrans 1996), the <i>Standard Specifications for Public Works Construction</i> (Caltrans 2009a), and the <i>Work Area Traffic Control Handbook (WATCH)</i> (Caltrans 2009b). Measures identified in the TMPs to include but	x			x	x

**Appendix E
Pre-Construction Mitigation Measures**

Mitigation Measures and APMs		Timing			Project Component	
<i>MM/APM</i>	<i>Measure</i>	<i>Prior</i>	<i>During</i>	<i>After</i>	<i>Substation</i>	<i>TL665 Loop- In</i>
	<p>not be limited to: The proposed gates must be located and operated so there will not be traffic backed up onto Mira Sorrento Place during peak times. No lane closure will be allowed to occur on Mira Sorrento Place or Vista Sorrento Parkway during the AM and PM peak hours to minimize disruption from construction traffic. The traffic control plan shall ensure that access remains available to all private properties at all times. Documentation of the approval of these plans, consistency with SDG&E's utility franchise agreements, and issuance of encroachment permits (if applicable) shall be provided to CPUC prior to the start of construction activities that require temporary closure of a public roadway.</p>					
TT-2	SDG&E shall stagger work shifts during the peak period of construction activity, and construction shifts shall be staggered to the degree possible, such that employee arrivals and departures from the site will avoid the project area peak hours (7:30–8:30 a.m. and 4:30–5:30 p.m.). Construction-related truck traffic shall also be scheduled to avoid travel during peak periods of traffic on the surrounding roadways.	x	x		x	x
TT-3	Construction workers shall be encouraged to carpool to the job site to the extent feasible.		x		x	x

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