Proponent's Environmental Assessment Supplement

for the

Pipeline Safety & Reliability Project

San Diego Gas & Electric Company
and
Southern California Gas Company

Volume II

Application 15-09-013

March 2016

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CHAPTER 1 – PEA SUPPLEMENT SUMMARY

1.0 INTRODUCTION

San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—filed an application and Proponent's Environmental Assessment (PEA) for a Certificate of Public Convenience and Necessity (CPCN) with the California Public Utilities Commission (CPUC or Commission) on September 30, 2015 (Application).

In the Application, Applicants propose to construct, operate, and maintain the Pipeline Safety & Reliability Project (Proposed Project). The Proposed Project involves the construction of a new approximately 47-mile-long, 36-inch-diameter natural gas transmission pipeline that will carry natural gas from SDG&E's existing Rainbow Metering Station to the pipeline's terminus and cross-tie with the existing Line 2010 on Marine Corps Air Station (MCAS) Miramar. As part of the new pipeline, the Applicants will also construct and maintain appurtenant facilities, including mainline valves, metering equipment, pressure-limiting equipment, in-line inspection equipment, cathodic protection systems, and an intrusion detection and leak monitoring system.

Since the filing of the PEA in September 2015, the Applicants have responded to requests by CPUC's Energy Division for additional information. The Applicants' responses included submittals on November 30, 2015 and February 12, 2016, as well as information that was later provided to Energy Division as it became available.

On January 22, 2016, the Commission issued a Joint Assigned Commissioner and Administrative Law Judge's Ruling Requiring an Amended Application and Seeking Protests, Responses and Replies (Ruling). This Ruling requires the Applicants to amend their Application to include an analysis of the relative costs and benefits of the Proposed Project and various alternatives identified in the Ruling, safety and compliance analysis, and information regarding construction or extension of utility facilities in compliance with Rule 3.1 of the CPUC's Rules of Practice and Procedure.

As noted above and per CPUC practice and procedure, the Applicants have provided additional information to Energy Division after the PEA was filed and will continue to do so throughout the environmental review process. The Ruling does not require the Applicants to supplement the PEA[1] and the Applicants are not aware of any applicable requirement to do so. Nonetheless,

[1] In parallel with CPUC Energy Division's review of the environmental impacts of the Proposed Project, the Administrative Law Judge (ALJ) assigned to this proceeding, together with the Assigned Commissioner, will identify the scope of the issues to be determined in the regulatory proceeding. The Applicants anticipate that the costs and purpose and need for the Proposed Project will be among the list of issues to be litigated in the regulatory proceeding before the ALJ. To the extent those issues are described in the PEA or this PEA Supplement, it is for the purpose of facilitating the CPUC Energy Division's review under CEQA. Litigation of these and other issues identified by the Assigned Commissioner and ALJ will be based on evidence presented by the parties to the proceeding.

filing the Amended Application provides the opportunity to supplement the PEA with additional engineering, design and cost information that has been developed and become available since the PEA was originally filed, as well as to bring to the Commission's attention any material corrections or modifications to the PEA that have been identified since the PEA has been filed. The Applicants have prepared this supplement to the PEA (PEA Supplement) to support a complete and accurate record.

Specifically, the Applicants have developed further engineering and design details regarding the distribution system modifications required to lower the operating pressure of Line 1600 and connect the Proposed Project with the pre-lay pipeline segment located within Pomerado Road (Distribution System Modifications).[2] In addition, the Applicants have identified a number of corrections and modifications that may be considered material. Most of this information was previously brought to the attention of Energy Division, but the Applicants include it in this PEA Supplement for the sake of a maintaining a complete record.

1.1 PEA SUPPLEMENT CONTENTS

To facilitate the CPUC's review, this PEA Supplement includes a more detailed description of the activities necessary to lower the operating pressure of Line 1600 and to connect with the pre-lay pipeline segment in Pomerado Road, supplemental environmental impact analysis of each resource area listed in Appendix G of the California Environmental Quality Act (CEQA) Guidelines, and a list of PEA corrections and modifications.

This PEA Supplement is divided into the following three sections:

- Chapter 1 – PEA Supplement Summary discusses the context, contents and conclusions of the PEA Supplement.

- Chapter 2 –Project Description Supplement provides a detailed description of the Distribution System Modifications. This discussion includes specifics regarding the following:
    - The Distribution System Modifications location
    - Distribution System Modifications components
    - Permanent and temporary land/right-of-way requirements
    - Construction methods
    - Constructions schedule and workforce

[2] As discussed in PEA Chapter 2 – Project Purpose and Need, the Proposed Project will enable the conversion of the existing Line 1600 to distribution service by lowering the maximum operating pressure of the pipeline (de-rating). Lowering the pressure of Line 1600 will satisfy the requirements of the Pipeline Safety Enhancement Plan (PSEP), which requires the Applicants to either pressure test, replace or remove Line 1600 from transmission service, and will eliminate the need to pressure test Line 1600. In addition, as discussed in PEA Chapter 3 – Project Description, the Proposed Project will connect with approximately 1.1 miles of existing 36-inch pre-lay segment (pre-lay segment) of pipe located in Pomerado Road. The pre-lay segment is currently utilized as part of SDG&E's distribution system.

  - Identification of one new Applicant-proposed measures (APM) (APM-CUL-06) that will be implemented as part of the Proposed Project in order to reduce potential impacts to unknown cultural resources from the Distribution System Modifications

- Chapter 3 – Environmental Impact Assessment Supplement includes an environmental impact assessment summary and a discussion of any changes to the existing conditions and the potential and anticipated impacts resulting from the Distribution System Modifications for each of the following resource areas:
  - Aesthetics
  - Agriculture and Forestry Resources
  - Air Quality
  - Biological Resources
  - Cultural, Tribal, and Paleontological Resources (the results of literature reviews and resource surveys will be submitted at a later date)
  - Geology, Soils, and Seismicity
  - Greenhouse Gas Emissions
  - Hazards and Hazardous Materials
  - Hydrology and Water Quality
  - Land Use and Planning
  - Mineral Resources
  - Noise
  - Population and Housing
  - Public Services
  - Recreation
  - Transportation and Traffic
  - Utilities and Service Systems
  - Cumulative Analysis

- Appendix A – List of PEA Corrections and Modifications

Because the Distribution System Modifications are located in the same jurisdictions and include similar construction activities as the Proposed Project, some resource areas did not require a detailed evaluation of each of the questions included in Appendix G of the CEQA Guidelines. In these sections, a brief description of the conclusions of the analysis is provided. For other resources areas, a more detailed analysis is provided, including review of the thresholds in Appendix G of the CEQA Guidelines.

1.2 PEA SUPPLEMENT CONCLUSIONS

This PEA Supplement provides more detailed analysis of the potential impacts associated with construction, operation, and maintenance of the Distribution System Modifications associated with the Proposed Project. Each resource area was evaluated and any potential environmental impacts associated with the more detailed Distribution System Modifications project description were disclosed. Table 1-1: Environmental Impact Assessment Supplement Summary provides a summary of the conclusions of the analysis in each resource area. The Distribution System

Modifications will not result in any new potentially significant impacts. In addition, any change in the previously identified impacts will be incremental and with implementation of APMs do not change the conclusions of the PEA. As shown in Table 1-1: Environmental Impact Assessment Supplement Summary, one additional APM (APM-CUL-06) is proposed to ensure potential impacts to cultural resources resulting from the Distribution System Modifications remain at a less-than-significant level.

The Distribution System Modifications described in PEA Supplement Chapter 2 – Project Description would also be required if construction of any of the alternatives fully evaluated, with the exception of the No Project Alternative, in PEA Chapter 5 – Discussion of Significant Impacts and Project Alternatives were to occur. Accordingly, the impacts associated with the Distribution System Modifications would also result if any of the alternatives were chosen as an alternative to the Proposed Project. However, because the Distribution System Modifications discussed in this PEA Supplement do not substantially reduce or increase impacts identified in the PEA, the conclusions in the PEA remain unchanged. These conclusions are summarized in PEA Table 5-2 Summary of Alternatives Fully Evaluated.

Table 1-1: Environmental Impact Assessment Supplement Summary

Resource Area	Proposed Project Proponent's Environmental Assessment (PEA) Determination	Do the Distribution System Modifications Change the Severity of a Previously Identified Impact to Potentially Significant or Create a New Significant Impact?	Additional APMs Proposed?
Aesthetics	Less-than-Significant Impact with implementation of APMs	No	No
Agriculture and Forestry Resources	Less-than-Significant Impact with implementation of APMs	No	No
Air Quality	Potentially Significant Impact	No	No
Biological Resources	Less-than-Significant Impact with implementation of APMs	No	No
Cultural, Tribal, and Paleontological Resources	Less-than-Significant Impact with implementation of APMs	No	APM-CUL-06 was proposed to ensure that all areas not included in the original cultural resource survey will be surveyed prior to construction.
Geology, Soils, and Seismicity	Less-than-Significant Impact with implementation of APMs	No	No
Greenhouse Gas Emissions	Less-than-Significant Impact	No	No
Hazards and Hazardous Materials	Less-than-Significant Impact with implementation of APMs	No	No
Hydrology and Water Quality	Less-than-Significant Impact with implementation of APMs	No	No
Land Use and Planning	Less-than-Significant Impact	No	No
Mineral Resources	Less-than-Significant Impact	No	No

Resource Area	Proposed Project Proponent's Environmental Assessment (PEA) Determination	Do the Distribution System Modifications Change the Severity of a Previously Identified Impact to Potentially Significant or Create a New Significant Impact?	Additional APMs Proposed?
Noise	Potentially Significant Impact with implementation of APMs	No	No
Population and Housing	Less-than-Significant Impact	No	No
Public Services	Less-than-Significant Impact with implementation of APMs	No	No
Recreation	Less-than-Significant Impact with implementation of APMs	No	No
Transportation and Traffic	Potentially Significant Impact with implementation of APMs	No	No
Utilities and Service Systems	Less-than-Significant Impact with implementation of APMs	No	No
Cumulative Analysis	Less-than-Significant Impact with implementation of APMs	No	No

CHAPTER 2 – PROJECT DESCRIPTION SUPPLEMENT

As discussed in Chapter 2 – Project Purpose and Need of the Proponent's Environmental Assessment (PEA), the construction, operation and maintenance of the Pipeline Safety & Reliability Project (Proposed Project) will enable the conversion of the existing Line 1600 to distribution service by lowering the maximum allowable operating pressure (MAOP) of the pipeline. This will satisfy the requirements of San Diego Gas & Electric Company's (SDG&E's) and Southern California Gas Company's (SoCalGas') (collectively, the Applicants') Pipeline Safety Enhancement Plan (PSEP) and eliminate the need to pressure test Line 1600. In addition, as discussed in PEA Chapter 3 – Project Description, the Proposed Project will connect with approximately 1.1 miles of existing pre-lay segment of pipe located in Pomerado Road. To complete the conversion of Line 1600 and utilize the existing pre-lay segment, several changes to SDG&E's distribution system are required, including the following:

- Remove 10 existing regulator stations
  - Regulator Station 1316
  - Regulator Station 1101
  - Regulator Station 1516
  - Regulator Station 141
  - Regulator Station 1500
  - Regulator Station 1248
  - Regulator Station 1494
  - Regulator Station 1051
  - Regulator Station 1335
  - Regulator Station 982
- Replace two removed regulator stations with check valves
  - Regulator Station 1519
  - Regulator Station 1500
- Replace one existing regulator station with a new regulator station
  - Regulator Station 939
- Construct three new regulator stations and connection pipelines
  - Regulator Station A
  - Regulator Station B
  - Regulator Station C
- Construct an approximately 0.88-mile long, eight-inch-diameter extension
  - Mira Mesa Extension
- Replace an approximately 0.70-mile-long segment of Line 49-31B with six-inch-diameter pipe
  - Line 49-31B Replacement
- Install approximately 1.08 miles of eight-inch-diameter distribution pipeline along the pre-lay segment of pipeline in Pomerado
  - Pre-lay Segment Replacement

The following subsections describe the components of the Distribution System Modifications and their location in detail.

2.0 LOCATION OF DISTRIBUTION SYSTEM MODIFICATIONS

The Proposed Project is located in San Diego County, California, and crosses the cities of San Diego, Escondido, and Poway; unincorporated communities in San Diego County; and federal land. The Distribution System Modifications proposed by the Applicants are generally located within existing paved roads and road shoulders in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Figure 2-1: Distribution System Modifications Location Map depicts the general location of the Distribution System Modifications.

2.0.0 Regulator Stations

The regulator stations to be removed, replaced, and/or constructed are in various locations in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Attachment 2-A: Detailed Distribution System Modifications Map depicts the locations of the regulator station removal and installation sites. The regulator stations will be removed or installed adjacent to roads and road intersections and within SDG&E's existing right-of-way (ROW),[1] as described in Section 2.2.0 Pressure Reduction of Line 1600. Two of the three new regulator stations will require short connection pipeline segments from the high-pressure supply to the station locations. For Regulator Station A, the approximately 0.06-mile-long pipeline segment will be installed within Pomerado Road near the intersection with Twin Peaks Road within the City of Poway. For Regulator Station B, the approximately 0.01-mile-long pipeline segment loop will be installed within Pomerado Road near the intersection with Oak Knoll Road within the City of Poway.

2.0.1 Distribution Pipelines

Attachment 2-A: Detailed Distribution System Modifications Map depicts the locations of three distribution pipeline segments to be constructed or replaced, including an extension of the distribution pipeline in the community of Mira Mesa (Mira Mesa extension) and two replacement segments in different locations along Pomerado Road in San Diego County (Line 49-31B replacement and the pre-lay segment replacement). The approximately 0.88-mile Mira Mesa extension from the existing Line 49-125 to the existing Line 49-31B is located in the City of San Diego. The Mira Mesa extension connects with the existing Line 49-125 at the intersection of Black Mountain Road and Mira Mesa Boulevard, then travels south within Black Mountain Road for approximately 0.30 mile to the intersection of Black Mountain Road and Hillery Drive. At Hillery Drive, the Mira Mesa extension travels east within Hillery Drive for approximately 0.36 mile, veers south at North Campus Drive for approximately 0.20 mile, then travels off the road within the adjacent, disturbed area to connect with the existing Line 49-31B. The Line 49-31B replacement is located in unincorporated San Diego County, within approximately 0.70 mile of Pomerado Road between Interstate (I-) 15 and Avenue of the Nations, where it connects with Regulator Station C. The pre-lay segment replacement is located in the City of Poway, within approximately 1.08 miles of Pomerado Road between Oak Knoll Road and Scripps Poway Road.

[1] For purposes of this PEA Supplement, ROW includes SDG&E franchise rights and easement rights.

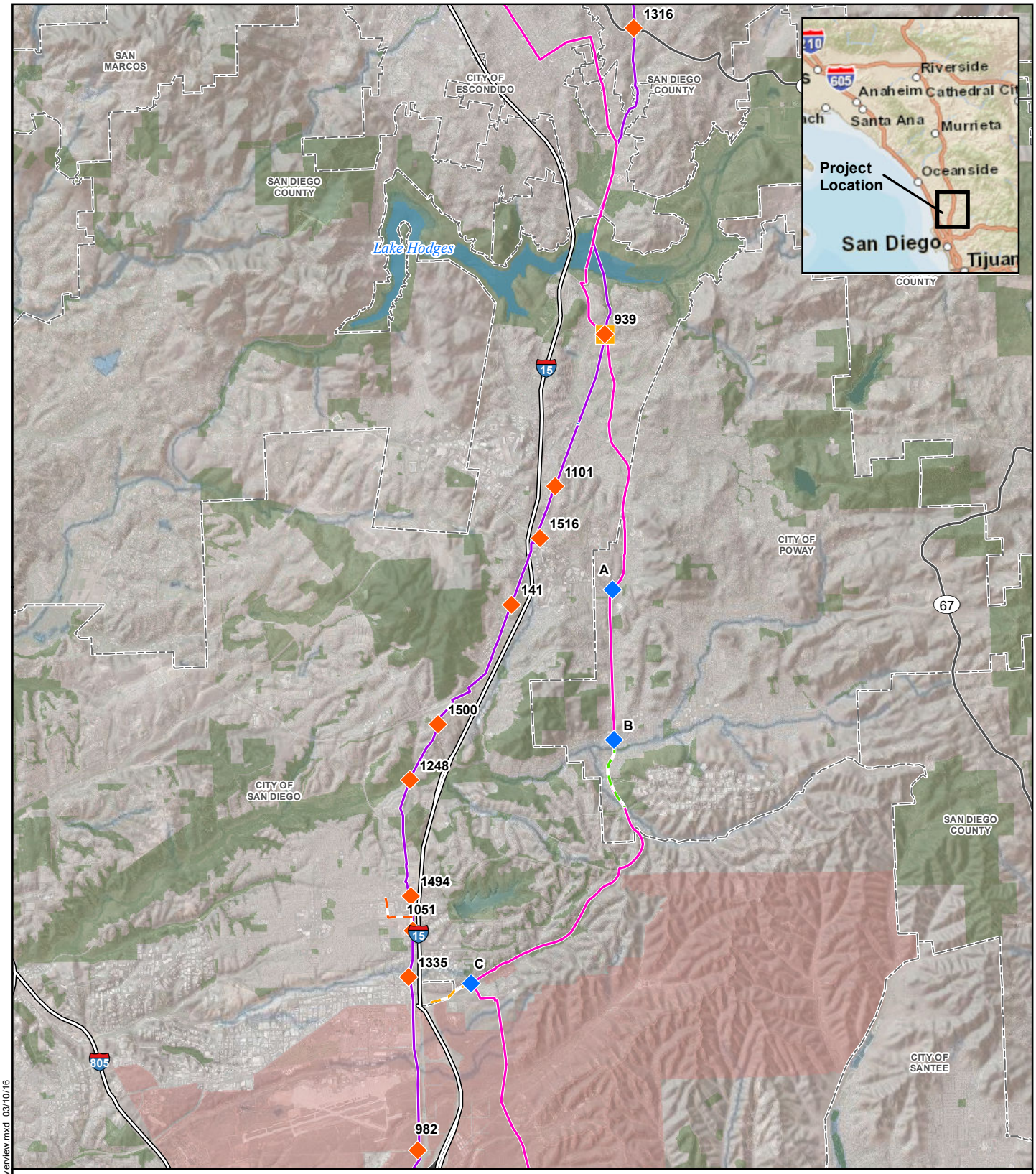


Figure 2-1: Distribution System Modification Location Map — **Pipeline Safety & Reliability Project**

- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Proposed PSRP Project Route
- Line 1600
- Parks
- Military
- Interstate Highway
- Major Road/State Highway

1:135,000

0 1 2 Miles

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

\MXDs\L1600_Derating\Overview.mxd 03/10/16

2.1 DISTRIBUTION SYSTEM MODIFICATIONS

2.1.0 Pressure Reduction of Line 1600

Line 1600 is a 16-inch-diameter transmission main that extends from the community of Rainbow to Mission Valley.[2] The transmission main supplies approximately 10 percent of the natural gas demand in San Diego County and serves as the sole supply of natural gas for customers in the inland valley communities north of the City of Escondido. Currently, Line 1600 has an MAOP of 640 pounds per square inch gauge (PSIG) along its entire length. In order to repurpose and de-rate Line 1600 to a distribution line operating at a pressure level below 20 percent specified minimum yield strength (SMYS), the pressure in the pipeline between the Rainbow Pressure Limiting Station and Kearny Villa Pressure Limiting Station will be reduced to an MAOP of 320 PSIG.

Within the distribution supply systems, 10 regulator stations will no longer be needed between Line 1600 and the distribution system downstream, and they will be removed. The Applicants anticipate installing check valves in place of two of the removed regulator stations. Additionally, because one existing regulator station will be pushed beyond its design capacity with the reduced inlet pressure, it will be replaced with a new regulator station designed to operate at the new Line 1600 MAOP of 320 PSIG. In addition, to maintain an MAOP of 400 PSIG in the most critical distribution supply line systems, three new regulator stations will be required to feed the distribution systems from the Proposed Project. Each of the regulator stations to be removed, replaced, and constructed are depicted in Attachment 2-A: Detailed Distribution System Modifications Map.

To maintain the existing capacity of Mira Mesa's current high-pressure system, which serves both Qualcomm and the Sorrento Valley area, a new 400 PSIG source is needed if the operating pressure of Line 1600 is lowered to an MAOP of 320 PSIG. To maintain the current operating pressure, the approximately 0.88-mile-long, eight-inch-diameter Mira Mesa extension will be installed between the west end of Line 49-31B and Line 49-125 in Mira Mesa Boulevard, and the existing regulator station (Regulator Station 1051) located off North Campus Drive within a pedestrian path will be removed. In addition, a new regulator station from the Proposed Project to Line 49-31B is required, as well as an upgrade from the existing four-inch-diameter pipe to a six-inch-diameter pipe for the approximately 0.70-mile-long west end of Line 49-31B in Pomerado Road. Attachment 2-A: Detailed Distribution System Modifications Map depicts the Mira Mesa extension, the regulator station, and the Line 49-31B replacement.

In sum, the following activities are proposed to maintain distribution supply service following the pressure reduction of Line 1600:

- Remove 10 existing regulator stations;
- Replace two removed regulator stations with check valves;
- Construct three new regulator stations;
- Replace one existing regulator station;

[2] The portion of Line 1600 that will be de-rated extends from the community of Rainbow to the Kearny Villa Pressure-Limiting Station.

- Construct an approximately 0.88-mile long, eight-inch-diameter extension on Black Mountain Road between the west end of Line 49-31B and Line 49-125; and
- Replace an approximately 0.70-mile-long segment of Line 49-31B, on Pomerado Road, with six-inch-diameter pipe.

2.1.1 Pre-Lay Segment Replacement

In 1994, Pomerado Road was realigned between Poway Road and Scripps-Poway Parkway. SDG&E installed a 36-inch-diameter pipeline in the new street alignment in anticipation of a proposed, new 36-inch-diameter transmission pipeline from the community of Rainbow. This pipeline segment was designed and tested to operate at 800 PSIG; however, the segment was incorporated into the existing 400 PSIG distribution system that tied the community of Rancho Bernardo to the high-pressure distribution systems in the City of Poway and the communities of Rancho Peñasquitos and Scripps Ranch. As discussed in Section 3.4.0 Transmission Pipeline of the PEA, the Proposed Project will use this existing 36-inch-diameter transmission pipeline by connecting with the pre-lay segment between approximate Milepost (MP) 37.9 and MP 39.0. To connect this segment of pre-lay pipeline—which is designated as Line 49-31C—with the Proposed Project, a new, approximately 1.08-mile-long, eight-inch-diameter distribution supply pipeline will be installed parallel to the pre-lay segment to replace Line 49-31C within the distribution system and maintain system continuity.

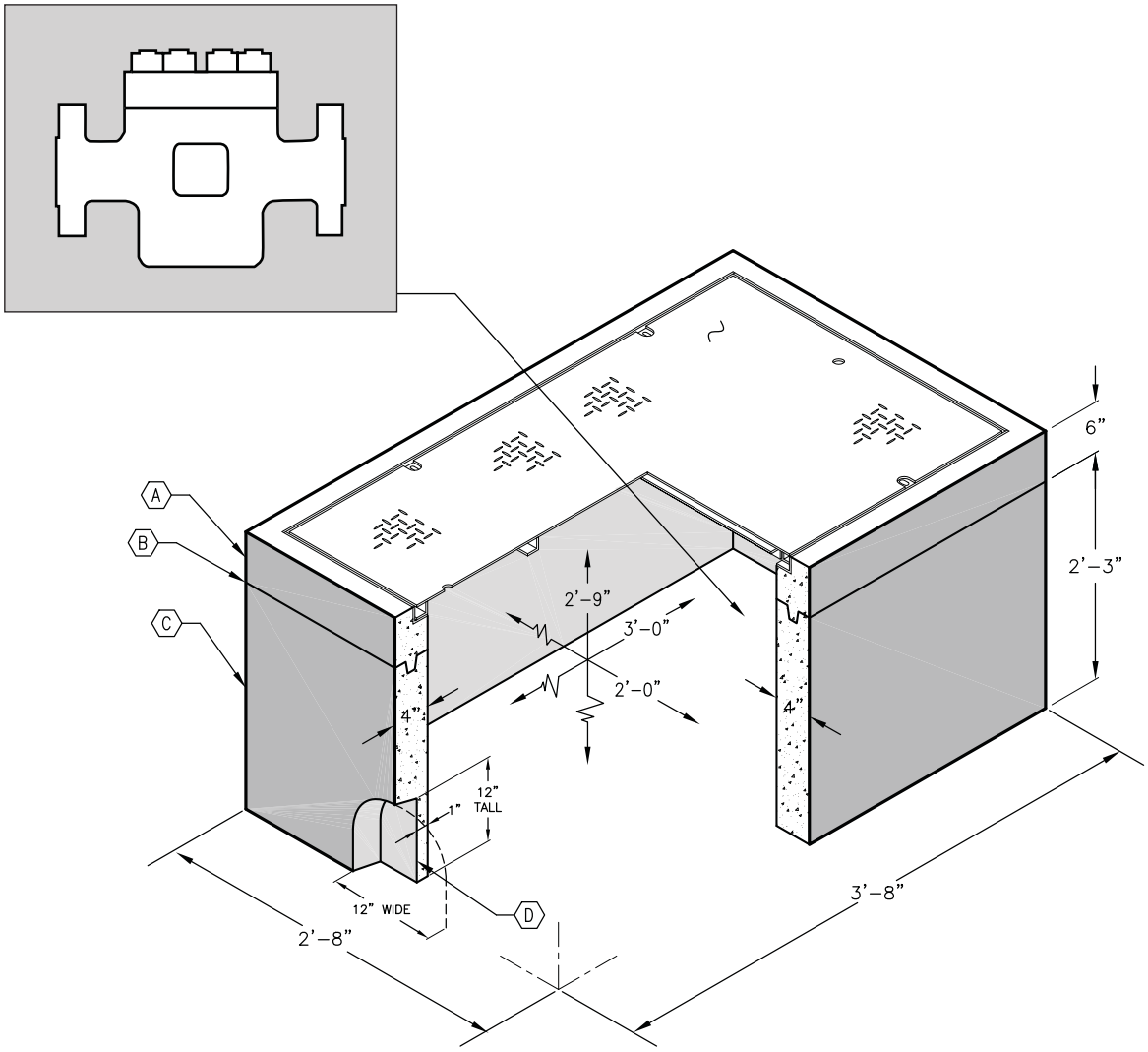
2.2 PROPOSED PROJECT COMPONENTS

2.2.0 Pressure Reduction of Line 1600

Removal of Existing Regulator Stations

Ten regulator stations will be removed as they will no longer be needed with the lowered operating pressure of Line 1600. All regulator stations slated for removal, which are listed in Table 2-1: Regulator Stations to be Removed will be taken out of service, and the existing equipment and substructures will be removed. Table 2-1: Regulator Stations to be Removed also lists which page number of Attachment 2-A: Detailed Distribution System Modifications Map each facility is depicted on. Temporary workspaces of up to 50 feet by 100 feet will be required to remove the equipment at each location. Workspaces specific to each location are discussed in Section 2.3 Right-of-Way Requirements. To the extent possible, the workspaces required to remove the facilities are located in SDG&E's existing ROW; however, additional ROW may be required. The removed regulator stations will be backfilled and paved over where they are located in city streets, or they will be replaced with like material where they are located in road shoulders.

Check valves are anticipated to be installed at two of the removed regulator station locations (Regulator Station 1516 and Regulator Station 1500). Each check valve will be installed underground, in place of the removed regulator station, and will have a permanent underground footprint of approximately two feet eight inches (2'8") tall, three feet eight inches (3'8") wide, and two feet nine inches (2'9") deep. Steel vault covers will be installed at the new check valve locations, and no permanent aboveground facilities will be required. Typical drawings of a check valve are included in Figure 2-2: Check Valve Typical Drawing. As discussed previously, one of the existing regulator stations to be removed (Regulator Station 939) will be replaced with a new



■ ILLUSTRATION IS TYPICAL ONLY OF GENERAL SERIES CONFIGURATION.

MINIMUM EXCAVATION SIZE:
3’-2” x 4’-2” DEPTH REQUIRED

Ⓐ 6” TOP SECTION WT. = 200 Lbs.

Ⓑ 6” OR 12” EXTENSION SECTIONS AVAILABLE

Ⓒ BOTTOM SECTION WT. = 1,200 Lbs.

Ⓓ 10” WIDE X 10” TALL PIPE KNOCKOUT ON EACH END WALL

Source: Jensen Precast W-2436 Series

SDGE A Sempra Energy utility SoCalGas A Sempra Energy utility

Figure 2-2: Check Valve Typical Drawing

Table 2-1: Regulator Stations to be Removed

Existing Regulator Station	Location	City	Check Valves Installed in Place	Replacement Regulator Station to be Installed	Map Page Number
Regulator Station 1316	San Pasqual Valley Road, near its intersection with Bear Valley Parkway	Unincorporated San Diego County			1
Regulator Station 939	Pomerado Road, opposite of Bernardo Trails Drive	City of San Diego		●	2
Regulator Station 1101	Intersection of Bernardo Heights Parkway and Avenida Vensuto	City of San Diego			3
Regulator Station 1516	Camino Del Norte, between I-15 and Carmel Mountain Road	City of San Diego	●		4
Regulator Station 141	Off of the unnamed access road from Caminito Orense Este	City of San Diego			5
Regulator Station 1500	Rancho Peñasquitos Boulevard, between Calle De Las Rosas and Via Del Sud	City of San Diego	●		6
Regulator Station 1248	Mercy Road, off of the paved driveway near the intersection of Mercy Road and Branicole Lane	City of San Diego			7
Regulator Station 1494	Mira Mesa Boulevard, between Westview Parkway and I-15	City of San Diego			8, 9

Existing Regulator Station	Location	City	Check Valves Installed in Place	Replacement Regulator Station to be Installed	Map Page Number
Regulator Station 1051	North Campus Drive, between the road and the parking lot	City of San Diego			8, 10
Regulator Station 1335	Carroll Centre Road, toward the end of the cul-de-sac	City of San Diego			11
Regulator Station 982	Near the southbound on- and off-ramps to Kearny Villa Road from Harris Plant Road	City of San Diego			12

regulator station. Installation of the new regulator station will be completed prior to removing the existing regulator station; regulator station installation is described in the following subsection.

Installation of New Regulator Stations

As listed in Table 2-2: New Regulator Stations, three new regulator stations will be installed underground at three locations along Pomerado Road. Table 2-2: New Regulator Stations also lists which page number of Attachment 2-A: Detailed Distribution System Modifications Map each facility is depicted on. The new regulator stations will be designed to operate at the Proposed Project MAOP of 800 PSIG, and they will be installed in accordance with United States (U.S.) Department of Transportation (DOT) regulations in Title 49, Part 192 of the Code of Federal Regulations and General Order 112-F. The regulator stations will ensure that the distribution pipeline system operates safely by reducing pressure as natural gas flows downstream.

Each regulator station will be constructed underground and within SDG&E's existing ROW. While the permanent facilities will be installed within existing sidewalks or directly adjacent to the road shoulder, additional temporary workspace may be required to construct the facility. A workspace measuring up to 70 feet wide and 140 feet long will be required to construct each regulator station; workspaces specific to each location are discussed in Section 2.3 Right-of-Way Requirements. As described in Section 2.0.0 Regulator Stations, some locations will require a short pipeline segment to connect to the high-pressure distribution system, ranging from 0.01 mile to 0.06 mile. The required workspace will be located within or adjacent to the road, road shoulder, and SDG&E's existing ROW. Each regulator station will be located below grade inside two concrete vaults that each measure approximately seven feet by seven feet.

Table 2-2: New Regulator Stations

New Regulator Station	Location	City	Length of Connection Pipeline (miles)	Map Page Number
Regulator Station A	Pomerado Road, near its intersection with Twin Peaks Road	City of Poway	0.06	13
Regulator Station B	Pomerado Road, between Poway Road and Oak Knoll Road	City of Poway	0.01	14, 15
Regulator Station C	Pomerado Road, near its intersection with Willow Creek Road	City of San Diego	None	16, 17

The permanent footprint of the regulator stations will measure approximately 19 feet by seven feet, or 133 square feet (0.003 acre). No permanent aboveground facilities will be installed at the regulator stations, with the exception of steel vault covers and an Electronic Pressure Monitoring (EPM) System. The EPM System consists of a steel pole measuring six to 10 feet high (depending on the location) and two inches in diameter with an electronic pressure monitoring

box mounted on it. A small solar panel, measuring approximately two feet by two feet, will be located near the top of the pole. No new driveway or access roads will be constructed. Typical drawings of a regulator station are included in Figure 2-3: Regulator Station Typical Drawing.

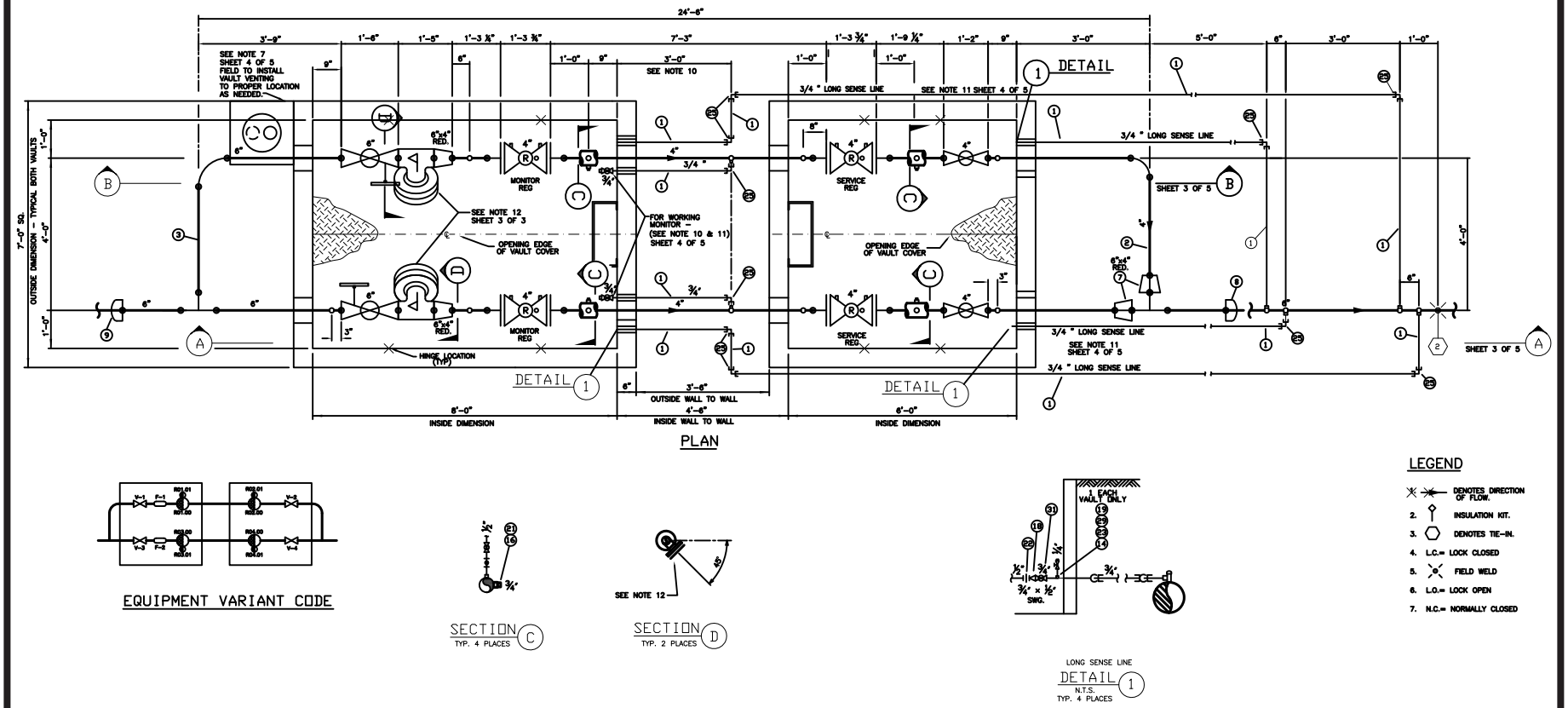
Mira Mesa Pipeline Extension and Line 49-31B Replacement

Table 2-3: Distribution Pipeline Extension and Replacements lists each of the segments of distribution pipelines to be installed as part of the Distribution System Modifications. In addition, the page number of Attachment 2-A: Detailed Distribution System Modifications Map that each facility is depicted on is provided in Table 2-3: Distribution Pipeline Extension and Replacements. An approximately 0.88-mile-long, high-pressure extension will be constructed between the west end of Line 49-31B and Line 49-125. The pipe diameter will be eight inches and will operate at an MAOP of 400 PSIG. The pipeline will be installed approximately 36 inches below the ground surface using conventional trenching methods for urban areas. A typical trench cross-section for distribution pipelines in urban areas is provided in Figure 2-4: Typical Trench Cross-Section. The pipeline will be installed entirely within the existing road and road shoulder, which is where the workspace to construct the segment will also be located. In addition, the pipeline will cross numerous existing utilities along the route, such as other natural gas pipelines, communication lines, aqueducts, sewers, and water pipelines. These utilities will be identified through consultation with local jurisdictions and incorporated into the final design.

In addition, an approximately 0.70-mile-long segment of Line 49-31B, which has an existing diameter of four inches, will be replaced with a six-inch-diameter pipe. The replaced segment will have an MAOP of 400 PSIG. The replacement segment will be installed with approximately 36 inches of cover using conventional trenching methods for urban areas. The pipeline will be installed entirely within the existing road and road shoulder. Workspace to construct the segment will be limited to the road, road shoulder, and sidewalk.

2.2.1 Pre-Lay Segment Replacement

The Proposed Project will utilize the existing 36-inch-diameter pre-lay segment of pipeline, which is located within Pomerado Road and currently provides distribution service. As discussed in Section 3.4.0 Transmission Pipeline of the PEA, three eight-inch-diameter distribution pipelines are currently connected to the pre-lay segment, including one at each end of the pre-lay segment and one at the segment's midway point at the intersection of Stowe Drive and Pomerado Road. Section 3.4.0 Transmission Pipeline of the PEA described that three regulator stations will be installed on the distribution lines connected to the pre-lay segment, and that a temporary supply from a portable liquefied or compressed natural gas system will be required during construction. However, upon further refinement of the design of the Proposed Project, it was determined that the impacts associated with installing new regulator stations and a temporary natural gas supply could be avoided by installing a pipeline to replace the current function of the pre-lay segment. Therefore, to maintain service to the three distribution pipelines, a new distribution supply pipeline will be installed adjacent to the existing pre-lay segment.



EQUIPMENT VARIANT CODE

SECTION C
TYP. 4 PLACES

SECTION D
TYP. 2 PLACES
SEE NOTE 12

1 EACH VAULT ONLY

LONG SENSE LINE
DETAIL 1
N.T.S.
TYP. 4 PLACES

LEGEND

1. DENOTES DIRECTION OF FLOW.
2. INSULATION KIT.
3. DENOTES TIE–IN.
4. L.C.= LOCK CLOSED
5. FIELD WELD
6. L.O.= LOCK OPEN
7. N.C.= NORMALLY CLOSED

SDGE A Sempra Energy utility SoCalGas A Sempra Energy utility

Figure 2-3: Regulator Station Typical Drawing

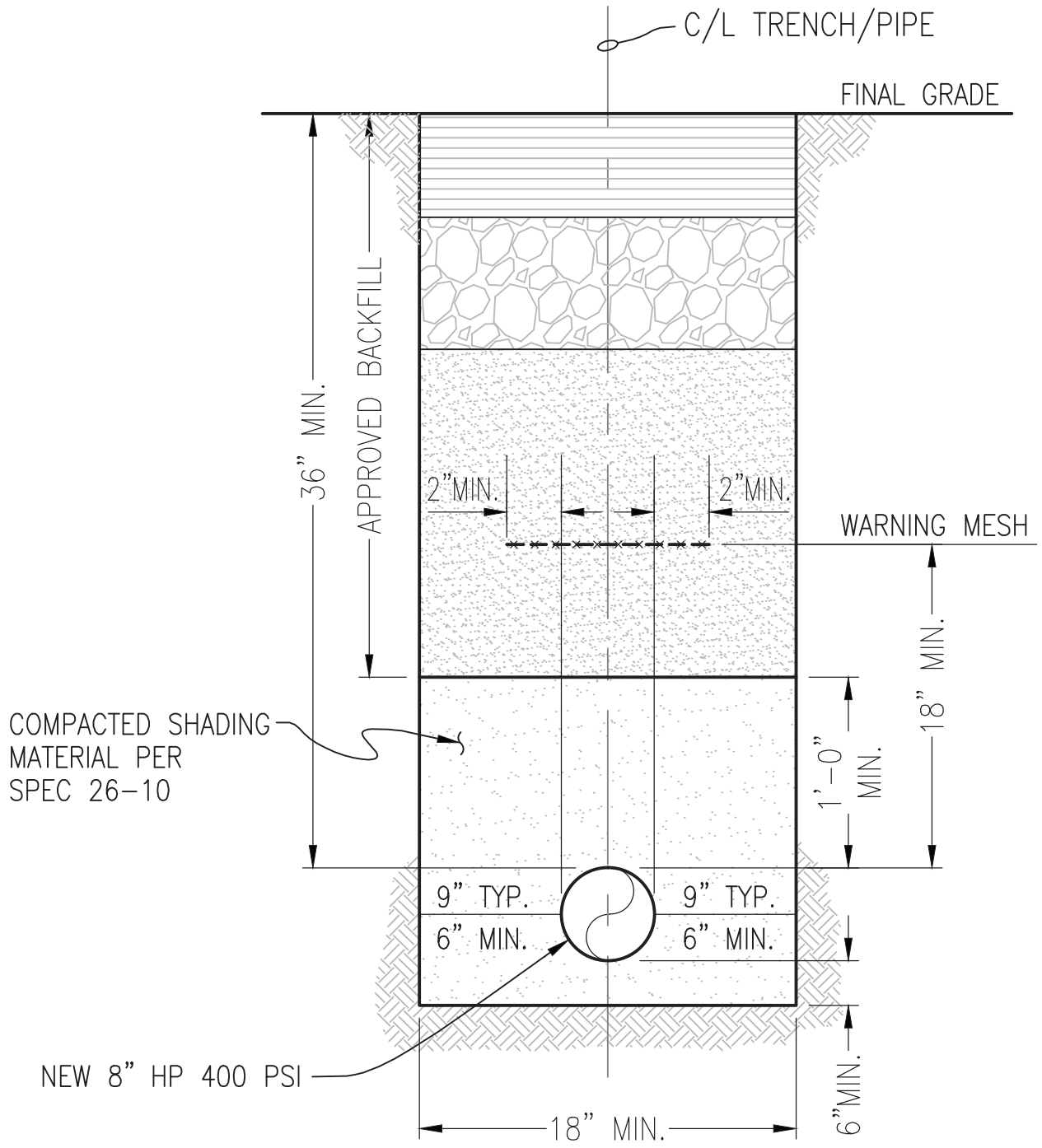


Figure 2-4: Typical Trench Cross-Section

Table 2-3: Distribution Pipeline Extension and Replacements

Extension or Replacement Segment	Location	City	Length (miles)	Map Page Number
Mira Mesa Extension	Black Mountain Road (from Mira Mesa Boulevard to Hillery Drive), Hillery Drive (from Back Mountain Road to North Campus Drive), and North Campus Drive	City of San Diego	0.88	8
Line 49-31B Replacement	Pomerado Road (between I-15 and Avenue of the Nations)	City of San Diego	0.70	16
Pre-Lay Segment Replacement	Pomerado Road (between Oak Knoll Road and Scripps Poway Road)	City of Poway	1.08	14

As described in Table 2-3: Distribution Pipeline Extension and Replacements, the replacement pipeline will consist of 1.08 miles of eight-inch-diameter pipe designed for an MAOP of 400 PSIG. Using conventional trenching methods, the pipeline will be installed adjacent to the existing pre-lay segment and 36 inches below the ground surface. A typical cross-sectional drawing is provided as Figure 2-3: Regulator Station Typical Drawing. The replacement pipeline will be installed entirely within the existing road. Workspace will be limited to the road, road shoulder, road median, and/or sidewalk, depending on the location. In addition, the replacement pipeline may cross existing utilities along the route, such as communication lines, sewers, and water pipelines. These utilities will be identified through consultation with local jurisdictions and incorporated into the final design.

The replacement pipeline will be constructed using conventional trenching methods prior to connecting the Proposed Project with the existing pre-lay segment so that distribution service is not interrupted. Once completed, the replacement distribution pipeline will be connected with the three distribution pipelines that currently feed from the existing pre-lay segment of pipeline.

2.3 RIGHT-OF-WAY REQUIREMENTS

Each of the Distribution System Modifications will be located within existing SDG&E ROWs, and no additional permanent land easements will be required, with the exception of the segment of the Mira Mesa extension within North Campus Drive, which is not a public road. In some areas, temporary workspace will require additional area within the road and road shoulder to install the Distribution System Modifications. Wherever possible work areas will be kept in existing ROW; however, it may be necessary to acquire temporary construction easements in areas adjacent to the road/road shoulder to install or remove the Distribution System Modifications. The temporary workspace dimensions that are necessary to construct each facility and the permanent footprint of each facility are provided in Table 2-4: Temporary and

Permanent Land Requirements. The distribution system modification work areas will be accessed by existing roadways, and no new access roads or driveways will be constructed.

The PEA provided the anticipated staging areas in Table 3-5: Approximate Staging Area Locations and Descriptions, and no additional staging areas will be required to complete the Distribution System Modifications.

2.4 CONSTRUCTION

Construction of the Distribution System Modifications will be similar to what was described in Section 3.6 Construction of the PEA. Conventional trenching methods discussed will be used for the Distribution System Modifications. Horizontal boring may be utilized to cross existing utilities or water features. Section 3.6.0 Mobilization and Staging and Section 3.6.1 Surveying, Staking, and Flagging of the PEA describe site preparation methodologies that will be utilized.

2.4.0 Clearing and Grading

The Distribution System Modifications are located within urban areas and will not require cross-country travel. Therefore, clearing and grading will be primarily limited to trimming ornamental trees and vegetation adjacent to workspaces, as necessary.

2.4.1 Hauling and Stringing the Pipe

Due to the small pipe size, the pipe necessary to complete the distribution pipeline installations will be transported to the site immediately prior to installation, rather than storing the pipe at the staging areas. Otherwise, hauling and stringing methods will occur similar to what is described in Section 3.6.3 Hauling and Stringing the Pipe of the PEA.

2.4.2 Trenching

A typical trench cross-section is included as Figure 2-4: Typical Trench Cross-Section. The trench for the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components will measure 44 inches deep and 18 inches wide. Installation of the new regulator stations will require an excavation measuring approximately seven feet wide, five feet deep, and 34 feet long. The typical cross-section for the regulator station is included as Figure 2-3: Regulator Station Typical Drawing. Typical construction methods will be utilized consistent with the description provided in Section 3.6.4 Trenching, Section 3.6.5 Construction within Roadways, and Section 3.6.6 Residential Construction of the PEA.

2.4.3 Pipe Bending, Welding, and Coating

Pipe bending, welding, and coating for the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components will be conducted similar to what was described in Section 3.6.10 Pipe Bending, Welding, and Coating of the PEA. New pipeline welds will be inspected both visually and radiographically (i.e., via X-ray) by certified weld inspectors, and will be coated.

Table 2-4: Temporary and Permanent Land Requirements[3][4]

Facility	Temporary Land Requirements		Permanent Land Requirements	
	Approximate Dimensions (feet)	Approximate Area (acres)	Approximate Dimensions (feet)	Approximate Area (acres)
Regulator Station 1316	50 by 50	0.06	Not Applicable (NA)	NA
Regulator Station 1101	35 by 95	0.07	NA	NA
Regulator Station 1516	40 by 75	0.07	NA	NA
Regulator Station 141	50 by 50 (workspace) 12 by 140 (access)	0.06 (workspace) 0.03 (access)	NA	NA
Regulator Station 1500	40 by 75	0.06	NA	NA
Regulator Station 1248	50 by 100 (workspace) 12 by 140 (access)	0.11 (workspace) 0.04 (access)	NA	NA
Regulator Station 1494	50 by 75	0.09	NA	NA
Regulator Station 1051	60 by 80	0.08	NA	NA
Regulator Station 1335	30 by 80	0.05	NA	NA
Regulator Station 982	55 by 94	0.12	NA	NA
Regulator Station 939	70 by 122	0.20	7 by 19	<0.01
Regulator Station A	70 by 90	0.16	7 by 19	<0.01
Regulator Station B	55 by 140	0.18	7 by 19	<0.01
Regulator Station C	60 by 125	0.16	7 by 19	<0.01

[3] Permanent land requirement refers to the permanent footprint of the facilities; temporary land requirement refers to this area and the temporary workspace required to construct each facility.
[4] The location and dimension of facility workspaces and permanent footprints are anticipated to shift or move during final design.

2.4.4 Lowering-In, Backfill, and Compaction

The pipe for the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components will be lowered in, and the trench will be backfilled and compacted consistent with the methodology discussed for urban areas in Section 3.6.11 Lowering-In, Backfill, and Compaction of the PEA. As shown in Figure 2-4: Typical Trench Cross-Section, warning mesh will be installed approximately 18 inches above the pipe during the backfill process.

2.4.5 Dust Control

The Distribution System Modifications are located within paved, urban areas; therefore, the release of fugitive dust during trenching, padding, backfill, and cleanup is anticipated to be minimal. However, water trucks will be used during construction to apply water to work areas, trench spoil, and other exposed soil to suppress dust to a level that complies with applicable regulations. Dust control efforts will be conducted according to the description provided in Section 3.6.14 Dust Control of the PEA. A discussion of the additional water usage associated with the Distribution System Modifications is provided in Section 3.17 Utilities and Service Systems.

2.4.6 Hydrostatic Testing

Hydrostatic testing of the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components will be conducted similar to the description provided in Section 3.6.15 Hydrostatic Testing of the PEA and in accordance with U.S. DOT standards. Approximately 33,206 gallons of water[5] will be required to test the approximately 2.7 miles of distribution pipeline components. It is anticipated that the test water will be obtained from test water used during hydrostatic testing of the new 36-inch pipeline where feasible. Therefore, the approximately 4.7 million gallons of water anticipated to be required to test the Proposed Project pipeline will remain unchanged.

2.4.7 Erosion and Sediment Control and Pollution Prevention During Construction

As discussed in Section 3.6.17 Erosion and Sediment Control and Pollution Prevention During Construction of the PEA, the Applicants will implement best management practices (BMPs) for erosion and sediment control in accordance with SDG&E's Water Quality Construction BMPs Manual and a Storm Water Pollution Prevention Plan that will be prepared prior to construction. At distribution system modification locations, the potential for erosion and subsequent sedimentation is low because the majority of work will occur on pavement, and an exposed trench generally has low potential for runoff.

2.4.8 Cleanup and Restoration

All construction material and debris will be removed from the ROW following the completion of construction, as described in Section 3.6.18 Cleanup and Restoration of the PEA. Following construction along roadways, restoration activities will generally commence within a few days of backfilling. Where applicable, pipeline markers measuring approximately four inches wide and

[5] Alternatively, nitrogen may be used to test the new distribution extension and replacement components.

four feet tall will be installed in bare ground areas off of the road once construction and restoration is complete.

2.4.9 Night Work

As discussed in PEA Section 3.6.19 Night Work, night work may be required. Any night work conducted for the Distribution System Modifications will be conducted as described in PEA Section 3.6.19 Night Work.

2.4.10 Construction Workforce and Equipment

The workforce described for the Proposed Project in PEA Section 3.6.20 Construction Workforce and Equipment will be utilized to construct the Distribution System Modifications. The equipment required for the Distribution System Modifications is anticipated to be the same as the list provided in PEA Attachment 3-B: Typical Construction Equipment.

2.5 CONSTRUCTION SCHEDULE AND COST

As discussed in PEA Section 3.7 Construction Schedule and Cost, construction of the Proposed Project is anticipated to begin in the third quarter of 2019[6] and is expected to take 15 to 21 months to complete. To account for construction of the Distribution System Modifications, an additional two to three months will be required. Construction of the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components may occur concurrently with construction of the Proposed Project. The removal, replacement, and installation of the regulator stations will begin following completion of the Proposed Project and prior to lowering the operating pressure of Line 1600. Therefore, the overall Proposed Project construction schedule will be extended two to three months to complete.

Construction crews will work 10 to 12 hours per day and up to six days per week, typically from 6:00 a.m. to 7:00 p.m., or as dictated by city or county ordinances and/or encroachment permit requirements. All applicable permits and authorizations will be obtained prior to commencing construction.

An updated estimated cost to construct the Proposed Project, including the Distribution System Modifications, is included in Table 2-5: Updated Estimated Construction Costs.

2.6 OPERATION AND MAINTENANCE

In accordance with the Applicants' operation and maintenance procedures, the Applicants' existing staff will operate and maintain the distribution pipelines and regulator stations; perform routine maintenance of the pipeline, check valves, and regulator stations; and respond to emergency situations. These operation and maintenance procedures also include emergency planning, on-call response, and incident reporting, and thus provide for prompt and effective responses to significant, irregular conditions detected along the pipeline. Typical testing and

[6] This PEA Supplement updates the construction schedule for the Proposed Project. The construction start date is based on receiving a Certificate of Public Convenience and Necessity from the CPUC by 2017 and issuance of other required permits by late 2017 or 2018.

inspection procedures conducted by the Applicants will be in compliance with federal and state regulations.

Table 2-5: Updated Estimated Construction Costs

Component	Estimated Cost in Millions[7, 8, 9]
Materials	90.3
Construction	256.0
Engineering, Design, Project Management, and Surveying	10.1
Environmental Review and Permits	26.5
Other Project Execution Activities	25.8
Company Labor	18.2
De-rating	15.1
Sub-Total Direct Cost[10]	441.9
Escalators	50.7
Loaders	71.2
Property Tax	9.0
Allowance for Funds Used During Construction	66.2
Sub-Total Indirect Cost	**197.1**
TOTAL FULLY LOADED	**639.0**

Table 2-6: Maintenance Activities provides a summary of maintenance activities required once the Distribution System Modifications are complete, along with their anticipated frequency. Existing personnel will conduct these routine operation and maintenance activities in the same manner as the activities are currently conducted for existing pipelines in the vicinity.

[7] All costs are approximate and based on the Association for the Advancement of Cost Engineering's (AACE's) best practices. The estimate is a Class 3 estimate as applied for the Building and General Construction Industries, which is most relevant to pipeline construction, and is defined as having -15 percent to 20 percent of the estimated cost. Final costs will be determined based on approved final design and contracting costs.

[8] AACE International Recommended Practice, No. 56R-08, Cost Estimate Classification System – As Applied for the Building and General Construction Industries, TCM Framework: 7.3 – Cost Estimating and Budgeting, Rev. December 5, 2012.

[9] Proposed Project costs, including cost contingencies, are predicated on the in-service date, which is currently planned for the fourth quarter of 2020 for the transmission line and 2021 for the distribution system modifications.

[10] The direct cost estimate for de-rating Line 1600 includes $2.3 million associated with removing existing assets for Line 1600 de-rate costs. As explained in the Direct Testimony of Michael Woodruff, these costs are excluded from the revenue requirement requested for recovery in this Application as the costs associated with removing existing assets is assumed to be recovered through the revenue requirement associated with the original asset.

Table 2-6: Maintenance Activities

Activity	Minimum Frequency
Inspection of regulator stations and check valves	Annually
Inspection of EPM Systems	Annually
Pipeline patrol and leak surveys at Class III locations	Annually
Cathodic protection reads for rectifier and test points	Bimonthly/Annually
Locate-and-mark services (i.e., DigAlert or 8-1-1)	Varies based on requests by third parties
Surveillance of entities excavating over the pipeline	Varies (12 times per year)

2.7 ANTICIPATED PERMITS AND APPROVALS

PEA Section 3.9 Anticipated Permits and Approvals and Table 3-9: Anticipated Permits and Approvals describe the permits and approvals that the Applicants anticipate will be required for the Proposed Project. No additional permits are anticipated for the Distribution System Modifications.

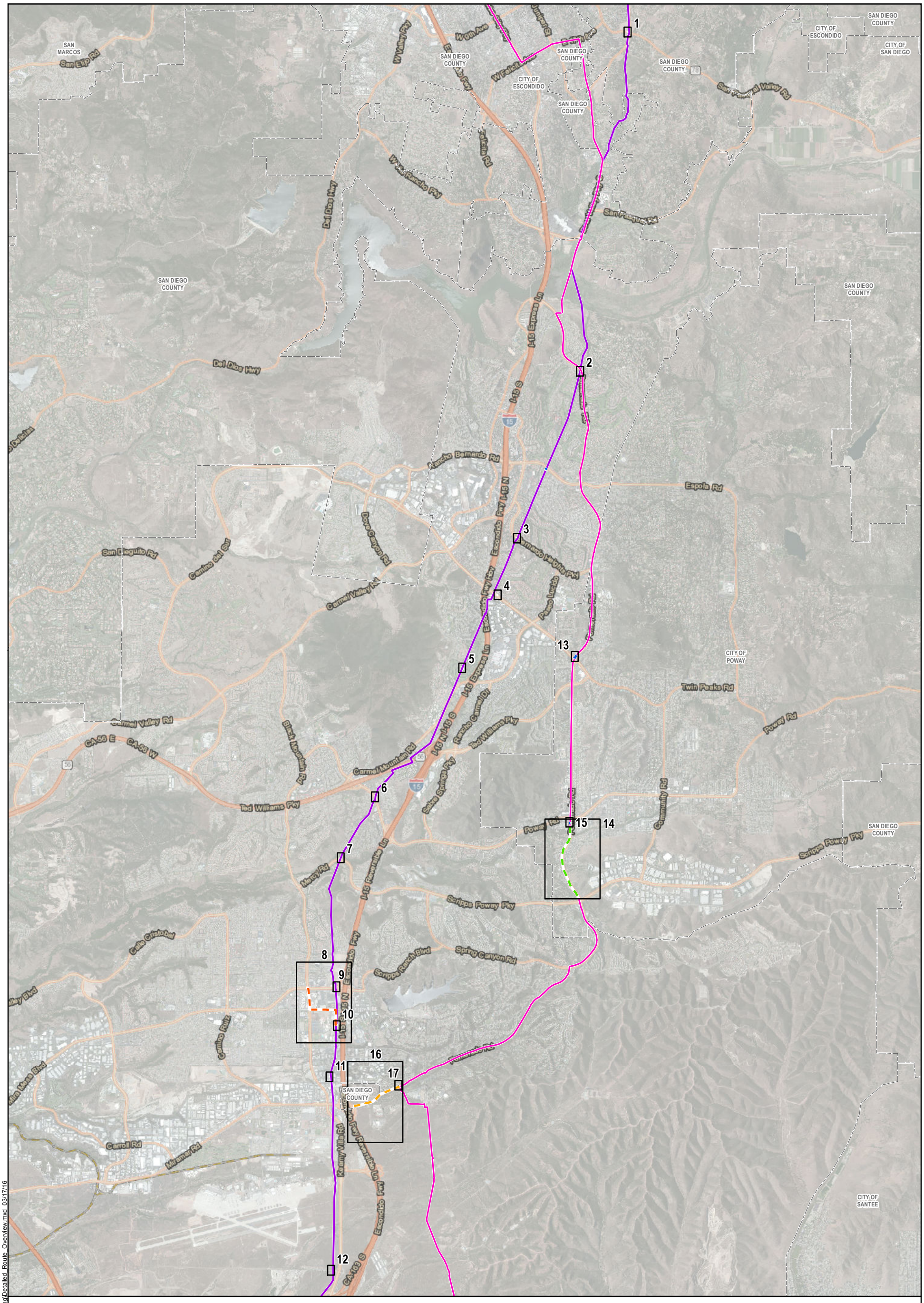
2.8 PROJECT DESIGN FEATURES AND ORDINARY CONSTRUCTION/OPERATING PROCEDURES

The Project Design Features and Ordinary Construction/Operating Restrictions that the Applicants routinely implement are discussed in PEA Section 3.10 Project Design Features and Ordinary Construction/Operating Procedures. The Applicants will implement these protocols during construction and operation of the Distribution System Modifications.

2.9 APPLICANTS-PROPOSED MEASURES

As part of the Proposed Project, the Applicants plan to incorporate the Applicants-proposed measures (APMs) included in PEA Table 3-10: Applicants-Proposed Measures into the Proposed Project design to avoid or minimize potential impacts to sensitive resources resulting from construction and operation of the Distribution System Modifications. All other applicable APMs identified in the PEA will be implemented for these components. APM compliance management, environmental training, and monitoring and inspection will be conducted in accordance with the protocols discussed in PEA Section 3.12 Implementation of Applicants-Proposed Measures. APM-CUL-06 requires a cultural resources record search and field survey to be conducted at all Proposed Project components that were not included in the field surveys conducted for the Proposed Project in April and May 2015. No additional APMs resulting from the Distribution System Modifications are proposed.

ATTACHMENT 2-A: DETAILED DISTRIBUTION SYSTEM MODIFICATIONS MAP



Attachment 2-A: Detailed Distribution System Modifications Overview Map

Pipeline Safety & Reliability Project

- Map Extent and Page Number
- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Proposed PSRP Project Route
- Line 1600
- City/County Boundary

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Attachment 2-A: Detailed Distribution System Modifications Map 1 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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Attachment 2-A: Detailed Distribution System Modifications Map 2 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
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Attachment 2-A: Detailed Distribution System Modifications Map 3 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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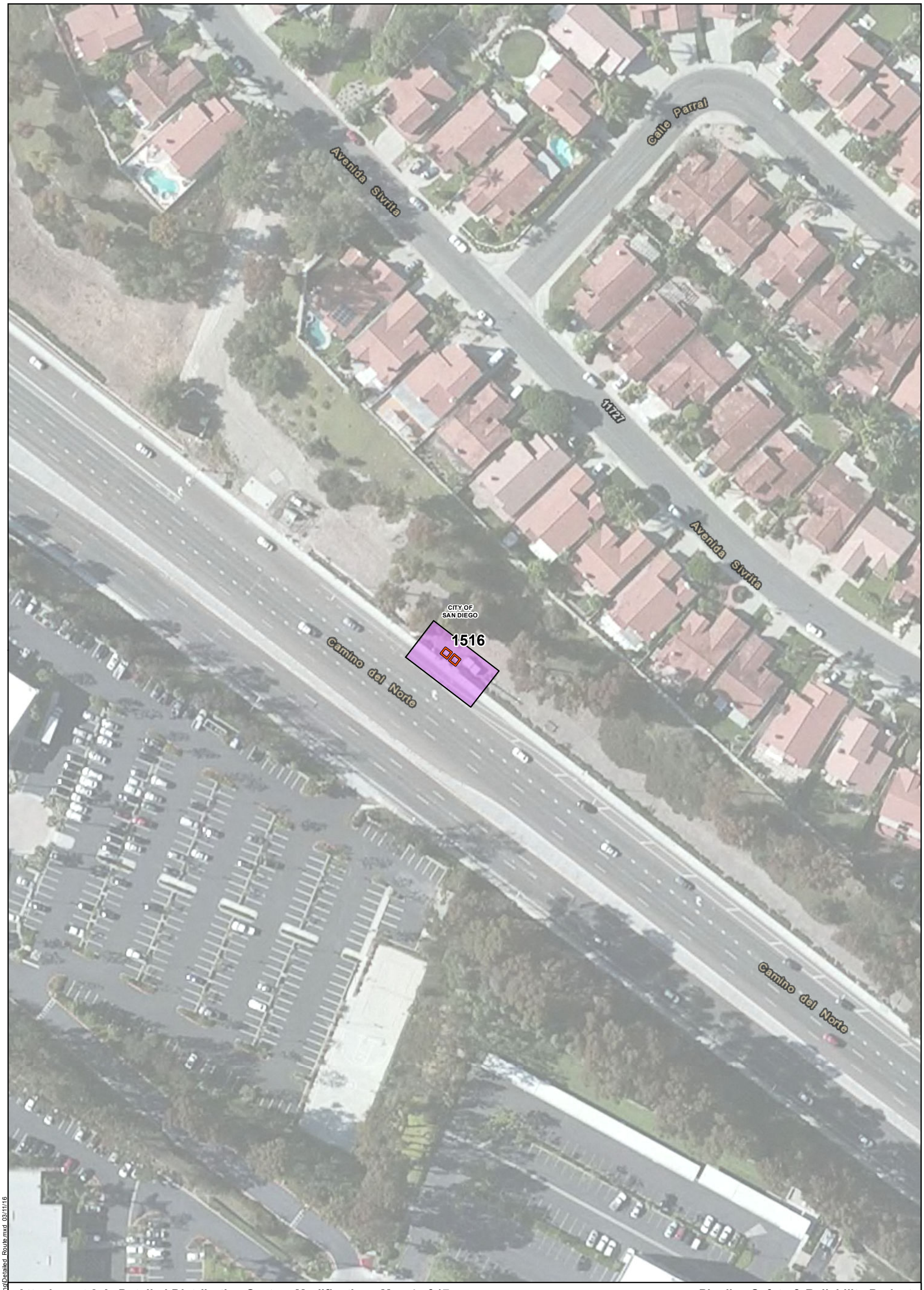

Attachment 2-A: Detailed Distribution System Modifications Map 4 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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Attachment 2-A: Detailed Distribution System Modifications Map 5 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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Attachment 2-A: Detailed Distribution System Modifications Map 6 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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Attachment 2-A: Detailed Distribution System Modifications Map 7 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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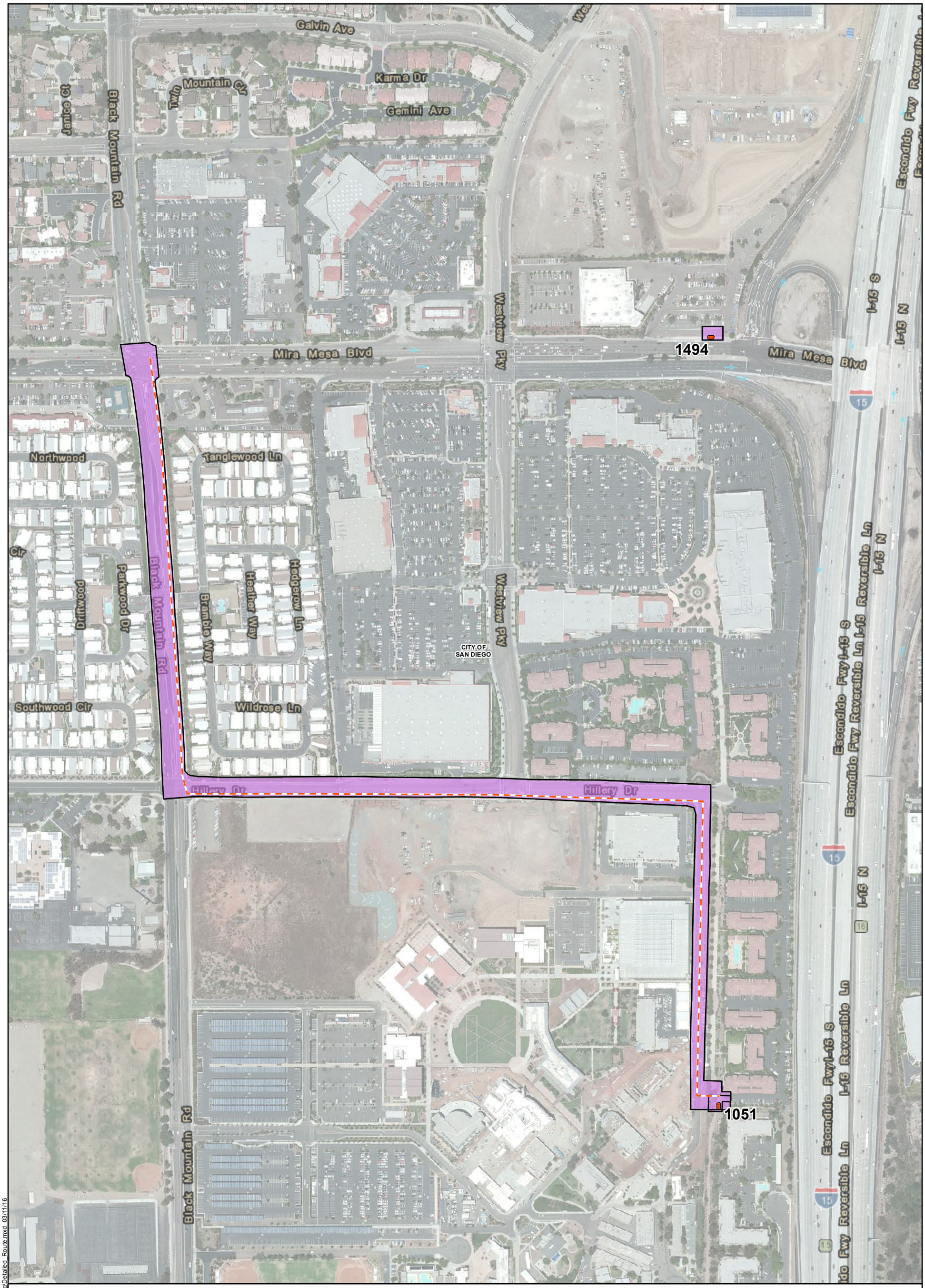

Attachment 2-A: Detailed Distribution System Modifications Map 8 of 17 — **Pipeline Safety & Reliability Project**

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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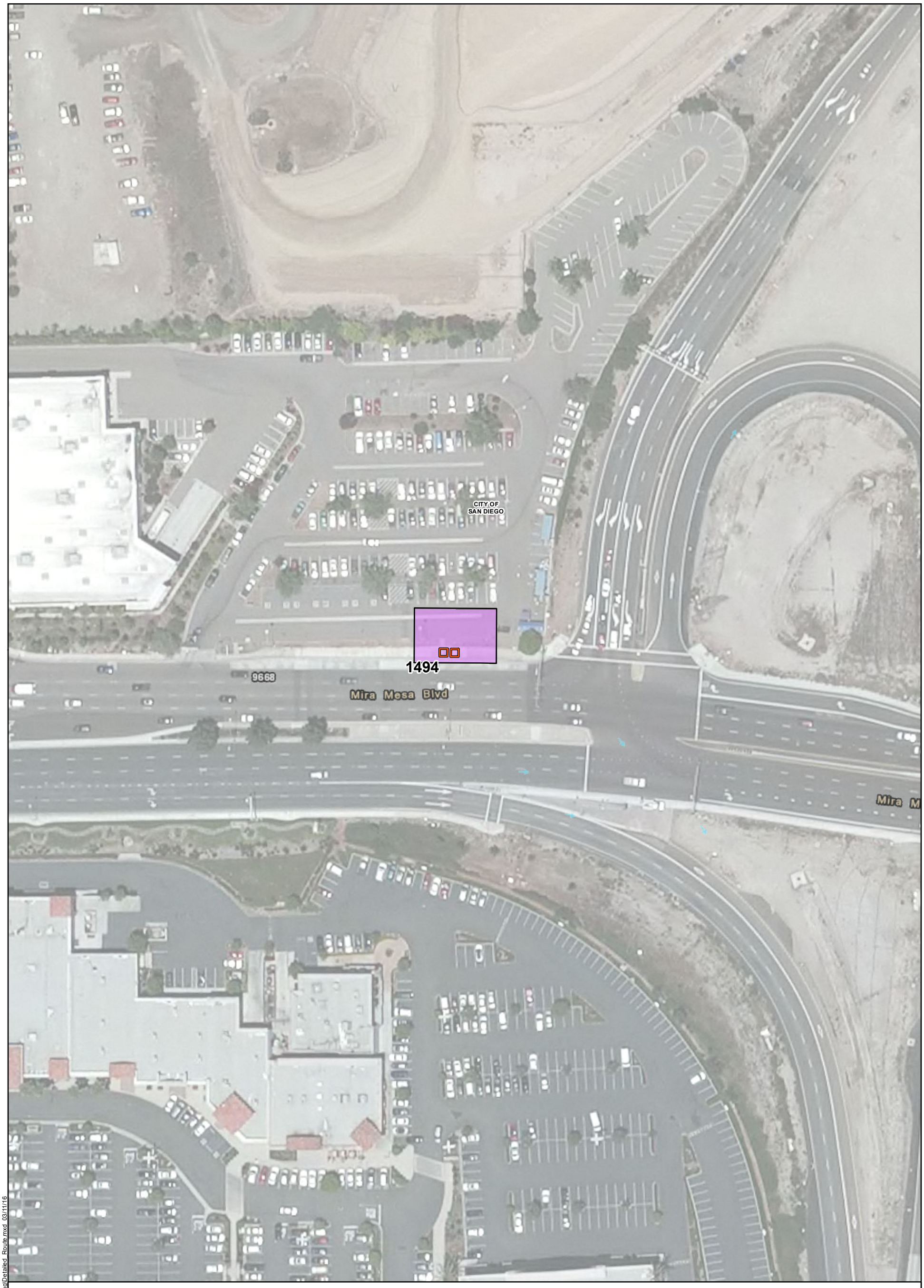

Attachment 2-A: Detailed Distribution System Modifications Map 9 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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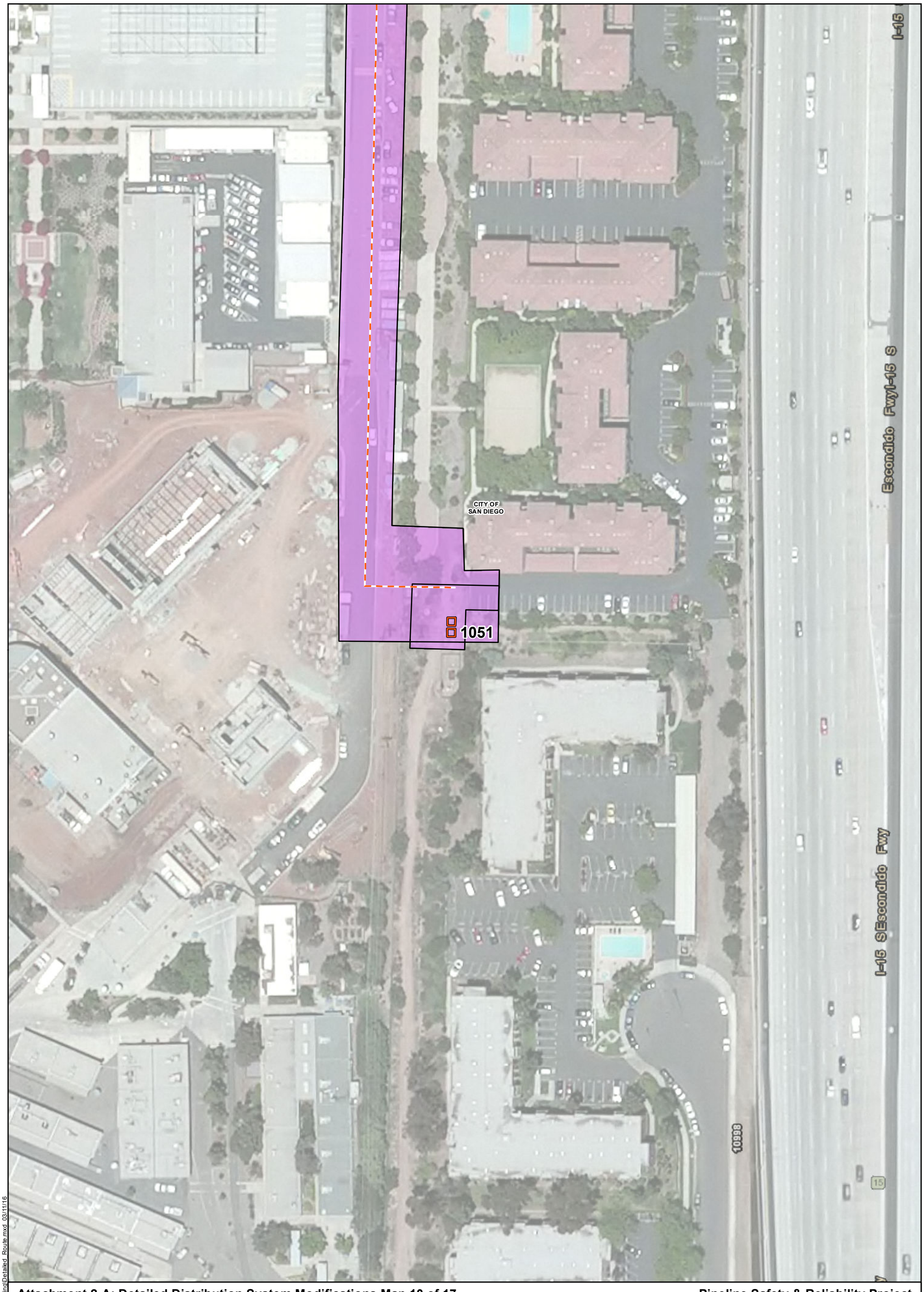

Attachment 2-A: Detailed Distribution System Modifications Map 10 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

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Attachment 2-A: Detailed Distribution System Modifications Map 11 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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- City/County Boundary

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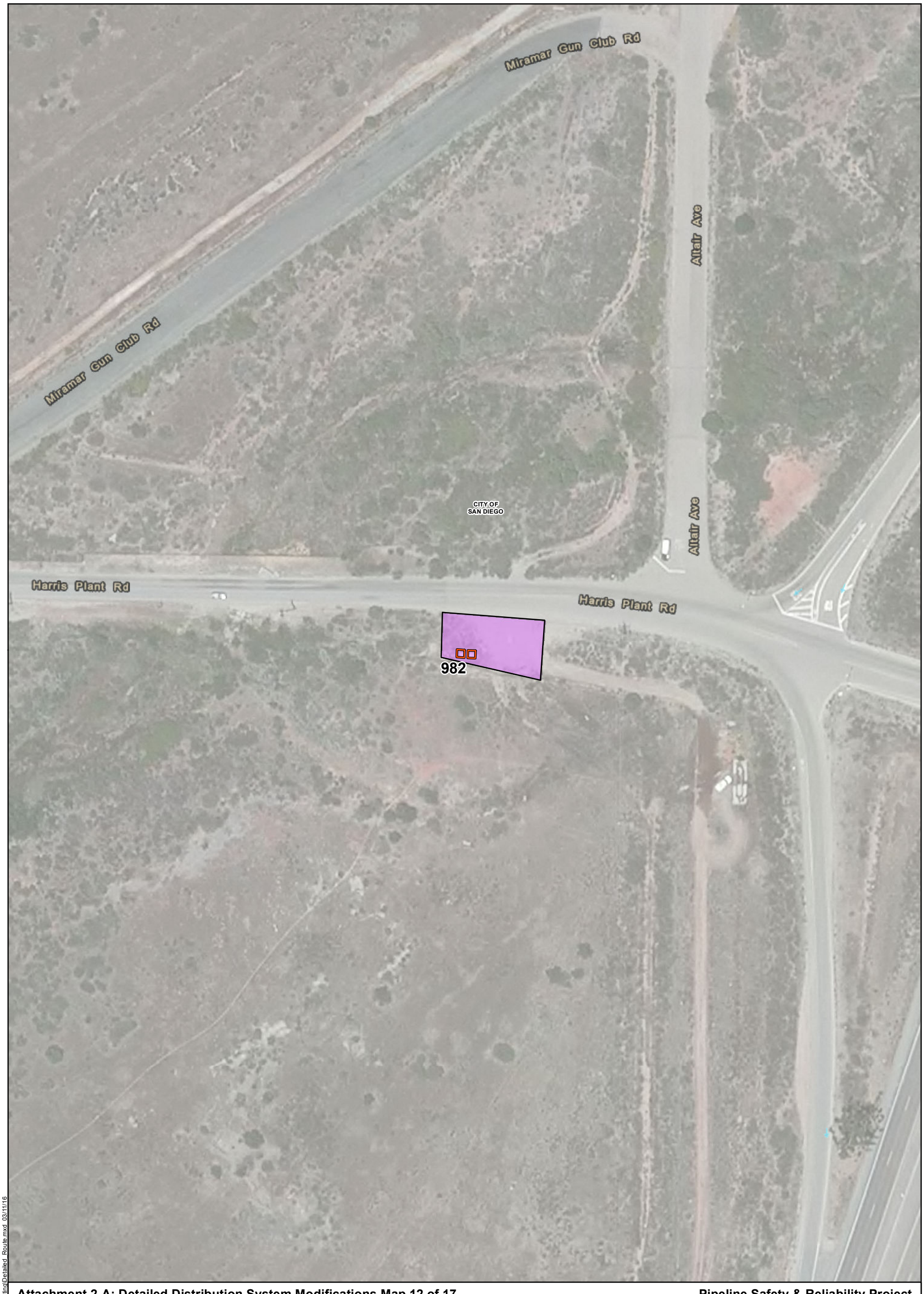

Attachment 2-A: Detailed Distribution System Modifications Map 12 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
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Attachment 2-A: Detailed Distribution System Modifications Map 13 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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Attachment 2-A: Detailed Distribution System Modifications Map 14 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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Attachment 2-A: Detailed Distribution System Modifications Map 15 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area
- Proposed Project Route
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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Attachment 2-A: Detailed Distribution System Modifications Map 16 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
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Note: Pipelines are shown on maps 8, 14, and 16

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Attachment 2-A: Detailed Distribution System Modifications Map 17 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
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CHAPTER 3 – ENVIRONMENTAL IMPACT ASSESSMENT SUPPLEMENT

3.1 AESTHETICS

3.1.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. The regulatory background within each of these jurisdictions is described in detail in Section 4.1.2 Existing Conditions of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project). A description of the regional and local landscape setting is also provided in PEA Section 4.1.2 Existing Conditions. The Distribution System Modifications are located within densely populated urban areas. The surrounding landscape features are characterized by transportation corridors, other infrastructure, and commercial and residential development. None of the Distribution System Modifications traverse open space or undeveloped areas. Regulator Station 1248 will be removed, and is located within Los Peñasquitos Canyon Preserve and near a segment of the San Diego Trans County Trail. In addition, Regulator Station 982 is located in a disturbed area off of Harris Plant Road, where views of open space are visible from vehicles traveling along the roadway. Regulator Station 141 will also be removed, and is located just outside of a residence that overlooks a golf course; however, private residential views are generally not considered a viewshed. No other distribution system modification components are located within a sensitive viewshed, and no scenic highways are crossed by the Distribution System Modifications.

3.1.1 Impact Evaluation

The Proposed Project's Distribution System Modifications include the construction and operation of underground distribution facilities in largely urban landscapes. The activities and locations associated with the Distribution System Modifications are similar to those analyzed in PEA Section 4.1.3 Impacts. Though Regulator Station 1248 and Regulator Station 982 are located in areas that may be considered scenic vistas, they are existing facilities that will be removed. Therefore, while temporary adverse effects to the scenic quality of these areas may occur during construction activities related to the removal of the facilities, impacts will be short term and no new permanent structures will be installed at the existing facility locations. Construction of the Distribution System Modifications will occur in a similar manner to that of the Proposed Project transmission facilities. As described in PEA Section 4.1.3 Impacts, temporary visual impacts may be experienced during construction due to the necessary heavy construction equipment. However, the Distribution System Modifications will not significantly increase the temporary impacts described in PEA Section 4.1.3 Impacts. Construction equipment will not remain at each distribution system modification location for the entire 2 to 3 months of construction; rather, equipment will generally be staged for only a few weeks at each location.

As the linear portions of the Distribution System Modifications will be installed within the existing road and road shoulder, no permanent land scars will result. No permanent aboveground

structures will be constructed for the Distribution System Modifications, with the exception of steel vault covers and Electronic Pressure Monitoring (EPM) Systems at the new regulator stations. As described in Chapter 2 – Project Description, the EPM System consists of a steel pole, small solar panel, and EPM unit that will be installed offset from the new regulator station vaults and adjacent to existing roadways. Each steel pole will measure six to 10 feet high and two inches in diameter with an EPM box mounted on it. A small solar panel measuring approximately two feet by two feet will be mounted near the top of the pole. Figure 3.1-1: Electronic Pressure Monitoring System Example Photographs provides example photographs of typical EPM Systems. Each of the new regulator stations will be installed in urban areas, and as shown in Figure 3.1-1: Electronic Pressure Monitoring System Example Photographs, the EPM Systems will not substantially degrade the visual character of the areas as they are already characterized by urban uses, such as transportation, residential, and commercial uses. Views of the EPM Systems will be visible by motorists and pedestrians traveling along the adjacent roadways; however, views will be screened by existing vegetation, buildings, and other aboveground infrastructure. The steel vault covers will be installed flush with the ground surface and will be generally unnoticeable to motorists and pedestrians. None of the distribution system modification components will require the installation of permanent lighting fixtures.

The impacts to aesthetic resources associated with the Distribution System Modifications are consistent with the analysis presented in the PEA, and only negligible additional impacts to aesthetic resources will occur. Therefore, impacts to aesthetic resources will remain less than significant with the implementation of Applicants-proposed measures (APMs).

3.1.2 Applicants-Proposed Measures

No additional or increased impacts to aesthetic resources are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.1.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

Figure 3.1-1: Electronic Pressure Monitoring System Example Photographs

Photograph 1:

Example of an Electronic Pressure Monitoring (EPM) System installed at a regulator station.

Photograph 2:

Example of an EPM system installed at a regulator station.

3.2 AGRICULTURAL AND FORESTRY RESOURCES

3.2.0 Existing Conditions

The Distribution System Modifications performed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Relevant agricultural resource policies from each of these jurisdictions' general plans, as well as applicable federal and state regulations, were reviewed and presented in Section 4.2 Agriculture and Forestry Resources of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project. The Farmland Mapping and Monitoring Program (FMMP) database, Williamson Act parcel data, and applicable zoning maps were reviewed specific to the Distribution System Modifications, and that information is presented in this section.

The Distribution System Modifications do not cross any Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, land under a Williamson Act contract, or forested land. Approximately 0.47 mile of the permanent alignment and 3.34 acre of temporary workspace for the Line 49-31B replacement are located within land designated as Grazing Land by the FMMP. Additionally, approximately 0.002 acre of the permanent footprint and approximately 0.16 acre of the temporary workspace for the proposed Regulator Station C is located within land designated as Grazing Land by the FMMP. Approximately 0.17 acre of the temporary workspace and existing paved driveway for the Regulator Station 1248 is also located within land designated as Grazing Land by the FMMP. No other components associated with the Distribution System Modifications are located within Grazing Land.

None of the lands crossed by the Distribution System Modifications and designated by a general plan as agricultural are currently in agricultural use. Approximately 0.14 acre of the temporary workspace for the removal of Regulator Station 1248 is located within land zoned by the City of San Diego as AR-1-1 (Agricultural Residential). In addition, 0.57 mile of the Mira Mesa extension and approximately 3.21 acres of the associated temporary workspace are located on land zoned by the City of San Diego as AR-1-2 (Agricultural Residential). Approximately 0.14 mile of the alignment for the Line 49-31B replacement and 0.50 acre of the associated temporary workspace are located on land zoned by the City of San Diego as AR-1-1. As discussed in PEA Section 4.2.2 Existing Conditions, AR-1-1 and AR-1-2 are designated for agricultural residential use, with a limit on the density of residences per acre, and utility facilities are permissible with a conditional use permit. These areas are not currently utilized for agricultural purposes, and no permanent aboveground facilities will be installed on land zoned as AR-1-1 or AR-1-2. No other components associated with the Distribution System Modifications are located within land zoned for agricultural use.

3.2.1 Impact Evaluation

As stated previously, the distribution upgrades will not cross any Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, land under a Williamson Act contract, forested land, or land designated for agricultural use by an applicable general plan. The nearest land under a Williamson Act contract is 0.60 mile from Regulator Station 1316, and no Williamson Act lands are crossed by workspace or permanent facilities for the Distribution System Modifications. Small portions of Grazing Lands are crossed by the Line

49-31B replacement (i.e., 0.47 mile), the temporary workspace and permanent footprint for Regulator Station C (i.e., 0.16 acre and 0.002 acre, respectively), and temporary workspace for the Regulator Station 1248 removal (i.e., 0.17 acre). However, none of the Grazing Lands crossed are currently utilized for grazing. Rather, the Grazing Land crossed by the Distribution System Modifications falls within Pomerado Road and its road shoulder (i.e., Line 49-31B replacement) and within SDG&E's existing right-of-way[1] (i.e., Regulator Station 1248 removal), with the exception of a disturbed, unpaved area adjacent to the road where Regulator Station C will be installed. Appendix G of the California Environmental Quality Act Guidelines only considers impacts to be significant if a project converts Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to non-agricultural use. Nonetheless, the Distribution System Modifications will not result in the conversion of Grazing Land to a use that precludes livestock grazing because the workspace is limited to the existing road, road shoulder, and area directly adjacent to the road that are not utilized for grazing.

The temporary workspaces required for the removal of Regulator Station 1248 are partially within land zoned by the City of San Diego as AR-1-1. However, the existing permanent footprint of Regulator Station 1248 is already located partially (0.002 acre) on land zoned as AR-1-1. In addition, the existing facilities will be removed, and the locations will be restored. The permanent alignments and temporary workspaces for the Mira Mesa extension and the Line 49-31B replacement cross lands zoned by the City of San Diego as AR-1-1 and AR-1-2. However, the alignments are located within existing roads and road shoulders in urbanized areas. No permanent change in the current land uses (i.e., transportation corridor) will result from construction of the Mira Mesa extension and the Line 49-31B replacement because the pipelines will be installed underground and the roads will be repaved. None of the areas crossed by the Distribution System Modifications and associated temporary workspaces are currently utilized for agricultural production. No new permanent facilities will be constructed within land zoned or utilized for agriculture.

Though the Distribution System Modifications cross portions of land designated as Grazing Land by the FMMP and as Agricultural Residential by the City of San Diego's Land Development Code, these areas are already in use as transportation and utility corridors and are not currently used for agricultural purposes. Therefore, the Distribution System Modifications will not result in the conversion of agricultural or forested land to non-agriculture or non-forestry uses. As a result, the impact analysis presented in the PEA is consistent with potential impacts to agriculture and forestry resources associated with the Distribution System Modifications. Therefore, impacts to agricultural and forestry resources will remain less than significant with implementation of Applicants-proposed measures (APMs).

3.2.2 Applicants-Proposed Measures

No additional or increase in impacts to agriculture or forestry resources are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

[1] For purposes of this PEA Supplement, ROW includes SDG&E franchise rights and easement rights.

3.2.3 References

California Department of Conservation. 2013. FMMP Data. Online. http://www.conservation.ca.gov/dlrp/fmmp/Pages/SanDiego.aspx. Site visited February 26, 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

San Diego Association of Governments. Maps and GIS. Online. http://www.sandag.org/index.asp?classid=21&fuseaction=home.classhome. Site visited February 26, 2016.

San Diego Geographic Information Source. 2012. San Diego Geographic Information Source. Online. http://www.sangis.org. Site visited February 26, 2016.

3.3 AIR QUALITY

3.3.0 Existing Conditions

The Distribution System Modifications performed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. In addition, the Distribution System Modifications are located within the jurisdiction of the San Diego County Air Pollution Control District (SDAPCD). The existing conditions presented in Section 4.3 Air Quality of the original Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project) describe the current air quality in San Diego County, including within the vicinity of the Distribution System Modifications.

3.3.1 Impact Evaluation

Question 3.3a – Applicable Air Quality Plan Conflicts

As described in the PEA, a potentially significant impact on air quality will occur if the Proposed Project conflicts with or obstructs the implementation of the applicable air quality plan. When determining whether a project will conflict with an air quality plan, the primary focus is to evaluate if the project's emissions are properly anticipated in the regional air planning process and if these emissions are reduced where feasible. To determine if the emissions were captured during the air quality planning process, it is necessary to assess the Proposed Project's consistency with the Regional Air Quality Strategy (RAQS). Consistency with the RAQS is determined by evaluating if the Proposed Project's emissions exceed the criteria air pollutant (CAP) thresholds established by the SDAPCD and if the Proposed Project will result in growth that has been anticipated.

The California Emissions Estimator Model (CalEEMod) was used to anticipate the emissions from construction using updated site-specific information and the data was presented in the PEA. The following emissions were evaluated:

- particulate matter (PM) less than 10 microns in diameter (PM_{10}),
- PM less than 2.5 microns in diameter ($PM_{2.5}$),
- carbon monoxide (CO),
- nitrogen oxides (NO_x),
- sulfur oxides (SO_x), and
- volatile organic compounds (VOCs).

It is anticipated that some of the construction personnel described in PEA Chapter 3 – Project Description will remain on site for approximately three months after the completion of the Proposed Project transmission components to complete construction of the Distribution System Modifications. To be conservative, it is assumed that the construction crew will use the same equipment and conduct the same construction activities for the purposes of this analysis.[1] As

[1] The PEA assumed that four separate crews will work simultaneously across an approximately 12-month period to construct the transmission line. Because the distribution lines will require a smaller trench and will involve the

such, the maximum daily emissions associated with one crew have been applied to the emissions in the CalEEMod results presented in the PEA. The amended CalEEMod results are shown in Table 3.3-1: Estimated Peak Daily Uncontrolled Construction Emissions, and they indicate that CO, NO_x, and VOCs will continue to exceed applicable SDAPCD thresholds.

The air quality Applicants-proposed measures (APMs) identified in the PEA will be implemented, and were entered into CalEEMod. The revised resulting controlled emissions are presented in Table 3.3-2: Estimated Peak Daily Controlled Construction Emissions. As the change to the resulting emissions is negligible, the impact analysis presented in the PEA adequately addresses potential impacts to plan consistency. The results of the controlled construction emissions indicated that CO and NO_x will continue to exceed applicable SDAPCD thresholds; however, PM_{10}, $PM_{2.5}$, SO_x, and VOCs will be within the applicable thresholds. Therefore, with implementation of APMs, the Distribution System Modifications will not trigger a new exceedance, and the impact to air quality remains potentially significant during construction.

Operation and maintenance activities will be completed by the Applicants' existing staff, and the Applicants will not be required to hire any additional employees to maintain the pipeline and their appurtenant facilities, including the Distribution System Modifications. It is anticipated that routine operation and maintenance activities will be conducted in the same manner and with the same frequency as the activities that are currently conducted for existing pipelines in the vicinity. Therefore, the potential impacts during operation and maintenance associated with the Distribution System Modifications will remain less than significant.

Question 3.3b – Air Quality Standard Violations

It is anticipated that one of the four crews identified in PEA Chapter 3 – Project Description will remain on site for approximately three months after the schedule presented in PEA Chapter 3 – Project Description. As described in response to Question 4.3a, the CalEEMod results from the PEA were adapted to include the construction activities associated with the Distribution System Modifications. As presented in Table 3.3-2: Estimated Peak Daily Controlled Construction Emissions, the Distribution System Modifications will not trigger a new exceedance from any threshold from the SDAPCD. Therefore, the impact to air quality will remain potentially significant during construction.

As previously stated, potential impacts associated with operation and maintenance of the Distribution System Modifications will remain less than significant.

installation of smaller infrastructure (e.g., eight-inch-diameter distribution pipeline instead of 36-inch-transmission line), the construction equipment needs will be reduced for the Distribution System Modifications when compared to the description provided in the PEA. In addition, the volume of pavement and dirt removed from the Proposed Project site and the volume of imported fill required to complete the distribution line segment will also be reduced. These reductions will result in fewer on-road truck trips to deliver and remove materials from the site. As a result, the daily emissions from the distribution pipeline installation will be less than those required for the installation of the transmission line.

Table 3.3-1: Estimated Peak Daily Uncontrolled Construction Emissions

Year	Emissions (pounds per day)[2]					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
Proposed Project without Implementation of APM-PUS-01						
Proposed Project (without the Distribution System Modifications)[3]	62.24	39.44	635.98	683.17	1.55	79.21
Distribution System Modifications[4]	72.20	17.76	181.52	219.95	0.43	25.08
Anticipated Worst-Case Emissions[5]	72.20	39.44	635.98	683.17	1.55	79.21
Threshold	100	55	550	250	250	75
Exceeded With Distribution System Modifications?	**No**	**No**	**Yes**	**Yes**	**No**	**Yes**
Proposed Project with Implementation of APM-PUS-01[6]						
Proposed Project (without the Distribution System Modifications)[3]	71.14	40.49	639.57	688.75	1.57	79.61
Distribution System Modifications[7]	72.20	17.76	181.52	219.95	0.43	25.08
Anticipated Worst-Case Emissions[5]	72.20	40.49	639.57	688.75	1.57	79.61
Threshold	100	55	550	250	250	75
Exceeded With Distribution System Modifications?	**No**	**No**	**Yes**	**Yes**	**No**	**Yes**

[2] Cells shaded grey exceed applicable thresholds.

[3] Use of a temporary liquefied natural gas system will not be required with the addition of the Distribution System Modifications to the Proposed Project. As a result, these emissions have been omitted from the updated Proposed Project emission rates.

[4] The emission rates for the Distribution System Modifications were conservatively assumed to be identical to that of one of the four crews' activity from the Proposed Project.

[5] Because the transmission line and Distribution System Modifications will not be constructed simultaneously, the anticipated worst-case emissions were conservatively estimated to be the highest daily emissions for either the Proposed Project's emissions (without the Distribution System Modifications) or the Distribution System Modifications' emissions.

[6] APM-PUS-01 was incorporated into the PEA to identify and evaluate sources of recycled water from SDG&E's Major Projects Water Sourcing Plan and ensure that the usage of recycled water does not result in new significant impacts to air quality, greenhouse gas emissions, or traffic. As specified in APM-PUS-01, if the transportation and use of recycled water requires more than 132,750 miles traveled or an average of 262 truck trips per day and a maximum of 957 truck trips during hydrostatic testing, impacts to air quality, greenhouse gas emissions, and traffic may increase. Therefore, construction emissions resulting from the exceedance of these thresholds are included in Table 3.3-1: Estimated Peak Daily Uncontrolled Construction Emissions and Table 3.3-2: Estimated Peak Daily Controlled Construction Emissions. Per APM-PUS-01, SDG&E will consult with the California Public Utilities Commission to determine if the benefits of using recycled water are sufficient to justify increased impacts to air quality, greenhouse gas emissions, and traffic.

[7] Water from the hydrostatic testing of the transmission line will be reclaimed, stored, and used for the testing of the Distribution System Modifications. As a result, emissions for the Proposed Project without the implementation of APM-PUS-01 were used as the basis for this calculation.

Table 3.3-2: Estimated Peak Daily Controlled Construction Emissions

Year	Emissions (pounds per day)					
	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_x	VOCs
Proposed Project without Implementation of APM-PUS-01						
Proposed Project (without the Distribution System Modifications)[3]	56.77	35.49	709.45	572.76	1.55	33.76
Distribution System Modifications[4]	29.88	11.34	203.49	165.76	0.43	9.58
Anticipated Emissions[5]	56.77	35.49	709.45	572.76	1.55	33.76
Threshold	100	55	550	250	250	75
Exceeded With Distribution System Modifications?	**No**	**No**	**Yes**	**Yes**	**No**	**No**
Proposed Project with Implementation of APM-PUS-01						
Proposed Project (without the Distribution System Modifications)[3]	59.64	35.94	713.04	578.34	1.57	34.16
Distribution System Modifications[7]	29.88	11.34	203.49	165.76	0.43	9.58
Anticipated Emissions[5]	59.64	35.94	713.04	578.34	1.57	34.16
Threshold	100	55	550	250	250	75
Exceeded With Distribution System Modifications?	**No**	**No**	**Yes**	**Yes**	**No**	**No**

Question 3.3c – Criteria Pollutant Increases

As shown previously in Table 3.3-1: Estimated Peak Daily Uncontrolled Construction Emissions and Table 3.3-2: Estimated Peak Daily Controlled Construction Emissions, the construction of the Proposed Project's Distribution System Modifications will generate daily CAP emissions below the levels identified in the PEA. Even with the implementation of APMs presented in the PEA, which include minimizing vehicle idling time and controls for fugitive dust, emissions for pollutants during the Distribution System Modifications will exceed applicable SDAPCD thresholds in a nonattainment area. Therefore, the Proposed Project's Distribution System Modifications will not trigger a new exceedance, and the impact to air quality will remain potentially significant during construction.

As previously stated, potential impacts associated with operation and maintenance of the Distribution System Modifications will remain less than significant.

Question 3.3d – Sensitive Receptor Exposure

The Proposed Project's Distribution System Modifications will be located in the cities of Poway and San Diego, and San Diego County. As described in the PEA, sensitive receptors have been identified directly adjacent to the Proposed Project alignment. As discussed in Section 3.12 Noise, there are multiple sensitive receptors located adjacent to the Proposed Project's Distribution System Modifications, including residences, schools, and parks/outdoor recreation areas. As shown in Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Proposed Project's Distribution System Modifications in Section 3.12 Noise, there are approximately 26 sensitive receptors within 300 feet of the Proposed Project's Distribution System Modifications, and the nearest sensitive receptors are adjacent or crossed. As depicted in Table 4.12-8: Sensitive Noise Receptors within 300 Feet of the Proposed Project in PEA Section 4.12 Noise, there are 8,230 sensitive receptors located within 300 feet of the Proposed Project, and the nearest sensitive receptors are also located directly adjacent to the Proposed Project alignment. Therefore, the potential impacts to the sensitive receptors located adjacent to the Proposed Project's Distribution System Modifications were adequately analyzed in the PEA. Thus, impacts to sensitive receptors located adjacent to the Proposed Project's Distribution System Modifications will be similar to the impacts in the PEA, and will remain less than significant.

Question 4.3e – Odor

As discussed in the PEA, odor impacts are not anticipated during construction of the Proposed Project. A potential source of Proposed Project-related odor will include diesel engine emissions and the blowdown at Distribution System Modification locations; however, these emissions will continue to be temporary in nature. Additionally, as described in the PEA, a chemical odorant is added to natural gas so that unanticipated escapes can be detected. Similar to the cold tie-in process, any released natural gas associated with the Distribution System Modifications will involve small volumes over short durations. The release of natural gas will range from 10 seconds to 3.5 minutes. As described previously, the duration and distance that the odor will be detectable from these releases will depend on the direction and speed of wind during and after the release. Even under adverse meteorological conditions, the Applicants anticipate that the odors from the short-term release of natural gas during construction will dissipate quickly, and the odors are not anticipated to affect a substantial number of people. Therefore, the potential odor impacts during construction of the Distribution System Modifications will remain less than significant.

Potential odor impacts during operation and maintenance of the Distribution System Modification locations include blowdown at these locations. However, as previously described, a chemical odorant is added to natural gas so that unanticipated escapes can be detected. Additionally, there are no schools, libraries, or hospitals adjacent to the Proposed Project's Distribution System Modifications. As discussed previously and as shown in Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Proposed Project's Distribution System Modifications in Section 3.12 Noise, there are approximately 26 residences, schools, and parks/outdoor recreation areas located within 300 feet of the Proposed Project's Distribution System Modifications; however, similar to the PEA, the nearest sensitive receptors are adjacent or crossed. As depicted in Table 4.12-8: Sensitive Noise Receptors within 300 Feet of the Proposed Project in PEA Section 4.12 Noise, there are 8,230 sensitive receptors located within 300 feet of the Proposed Project, and the nearest sensitive receptors are also located directly

adjacent to the Proposed Project alignment. As a result, the impacts presented in the PEA are consistent with the anticipated odor impacts from the blowdown at Distribution System Modification locations. Therefore, the potential odor impacts during operation and maintenance of the Distribution System Modifications will remain less than significant.

3.3.2 Applicant-Proposed Measures

No additional or increased impacts to air quality rare anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.3.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

3.4 BIOLOGICAL RESOURCES

3.4.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.4.2 Existing Conditions for the Pipeline Safety & Reliability Project (Proposed Project) describes the regulatory and environmental settings related to biological resources for the Proposed Project.

Data regarding biological resources within the vicinity of the Distribution System Modifications were obtained through a field reconnaissance survey and a literature review of applicable reference materials and reports. On March 1, 2016, an Insignia Environmental (Insignia) biologist conducted a reconnaissance-level biological survey of the Distribution System Modifications, which included a 150-foot buffer on either side of the Distribution System Modifications. The total area surveyed, including the buffers, was 98.3 acres. The primary objective of the reconnaissance-level survey was to assess the existing conditions in the vicinity of the Distribution System Modifications, and determine if any sensitive natural communities, special-status plant or wildlife species, or other biological resources are present.

Because Regulator Station A and its connection pipeline, the pre-lay segment replacement, and Regulator Station B areas were surveyed as part of the fieldwork to prepare the PEA, the reconnaissance survey did not include these areas.\

Sensitive Natural Communities

Two sensitive natural communities were observed within the areas proposed for the Distribution System Modifications: coastal sage scrub and a disturbed southern willow scrub. Both of these communities were documented and described in the PEA. Coastal sage scrub habitat was observed within the temporary work areas associated with Regulator Station 1248, and this habitat was dominated by broom baccharis (*Baccharis sarothroides*), big sagebrush (*Artemesia tridentata*), four-wing saltbush (*Atriplex canescens*), California brittlebush (*Encelia california*), and California sagebrush (*Artemesia california*). This stand of coastal sage scrub is diverse; exhibits a low degree of invasive species; and is contiguous with the larger coastal sage scrub habitats associated with Los Peñasquitos Canyon Preserve, where it is also located. As such, the coastal sage scrub within this temporary work area has the potential to support special-status wildlife species, such as the coastal California gnatcatcher (*Polioptila californica californica*).

Within the temporary workspace associated with Regulator Station 1051, a small coastal sage scrub stand was observed immediately west of Regulator Station 1051. This stand was dominated by broom baccharis, California sagebrush, and deerweed (*Acmisphon glaber*). Immediately north of this coastal sage scrub stand, a small stand of disturbed southern willow scrub was observed. No hydrological features or potentially jurisdictional drainages were associated with this disturbed southern willow scrub stand, which appears to be dependent on storm water runoff from the paved areas north of and uphill from this site. Both the coastal sage scrub and disturbed southern willow scrub stand are islands of native habitat entirely surrounded

by developed areas, thus offering a limited potential to support special-status wildlife species, such as the coastal California gnatcatcher.

Regulator Station 982 is located within a disturbed stand of coastal sage scrub that is dominated by deerweed, broom baccharis, red-stem filaree (*Erodium cicutarium*), and tecolote (*Centaurea melitensis*). The adjacent coastal sage scrub stand to the south and west of Regulator Station 982 and across Harris Plant Road to the north is relatively undisturbed, with high species diversity, low invasive cover, and connectivity to a much larger stand of coastal sage scrub present within the adjacent Marine Corps Air Station Miramar.

All other sites associated with the Distribution System Modifications—including those surveyed on March 1, 2016 and during preparation of the PEA—are entirely within developed, ruderal, disturbed, eucalyptus woodlands, or ornamental areas. The ornamental areas and eucalyptus woodlands will potentially provide habitat for nesting bird species during the nesting season. The other communities are not considered sensitive natural communities and will generally not support habitat for special-status plants or wildlife.

Table 3.4-1: Vegetation Communities Observed within the Survey Area summarizes the vegetation communities observed within the survey area, which includes all proposed Distribution System Modifications, plus a 150-foot buffer on either side of those infrastructure components. Attachment 3.4–A: Vegetation Map shows the vegetation communities observed within the survey area.

Table 3.4-1: Vegetation Communities Observed within the Survey Area

General Habitat Type	Vegetation Community	Approximate Total Area Within Survey Area (acres)
Disturbed or Developed Habitat	Disturbed Habitat	4.3
	Urban/Developed	67.2
Scrub and Chaparral	Diegan Coastal Sage Scrub*	11.8
	Diegan Coastal Sage Scrub (disturbed)*	0.1
Grasslands, Vernal Pools, Meadows, and Other Herb Communities	Non-Native Grassland	2.3
Riparian and Bottomland Habitat	Southern Willow Scrub (disturbed)*	0.7
Woodland	Open Coast Live Oak Woodland (<50%)*	0.2
	Eucalyptus Woodland	11.7
Total		**98.3**

Notes: * = Sensitive natural community. Totals may not be precise due to rounding.

Special-Status Plant Species

No special-status plant species were observed during the reconnaissance-level biological survey. Annual or bulbiferous perennial special-status plant species have a low potential to occur within the coastal sage scrub stand associated with the temporary work area at Regulator Station 1248. Special-status perennial herbs and shrubs would have been observed at the time of the survey, if present. No immature special-status annual or bulbiferous perennial special-status plant species were observed at this area.

Special-Status Wildlife Species

A coastal California gnatcatcher was observed approximately 50 feet to the west of Regulator Station 982 in a coastal sage scrub stand adjacent to Harris Plant Road. Additional coastal California gnatcatcher individuals and potential breeding pairs are likely present within the immediate area of Regulator Station 982 based on the high-quality habitat present to the south, west, and directly across Harris Plant Road to the north.

As mentioned previously, coastal California gnatcatchers have a low potential to occur within the coastal sage scrub stands associated with the temporary work area at Regulator Station 1248. Coastal sage scrub habitat that is conducive to supporting coastal California gnatcatcher was observed. These stands are contiguous with larger coastal sage scrub habitats within the approximately 4,000-acre Los Peñasquitos Canyon Preserve.

Peñasquitos Creek—a perennial water supporting large, mature stands of willows (*Salix* spp.) and sycamore (*Platanus racemosa*)—is located adjacent to and approximately 100 feet north of the temporary work area at Regulator Station 1248. Peñasquitos Creek has the potential to support least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and other special-status birds that depend on riparian habitats for all or portions of their life cycles, such as yellow warbler (*Setophaga petechia*) and yellow-breasted chat (*Icteria virens*), which are both designated as species of special concern by the California Department of Fish and Wildlife.

Although no nests were observed during the reconnaissance-level biological survey, ornamental areas and eucalyptus woodlands within the following work areas could potentially provide habitat for special-status nesting bird species during the nesting season:

- ornamental vegetation and eucalyptus trees (*Eucalyptus* spp.) adjacent to replacement Regulator Station 939;
- ornamental trees (pepper trees [*Schinus* spp.] and eucalyptus) adjacent to Regulator Station 1101;
- ornamental trees (black locust [*Robinia pseudoacacia*] and eucalyptus) adjacent to Regulator Station 1516;
- eucalyptus trees and ornamental shrubs adjacent to Regulator Station 141;
- ornamental trees (species undetermined) adjacent to Regulator Station 1051;

- eucalyptus trees adjacent to Regulator Station 1335; and
- eucalyptus trees adjacent to Regulator Station C at Willow Creek Road and Pomerado Road, as well as along the Line 49-31B replacement along Pomerado Road from Interstate (I-) 15 to Willow Creek Road.

Critical Habitat

No critical habitat designated by the United States (U.S.) Fish and Wildlife Service (USFWS) has been identified within any of the distribution system modification work areas.

Potential Jurisdictional Wetlands and Waters

No potentially jurisdictional wetlands were noted within the work areas associated with the Distribution System Modifications. The Distribution System Modifications will cross four blue-line streams, potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Three of these features were described in PEA Section 4.4.3 Impacts.[1] Only the crossing of Carroll Canyon Creek along Pomerado Road associated within the Line 49-31B replacement is new to the Distribution System Modifications. Potentially jurisdictional features are summarized in Table 3.4-2: Potentially Jurisdictional Features.

3.4.1 Impact Evaluation

Temporary impacts are anticipated within 14.8 acres where vegetation removal or disturbance will be required to construct the new and replacement distribution system pipelines as well as to remove the existing regulator stations. Of those temporary impacts, 0.6 acre overlaps the temporary work areas for the 36-inch pipeline described in the PEA, resulting in a total of 14.2 acres of additional temporary impacts resulting from the Distribution System Modifications, of which only 0.1 acre is within areas where native vegetation is present. Table 3.4-3: Impact Summary summarizes the temporary and permanent impacts associated with the Distribution System Modifications.

Permanent facilities are proposed within 0.1 acre (392 square feet) where new or replacement regulator stations will be installed, including Regulator Stations A, B, C, and 939. Regulator Stations A, B, and 939 will be installed entirely within developed areas, such as sidewalks. Regulator Station C will be installed immediately adjacent to Pomerado Road within a eucalyptus woodland, as shown in Table 3.4-4: Impacts to Vegetation Communities.

[1] Jurisdictional features are provided in Attachment C: Wetlands and Waters Assessment, which is located within PEA Attachment 4.4-A: Biological Resources Technical Report. The figure showing these three drainages (i.e., drainage [D-] 300, D-301, and D-304) is Attachment B: Wetland and Waters Assessment Map within Attachment C: Wetlands and Waters Assessment.

Table 3.4-2: Potentially Jurisdictional Features

Distribution System Modifications Component	Potentially Jurisdictional Features Observed[2]
Regulator Station 1316	None
Regulator Station 939	None
Regulator Station 1101	None
Regulator Station 1516	None
Regulator Station 141	None
Regulator Station 1500	None
Regulator Station 1248	Peñasquitos Creek, a perennial creek, is located approximately 100 feet north of the work area.
Regulator Station 1494	None
Regulator Station 1051	None
Regulator Station 1335	None
Regulator Station 982	None
Mira Mesa Extension	None
Line 49-31B Replacement	The Line 49-31B replacement crosses Carroll Canyon Creek, a potentially jurisdictional intermittent drainage, between I-15 and Willow Creek Road.
Pre-Lay Segment Replacement	The pre-lay segment replacement crosses two blue-line streams—Poway Creek (mapped as D-301 in the PEA) and an unnamed ephemeral drainage south of Poway Creek located north of Scripps Poway Parkway Road (mapped as D-300 in the PEA).
Regulator Station A and Connection Pipeline	No hydrological features were observed within the temporary work areas associated with Regulator Station A. One blue-line feature is mapped crossing the new distribution pipeline associated with this new regulator station. However, this blue-line feature is entirely underground and culverted where the new Regulator Station A connection pipeline is proposed, with no outlet visible near the Proposed Project. The above-ground portion of this drainage was mapped as D-304 in the PEA, but the new connection pipeline does not cross the aboveground portion of D-304.
Regulator Station B	None
Regulator Station C	None. One ephemeral drainage was mapped just outside of and west of the Regulator Station C temporary work area.

[2] Table 3.4-2: Potentially Jurisdictional Features includes only potentially jurisdictional features within the distribution system modifications. Table 3.9-1 in Chapter 3.9 -- Hydrology of this PEA Supplement includes all hydrological features, including brief descriptions of hydrological features that would not be considered jurisdictional by the USACE.

Table 3.4-3: Impact Summary

Component	Vegetation Community	Approximate Permanent Impact (acres)	Approximate Temporary Impact (acres)
Regulator Station 1316	Disturbed Habitat	Not Applicable (NA)	<0.1 (2,126 square feet)
	Urban/Developed	NA	<0.1 (374 square feet)
Regulator Station 1316 Total		**NA**	**0.1**
Regulator Station 939	Eucalyptus Woodland	<0.1 (16 square feet)	0.1
	Ornamental	NA	<0.1 (1,207 square feet)
	Urban/Developed	<0.1 (82 square feet)	<0.1 (137 square feet)
Regulator Station 939 Total		**<0.1 (98 square feet)**	**0.1**
Regulator Station 1101	Eucalyptus Woodland	NA	<0.1 (559 square feet)
	Urban/Developed	NA	0.1
Regulator Station 1101 Total		**NA**	**0.1**
Regulator Station 1516	Eucalyptus Woodland	NA	<0.1 (1,622 square feet)
	Urban/Developed	NA	<0.1 (1,527 square feet)
Regulator Station 1516 Total		**NA**	**NA**
Regulator Station 141	Urban/Developed	NA	0.1
Regulator Station 141 Total		**NA**	**0.1**
Regulator Station 1500	Disturbed Habitat	NA	<0.1 (695 square feet)
	Urban/Developed	NA	<0.1 (2,152 square feet)
Regulator Station 1500 Total		**NA**	**0.1**
Regulator Station 1248	Diegan Coastal Sage Scrub	NA	0.1
	Disturbed Habitat	NA	<0.1 (145 square feet)
	Urban/Developed	NA	0.1
Regulator Station 1248 Total		**NA**	**0.2**
Regulator Station 1494	Urban/Developed	NA	0.1
Regulator Station 1494 Total		NA	**0.1**
Regulator Station 1051	Diegan Coastal Sage Scrub	NA	<0.1 (680 square feet)
	Urban/Developed	NA	0.1
Regulator Station 1051 Total		**NA**	**0.1**
Regulator Station 1335	Urban/Developed	NA	0.1
Regulator Station 1335 Total		**NA**	**0.1**

Component	Vegetation Community	Approximate Permanent Impact (acres)	Approximate Temporary Impact (acres)
Regulator Station 982	Diegan Coastal Sage Scrub (disturbed)	NA	<0.1 (2,100 square feet)
	Urban/Developed	NA	0.1
Regulator Station 982 Total		**NA**	**0.1**
Mira Mesa Extension	Diegan Coastal Sage Scrub	NA	<0.1 (311 square feet)
	Southern Willow Scrub	NA	<0.1 (518 square feet)
	Urban/Developed	NA	8.0
Mira Mesa Extension Total		**NA**	**8.0**
Line 49-31B Replacement	Eucalyptus Woodland	NA	0.3
	Urban/Developed	NA	4.9
Line 49-31B Replacement Total		NA	5.2
Pre-Lay Segment Replacement	See PEA Section 4.4.3 Impacts	NA	NA. The temporary work area associated with the pre-lay segment replacement was included in the impact calculations provided in the PEA.
Pre-Lay Segment Replacement Total			
Regulator Station A and Connection Pipeline	Disturbed Habitat	NA	<0.1 (3 square feet)
	Eucalyptus Woodland	NA	<0.1 (155 square feet)
	Urban/Developed	98 square feet	NA
Regulator Station A and Connection Pipeline Total		98 square feet	<0.1[3]
Regulator Station B	Urban/Developed	98 square feet	0.1[4]
Regulator Station B Total		98 square feet	0.1
Regulator Station C	Eucalyptus Woodland	98 square feet	<0.1 (819 square feet)
	Urban/Developed	NA	<0.1 (114 square feet)
Regulator Station C Total		98 square feet	<0.1 (932 square feet)[5]
Total Impacts		**392 square feet**	**14.2**

[3] All but 158 square feet of this work area was included in the temporary workspaces disclosed in the PEA.
[4] Approximately the eastern half of this work area was included in the temporary workspaces disclosed in the PEA.
[5] All but 932 square feet of this work area was included in the temporary workspaces disclosed in the PEA.

Table 3.4-4: Impacts to Vegetation Communities

General Habitat Type	Vegetation Community	Approximate Permanent Impact (acres)	Approximate Temporary Impact (acres)	Approximate Total Impacts (acres)
Disturbed or Developed Habitat	Disturbed Habitat	None	0.1	0.1
	Urban/Developed	<0.1 (294 square feet)	13.6	13.7
Scrub and Chaparral	Diegan Coastal Sage Scrub*	None	0.1	0.1
	Diegan Coastal Sage Scrub (disturbed)*	None	<0.1 (1,846 square feet)	<0.1 (1,846 square feet)
Riparian and Bottomland Habitat	Southern Willow Scrub (disturbed)*	None	<0.1 (518 square feet)	<0.1 (518 square feet)
Woodland	Eucalyptus Woodland	<0.1 (98 square feet)	0.4	0.4
Total		**<0.1 (392 square feet)**	**14.2**	**14.2**

Notes: * = Sensitive natural community. Totals may not be precise due to rounding

The qualitative impact evaluation provided in the PEA is consistent with and applicable to the work areas associated with the Distribution System Modifications with regards to potential impacts to all biological resources, because no new biological resources were identified within the Distribution System Modifications' work areas and the type of work proposed for the Distribution System Modifications is similar to that which was described for the Proposed Project in the PEA. Additional detail and quantitative impacts potentially resulting from the Distribution System Modifications are provided in the following subsections. The majority of impacts resulting from the Distribution System Modifications occur within urban/developed areas, as shown in Table 3.4-4: Impacts to Vegetation Communities.

Question 3.4a – Sensitive Species

The qualitative impact evaluation provided in the PEA for potential impacts to special-status plant and wildlife species is consistent with and applicable to the work areas associated with the Distribution System Modifications, as described in the following subsections. No new special-status plant or wildlife species were observed within the work areas associated with the Distribution System Modifications.

Special-Status Plant Species

No special-status plant species were observed during the reconnaissance-level biological survey. Annual or bulbiferous perennial special-status plant species have a low potential to occur within the coastal sage scrub stand associated with the temporary work area at Regulator Station 1248,

which will be removed. As specified in Applicants-Proposed Measure (APM-) BIO-06 in the PEA, pre-construction surveys for federally listed, state-listed, and California Rare Plant Rank (CRPR) 1 and 2 special-status plants will be conducted within one year prior to construction within or adjacent to the construction areas that have potential for special-status plants to occur. The boundaries of these special-status plant occurrences will be mapped. Prior to construction, the locations of any federally listed, state-listed, and CRPR 1 and 2 special-status plants that the Applicants determine can be avoided will be flagged for avoidance with fencing or flagging. Flagged boundaries for special-status plants will be maintained during work at these locations. Where disturbance to these areas cannot be avoided, the Applicants will develop and implement the Habitat Restoration Plan described in APM-BIO-03. As a result, impacts to special-status plant species will remain less than significant with the implementation of the APMs.

Special-Status Wildlife Species

Coastal California Gnatcatcher

Potential impacts to coastal California gnatcatcher and its habitat resulting from the Proposed Project were described in PEA Section 4.4.3 Impacts. The type and nature of the impacts (e.g., the temporary loss of habitat and temporary avoidance of habitat areas during construction) are similar to the temporary impacts anticipated from the Distribution System Modifications. The Distribution System Modifications will result in an additional 0.1 acre of temporary impacts to coastal California gnatcatcher habitat associated with removing Regulator Station 1248 and Regulator Station 982. These impacts are very small and will not change the impact analysis in the PEA, which determined that impacts to coastal California gnatcatcher are less than significant. No new permanent impacts to coastal California gnatcatcher habitat will occur.

Temporary impacts to potential coastal California gnatcatcher habitat associated with the Proposed Project and the Distribution System Modifications will be restored by implementing APM-BIO-03, which requires the Applicants to prepare and implement a Habitat Restoration Plan for areas temporarily disturbed during construction. At a minimum, the Habitat Restoration Plan will describe the following:

- pre-construction documentation of existing conditions,
- clearing and grading procedures to be used during construction that will help facilitate restoration,
- recontouring and seedbed preparation methods,
- topsoil salvage,
- seed mix selection and application procedures,
- the schedule for restoration activities,
- monitoring periods,
- success criteria,
- remedial measures, and
- reporting procedures to be used.

To minimize impacts to coastal California gnatcatcher, the Applicants will coordinate with the USFWS to obtain the necessary permits under the federal Endangered Species Act (FESA), and will comply with all permit requirements for this species, as well as implement the APMs

summarized in PEA Section 4.4.3 Impacts. As a result, twith the implementation of APMs, impacts will remain less than significant.

Least Bell's Vireo and Southwestern Willow Flycatcher

Although a small stand of disturbed southern willow scrub was noted at Regulator Station 1051, this stand was entirely surrounded by developed areas and consisted of three willow trees with a disturbed understory. Because least Bell's vireo territories range from 0.5 to 7.5 acres, this stand will be too small to support habitat for the least Bell's vireo. Therefore, this stand will not be considered habitat for special-status riparian bird species, and as a result, no direct impacts to riparian bird habitat is anticipated from the Distribution System Modifications.

Peñasquitos Creek—a perennial water supporting large, mature stands of willows and sycamore—is located approximately 100 feet north of the temporary work area at Regulator Station 1248. This area has the potential to support least Bell's vireo, southwestern willow flycatcher (*Empidonax traillii extimus*), and other special-status birds that depend on riparian habitats for all or portions of their life cycles. No direct impacts to any of these species are anticipated, because no removal of riparian vegetation is proposed for the Distribution System Modifications at this location. Potential indirect impacts, such as noise disruptions due to the presence of humans and equipment, were discussed in PEA Section 4.4.3 Impacts for these riparian bird species. These indirect impacts are similar to the impacts anticipated from the Distribution System Modifications because the type of work is similar and could result in the short-term displacement of birds from riparian stands near the work areas.

To minimize impacts to least Bell's vireo and southwestern willow flycatcher, the Applicants will coordinate with the USFWS to obtain the necessary permits under the FESA; will comply with all permit requirements for this species; and will implement the APMs summarized in PEA Section 4.4.3 Impacts. As a result, potential impacts to least Bell's vireo will remain less than significant with the implementation of the APMs and permit conditions.

Special-Status Bat Species

Potential habitat for special-status bats was observed at the bridge over Carroll Canyon Creek along the Line 49-31B replacement. No special-status bats were noted, but this area could potentially support maternal bat roost sites. Potential impacts to special-status bats (e.g., destruction of maternal bat roost sites or abandonment of roost sites as a result of construction-related noise and human presence) were discussed in PEA Section 4.4.3 Impacts. The impacts are similar to the potential impacts resulting from the Distribution System Modifications at this bridge location, because the type of work is similar to that which is described in the PEA.

To minimize impacts to special-status bats, the Applicants will implement APMs described in PEA Section 4.4.3 Impacts, including APM-BIO-14, which requires the Applicants to avoid and minimize impacts to roosting bats by avoiding tree trimming during bat breeding season; assessing a habitat's potential to support special-status bat species; and if applicable, establishing exclusionary zones around active roost sites. As a result, potential impacts to special-status bat species will remain less than significant with the implementation of APMs.

Question 3.4b – Sensitive Natural Communities

Within the temporary work areas associated with the Distribution System Modifications, 0.1 acre of coastal sage scrub, including a disturbed coastal sage scrub stand, and 518 square feet of disturbed southern willow scrub were observed. Impacts to these sensitive natural communities will be temporary in nature and restored in accordance with APM-BIO-03, which requires the Applicants to prepare and implement a Habitat Restoration Plan for areas temporarily disturbed during construction. In addition, construction of the Distribution System Modifications has the potential to result in an increased level of invasive species within the temporary work areas associated with Regulator Station 1248 due to the temporary removal of native vegetation. The potential for increased invasive species was discussed in PEA Section 4.4.3 Impacts. To minimize the spread of invasive species, the Applicants will implement APM-BIO-04, which requires the Applicants to prepare and implement a Noxious and Invasive Weed Management Plan that is intended to minimize the spread of noxious and invasive weeds during construction. As a result, the potential impacts to sensitive natural communities will remain less than significant with the implementation of APMs.

Question 3.4c – Effects on Jurisdictional Waters

The Distribution System Modifications will not result in any permanent or temporary impacts to potentially jurisdictional waters. Although Carroll Canyon Creek crosses the temporary work areas associated with the Line 49-31B replacement, the Applicants anticipate using horizontal bore technique, or another technique discussed in the PEA, at this location to avoid impacts to this jurisdictional feature. A second potentially jurisdictional drainage feature mapped just outside of the temporary work areas at the southwestern intersection of Willow Creek Road and Pomerado Road will be avoided during construction, and will therefore not be impacted by the Distribution System Modifications. However, three potentially jurisdictional features described in the PEA are located in the temporary work areas for the pre-lay segment replacement and Regulator Station A. As mentioned in Section 3.4.0 Existing Conditions, both the pre-lay segment replacement and Regulator Station A are located in approximately the same location as the temporary work areas for the Proposed Project that were presented in the PEA. As a result, there are no impacts to jurisdictional waters anticipated as a result of the Distribution System Modifications that were not identified in the PEA. Therefore, impacts will remain less than significant.

Question 3.4d – Interfere with Native Wildlife Movement

Potential impacts to native wildlife movement resulting from the Distribution System Modifications are similar to those described in PEA Section 4.4.3 Impacts. All of the work areas associated with the Distribution System Modifications are within developed areas with minimal potential for impacts to native wildlife movement, with the exception of Regulator Station 1248, which is located within Los Peñasquitos Canyon Preserve. However, removal of Regulator Station 1248 will not result in any permanent impediments to wildlife movement and temporary impacts are only anticipated during construction when human presence and noise may result in a temporary avoidance of these work areas by native wildlife. These impacts were described in PEA Section 4.4.3 Impacts. As a result, potential impacts to native wildlife movement will remain less than significant.

Question 3.4e – Conflict with Local Policies

PEA Section 4.4.3 Impacts determined that the Proposed Project will not conflict with any local policies or plans protecting biological resources. The Distribution System Modifications are located within the same local jurisdictions as those discussed in the PEA, and as a result, the Distribution System Modifications also will not conflict with any local policies or plans protecting biological resources.

Question 3.4f – Conflict with Conservation Plan

PEA Section 4.4.3 Impacts determined that the Proposed Project will not conflict with any conservation plans protecting biological resources. The Distribution System Modifications also will not conflict with any conservation plans protecting biological resources, because no new conservation plans were identified for areas where the Distribution System Modifications are proposed.

3.4.2 Applicant-Proposed Measures

No additional or increased impacts to biological resources will result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.4.3 References

California Native Plant Society. 2016. Inventory of Rare and Endangered Vascular Plants of California. Online. http://www.rareplants.cnps.org/. Site visited March 2, 2016.

Insignia. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

Jepson Flora Project. 2016. Jepson eFlora. Online. http://ucjeps.berkeley.edu/IJM.html. Site visited March 2, 2016.

Kus, B. 2002. *Least Bell's Vireo (Vireo bellii pusillus). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight.* Online. http://www.prbo.org/calpif/htmldocs/riparian_v-2.html. Site visited March 10, 2016.

USACE. 2008. *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States A Delineation Manual*.

USFWS. 2016. Critical Habitat Portal. Online. http://ecos.fws.gov/crithab/. Site visited March 2016.

Unitt, P. 2004. *The San Diego County Bird Atlas*.

ATTACHMENT 3.4–A: VEGETATION MAP

Attachment 3.4-A: Vegetation Communities Map 1 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Bog and Marsh
- Disturbed or Developed Habitat
- Grasslands, Vernal Pools, Meadows, and Other Herb Communities
- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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Attachment 3.4-A: Vegetation Communities Map 2 of 17

Pipeline Safety & Reliability Project

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Attachment 3.4-A: Vegetation Communities Map 3 of 17

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Attachment 3.4-A: Vegetation Communities Map 4 of 17

Pipeline Safety & Reliability Project

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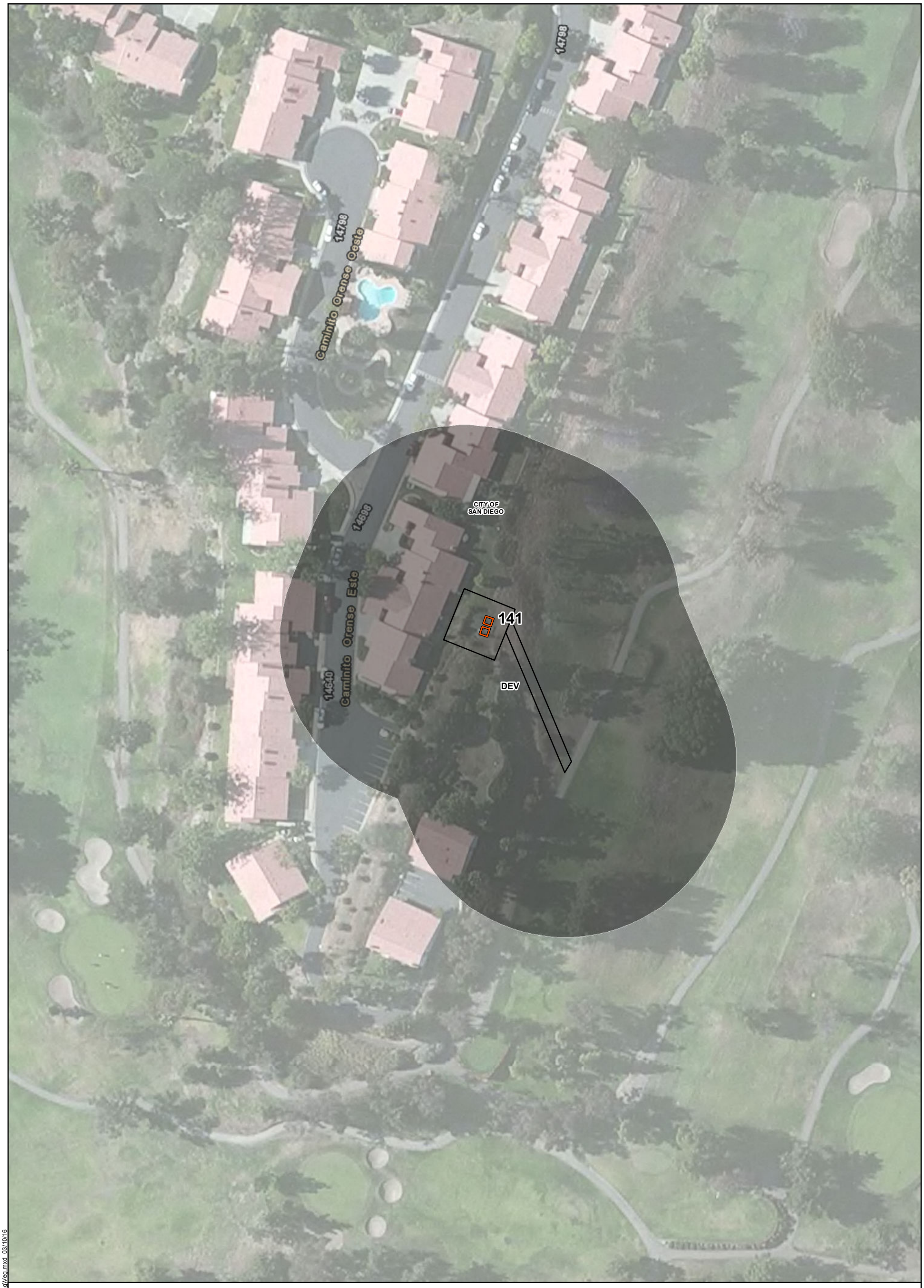

Attachment 3.4-A: Vegetation Communities Map 5 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
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- Grasslands, Vernal Pools, Meadows, and Other Herb Communities
- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
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Attachment 3.4-A: Vegetation Communities Map 6 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
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- Replacement Regulator Station
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- Disturbed or Developed Habitat
- Grasslands, Vernal Pools, Meadows, and Other Herb Communities
- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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Attachment 3.4-A: Vegetation Communities Map 7 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
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- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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Attachment 3.4-A: Vegetation Communities Map 8 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
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- Scrub and Chaparral
- Woodland
- City/County Boundary

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Attachment 3.4-A: Vegetation Communities Map 9 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
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Attachment 3.4-A: Vegetation Communities Map 10 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Bog and Marsh
- Disturbed or Developed Habitat
- Grasslands, Vernal Pools, Meadows, and Other Herb Communities
- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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0 60 120 Feet

SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

Attachment 3.4-A: Vegetation Communities Map 11 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Bog and Marsh
- Disturbed or Developed Habitat
- Grasslands, Vernal Pools, Meadows, and Other Herb Communities
- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.4-A: Vegetation Communities Map 12 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Bog and Marsh
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- Woodland
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SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

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Attachment 3.4-A: Vegetation Communities Map 13 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Bog and Marsh
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- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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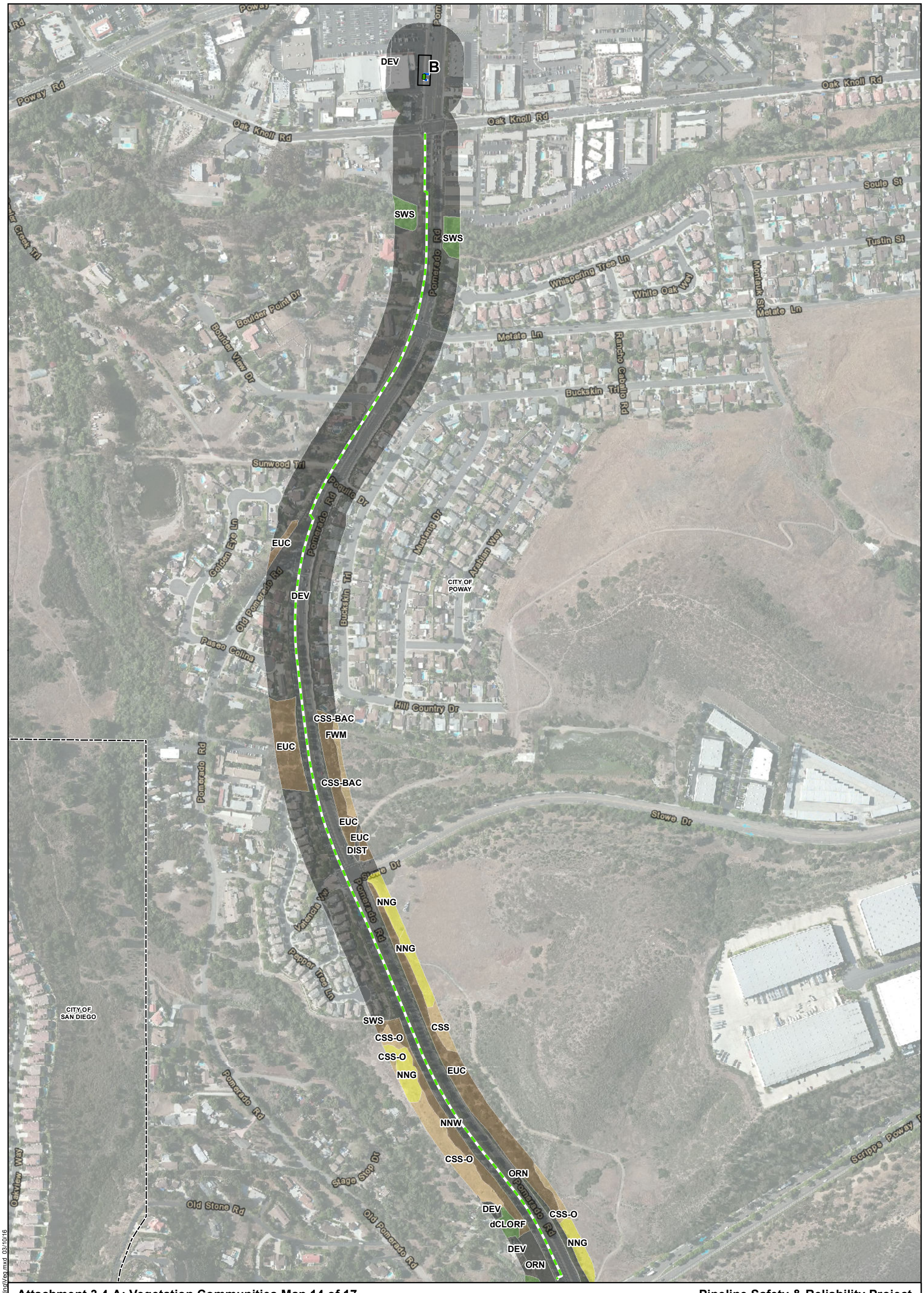

Attachment 3.4-A: Vegetation Communities Map 14 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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- Riparian and Bottomland Habitat
- Scrub and Chaparral
- Woodland
- City/County Boundary

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SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Attachment 3.4-A: Vegetation Communities Map 15 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
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- Woodland
- City/County Boundary

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SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.4-A: Vegetation Communities Map 16 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
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SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.4-A: Vegetation Communities Map 17 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
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3.5 CULTURAL, TRIBAL, AND PALEONTOLOGICAL RESOURCES

3.5.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. The regulatory setting relevant to cultural, tribal, and paleontological resources—as well as the historic and paleontological overviews of the relevant jurisdictions—is provided in Section 4.5.2 Existing Conditions of the Pipeline Safety & Reliability Project's (Proposed Project's) Proponent's Environmental Assessment (PEA). The following subsections describe the cultural and paleontological resource settings in the vicinity of the Distribution System Modifications.

Cultural Resources

On February 27, 2016, ASM Affiliates, Inc. (ASM) requested a record search for the Distribution System Modifications' areas of potential effect (APE) and a one-mile radius from the California Historical Resources Information System at the South Coastal Information Center. The APE is defined as 100 feet from any location where construction of the Proposed Project will require ground disturbance. In March 2016, ASM analyzed the updated cultural resources record search results in support of this PEA Supplement, and in compliance with the California Environmental Quality Act and Section 106 of the National Historic Preservation Act. The results are summarized in the Cultural Resources Letter Report (Confidential), which will be provided separately.

The Distribution System Modifications' APE covers approximately 100 acres, of which 35 acres have been intensively surveyed in the past five years. Table 1. Previously Recorded Cultural Resource Studies Within the Project APE of the Cultural Resources Letter Report (Confidential) lists all of the previously published cultural resources reports that address areas within the Distribution System Modifications' APE and one-mile radius. Within the one-mile radius of the Distribution System Modifications' APE, 187 cultural resources and 32 historic addresses were identified. Of these, three cultural resources are within the APE. No recorded historic addresses are located within the APE. Each of the identified resources are provided in Table 2. Previously Recorded Resources Within the Project APE in the Cultural Resources Letter Report (Confidential). In addition, Table 3. PRSP Proposed Distribution System Modifications Components and Relative Cultural Resource Sensitivity of the Cultural Resources Letter Report (Confidential) lists the relative cultural resource sensitivities of the Distribution System Modifications. Cultural sensitivity was determined based on the number of known cultural resource sites intersected by the route, taking into account the percentage of the route that was covered by available records. The Mira Mesa extension and removal of Regulator Station 1248 were determined to have medium sensitivity for cultural resources. All other distribution system modification components were determined to have low sensitivity.

Paleontological Resources

In March 2016, PaleoServices conducted a desktop-level paleontological resources assessment of the Distribution System Modifications; the results of the assessment are provided in Paleontological Resources Letter Report (Confidential), which will be provided separately.

Figure 1: Paleontological Potential Map of Paleontological Resources Letter Report (Confidential) depicts the paleontological sensitivities in locations where new, permanent facilities will be installed. Regulator Station A and portions of its connection pipeline are underlain by the Friars Formation, which has high potential for containing paleontological resources (i.e., fossils). In addition, portions of the Mira Mesa extension, Line 49-31B replacement, and pre-lay segment replacement are underlain by the Stadium Conglomerate, Lindavista Formation, and/or Friars Formation, which have moderate to high potential for containing paleontological resources.

3.5.1 Impact Evaluation

Question 3.5a – Historical Resource Change

No previously historic addresses, structures, or resources were identified in the records search for the Distribution System Modifications' APE. However, excavation associated with construction of the Distribution System Modifications has the potential to uncover and potentially damage or destroy unknown resources, similar to the excavation of the Proposed Project. To reduce the potential to impact unknown resources during construction of the Distribution System Modifications, Applicants-Proposed Measure (APM-) CUL-06 is proposed. This additional APM requires a cultural resource field survey to be conducted at all distribution system modification components prior to construction. Should any unrecorded historic resources be identified during the field survey, the PEA APMs intended to minimize and mitigate impacts to cultural resources will be implemented during construction of the Distribution System Modifications, as well as for the Proposed Project in general (i.e., APM-CUL-01, APM-CUL-02, and APM-CUL-03). As discussed in PEA Section 4.5.3 Impacts, APM-CUL-01 will ensure that all construction personnel are educated on the potential for exposing subsurface cultural resources. If unanticipated historic resources are identified within the APE during the archaeological field surveys required by APM-CUL-06, all resources that have not yet been evaluated for eligibility with the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the Local Register, or resource protection ordinance will be evaluated prior to the initiation of construction activities, in accordance with APM-CUL-02. In addition, to ensure that historic structures (if any are identified in the future survey within the APE) are not impacted during construction, APM-CUL-03 will ensure that a qualified archaeologist and Native American monitor oversee ground-disturbing activities within the identified cultural resource sites located within the Distribution System Modifications' APE. Furthermore, in accordance with APM-CUL-03, any identified resources within the APE that can be avoided will be enclosed within environmentally sensitive area fencing if there is the potential to impact them during construction.

Operation and maintenance of the Distribution System Modifications will occur in the same manner as the activities that are currently conducted for existing natural gas facilities in the vicinity. The Applicants have developed standard internal programs and practices to avoid impacts to cultural resources, and they will be implemented during operation and maintenance of the Proposed Project. In addition, operation and maintenance activities are not anticipated to require ground disturbance within previously undisturbed areas. Therefore, with implementation of APMs, impacts to historical resources will remain less than significant.

Question 3.5b – Archaeological Resource Change

As discussed previously, the Distribution System Modifications include activities that are consistent with those analyzed in PEA Section 4.5.3 Impacts. Three archaeological resources were identified by the records search within the Distribution System Modifications' APE. Two of the resources are recorded as isolates, and are determined not eligible for NRHP, CRHR, Local Register, or RPO listings. The third resource (CA-SDI-592) is a prehistoric archaeological site that has not yet been evaluated for NRHP, CRHR, Local Register, or RPO eligibility. No other previously recorded archaeological resources were identified in the records search or recent survey within the Distribution System Modifications' APE.

As described in the response to Question 3.5a, impacts to archaeological resources could result during excavation associated with construction of the Distribution System Modifications. Avoidance of known resources within the APE during construction may or may not be feasible, depending on the location. In addition, construction of the Distribution System Modifications will have the potential to uncover and potentially damage or destroy unknown archaeological resources. Therefore, with the addition of APM-CUL-06, the PEA analysis adequately addresses the potential impacts to cultural resources that may result from the Distribution System Modifications.

As discussed previously, operation and maintenance of the Distribution System Modifications will occur in the same manner as the activities that are currently conducted for existing natural gas facilities in the vicinity. The Applicants have developed standard internal programs and practices to avoid impacts to cultural resources, and these programs and practices will be implemented during operation and maintenance of the Proposed Project. In addition, operation and maintenance activities are not anticipated to require ground disturbance within previously undisturbed areas. Therefore, with implementation of APMs, impacts to archaeological resources will remain less than significant.

Question 3.5c – Paleontological Resource Destruction

Excavation associated with construction and the installation of the Distribution System Modifications has the potential to impact paleontological resources in areas underlain by geologic rock units/formations with moderate and high paleontological potential. The distribution system modification components that include removing existing facilities have a low potential to impact paleontological resources, because construction will occur within previously disturbed areas and significant earthwork will not be required. Additional impacts to paleontological resources may result during excavation in previously undisturbed deposits located in areas of moderate and high paleontological potential. Regulator Station A, the Regulator Station A connection pipeline, the Mira Mesa pipeline extension, the Line 49-31B replacement, and the pre-lay segment replacement are underlain by rock units with moderate and high potential for containing paleontological resources (i.e., fossils). Potential impacts to paleontological resources associated with the installation of the pre-lay segment replacement were already analyzed in the PEA and do not require further evaluation. However, new impacts to paleontological resources may result from installation of Regulator Station A, the Regulator Station A connection pipeline, the Mira Mesa extension, and the Line 49-31B replacement.

To reduce impacts associated with new facility installation, APM-PALEO-01 will ensure that excavation schedules, paleontological field techniques, and safety issues are appropriately communicated between the Proposed Project's paleontologist and the grading and excavation contractors. To minimize the potential for the direct or indirect destruction of paleontological resources or unique geologic features, the Applicants will implement APMs to ensure the proper salvage, relocation, and management of fossils encountered during excavations. APM-PALEO-02, which requires construction monitoring within areas of moderate and high paleontological potential by a qualified paleontologist, will ensure that fossils encountered during construction are salvaged. APM-PALEO-03 requires that salvaged fossils are appropriately cleaned, repaired, sorted, and cataloged as a part of a construction-phase paleontological mitigation program. All prepared fossils and relevant notes, photos, and maps will be curated at a scientific institution, such as the San Diego Natural History Museum. Lastly, a final report summarizing the results of the paleontological mitigation program will be prepared for the Proposed Project, including the Distribution System Modifications, as required by APM-PALEO-04.

Operation and maintenance activities are not anticipated to require ground disturbance within previously undisturbed areas. As such, no impact to paleontological resources will result during operation and maintenance of the Distribution System Modifications. Portions of the Distribution System Modifications are located in areas of high paleontological sensitivities, which result in a slight increase in the Proposed Project's potential impacts to paleontological resources; however, APM-PALEO-01 through APM-PALEO-04 will be implemented to mitigate these additional impacts during construction of the Distribution System Modifications. Therefore, impacts to paleontological resources will remain less than significant with implementation of APMs.

Question 3.5d – Human Remains Disturbance

No known cemeteries exist, and no recorded Native American or other human remains have been identified within or adjacent to the Distribution System Modifications. As such, the potential for the unintended discovery of human remains during subsurface construction activities is considered to be low. Regardless, in the event that human remains are encountered during the course of construction, the Applicants will implement the appropriate notification processes as required by law and as described in PEA Section 4.5.3 Impacts. As required by APM-CUL-05, all work will be halted in the vicinity of the find and the county coroner will be notified, as required by California Health and Safety Code Section 7050.5. As a result, impacts to human remains will remain less than significant with implementation of APM-CUL-05.

Question 3.5e – Tribal Cultural Resources

As discussed in PEA Section 4.5.3 Impacts, consultation with the tribes is ongoing. In accordance with APM-CUL-04, the Applicants will provide requested information and updates during initiation and construction of the Proposed Project, as well as continued Native American tribe consultation efforts. APM-CUL-04 also requires that Native American consultants be invited to monitor construction activities within culturally sensitive areas. Native American consultants will be given the right to inspect sites where human remains are discovered and to determine the treatment and disposition of the remains. Therefore, impacts to tribal cultural resources will remain less than significant.

3.5.2 Applicants-Proposed Measures

No additional or increased impacts to cultural, tribal, or historic resources are anticipated to result from the Distribution System Modifications. However, because the Distribution System Modifications' APE was not included in the cultural resource survey conducted in April and May 2015 for the Proposed Project's APE, the following APM is proposed:

- **APM-CUL-06:** Prior to construction, a cultural resources field survey will be conducted at all Proposed Project components that were not included in the field surveys conducted for the Proposed Project in April and May 2015.

3.5.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety & Reliability Project. September 30, 2015.

3.6 GEOLOGY, SOILS, AND SEISMICITY

3.6.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Section 4.6.2 Existing Conditions of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project) describes the regulatory and environmental settings related to geology, soils, and seismicity within these jurisdictions. A review of United States (U.S.) Geological Survey (USGS) and Natural Resources Conservation Service (NRCS) data was conducted for areas in the vicinity of the Distribution System Modifications to verify soil composition and subsurface conditions. Twelve distinct soil units are crossed by the Distribution System Modifications, although several of these units are grouped within the same soil types. The soil characteristics crossed by the Distribution System Modifications are summarized in Table 3.6-1: Soils in the Distribution System Modifications Area. With the exception of Diablo clay, soil types underlying the Distribution System Modifications will be the same as those identified in the PEA. Diablo clay soil types exhibit similar characteristics as the soil types previously analyzed in the PEA, and the majority of the Distribution System Modifications will occur in or on soil that was previously disturbed.

A detailed list of geological formations in the vicinity of the Distribution System Modifications is provided in Table 3.6-2: Geological Formations within the Distribution System Modifications Area. The geological formations in the vicinity of the Distribution System Modifications are similar to those discussed in PEA Section 4.6.2 Existing Conditions. Table 3.6-3: Active Faults in the Vicinity of the Distribution System Modifications lists the nearest active fault to the Distribution System Modifications area, the known maximum value of magnitude, the slip rate measured in millimeters per year (mm/yr), and the peak ground acceleration (Pga) expressed as a fraction of the acceleration of gravity (g). No additional faults or fault zones were identified within the vicinity of the Distribution System Modifications that were not already included in the PEA. Each site for the Distribution System Modifications is on flat to gently undulating terrain with low erosion potential.

Table 3.6-1: Soils in the Distribution System Modifications Area

Soil Type	Soil Map Unit[1]	Slope (percent)	Permeability	Erosion Potential	Distribution System Modification Component
Diablo clay[2]	DaD	9 to 15	Slow	Moderate	Regulator Station 141
	DaE	15 to 30		Severe	Regulator Station 1101, Regulator Station 1500, Regulator Station 1516
Diablo-Olivenhain complex	DoE	9 to 30	Medium to Rapid	Severe	Pre-lay segment replacement
Fallbrook-Vista sandy loam	FvE[3]	15 to 30	Moderately slow	Severe	Regulator Station 1316
Olivenhain cobbly loam	OhC	2 to 9	Very Slow	Slight	Regulator Station A
Placentia sandy loam, thick surface	PfC	2 to 9	Very Slow	Moderate	Regulator Station B, Pre-lay segment replacement
Ramona sandy loam	RaB	2 to 5	Moderately Slow	Moderate	Regulator Station 939
Redding gravelly loam	RdC	2 to 9	Slow to Very Slow	Moderate	Mira Mesa extension, Line 49-31B replacement, Regulator Station 1051, Regulator Station 1335, Regulator Station 1494, Regulator Station 982
Redding cobbly loam	ReE	9 to 30	Slow to Very Slow	Severe	Line 49-31B replacement, Regulator Station 982
Riverwash	Rm	15 to 50	Moderately Rapid to Very Rapid	Slight	Line 49-31B replacement, Regulator Station C

[1] Soil map units are utilized by the NRCS to identify and display specific soils and/or groups of soils on a map based on their soil profile, soil type, relationship to other soils, or suitability for various uses.
[2] Diablo clay was not identified in the PEA.
[3] FvE was not identified in the PEA.

Soil Type	Soil Map Unit[1]	Slope (percent)	Permeability	Erosion Potential	Distribution System Modification Component
San Miguel rocky silt loam	SmE	9 to 30	Very Slow	Severe	Regulator Station 1248
Visalia sandy loam	VaA	0 to 2	Rapid	Slight	Pre-lay segment replacement

Sources: U.S. Department of Agriculture (USDA), 2014a and 2014b

Table 3.6-2: Geological Formations within the Distribution System Modifications Area

Geological Formation	Geologic Age	Length of Distribution System Modifications Crossed by Geological Formation (acres)
Crystalline bedrock: Tonalite, undivided	Mid-Cretaceous	3.07
Crystalline bedrock: Granodiorite of Woodson Mountain	Mid-Cretaceous	1.99
Crystalline bedrock: Metasedimentary and metavolcanic rocks, undivided	Mesozoic	3.02
Old alluvial floodplain deposits, undivided	Late to middle Pleistocene	0.37
Very old paralic deposits, Unit 5[4]	Middle to early Pleistocene	6.70
Very old paralic deposits, Unit 6[4]	Middle to early Pleistocene	23.70
Very old paralic deposits, Unit 7[4]	Middle to early Pleistocene	21.88
Young alluvial floodplain deposits	Holocene and late Pleistocene	20.99
Sedimentary deposits: Friars Formation, nonmarine and lagoonal sandstone and claystone	Middle Eocene	2.18
Sedimentary deposits: Mission Valley Formation, marine and nonmarine sandstone	Middle Eocene	9.47
Sedimentary deposits: Conglomerates, Stadium Conglomerate	Middle Eocene	16.96

Source: USGS, 2014c

[4] This geologic formation was not identified in the PEA.

Table 3.6-3: Active Faults in the Vicinity of the Distribution System Modifications

Fault/ Fault Zone	Fault Section	Approximate Distance to Distribution System Modification	Approximate Fault Length (miles)	Maximum Magnitude Events		
				Maximum Estimated Earthquake Magnitude	Slip Rate (mm/yr)	Pga (g)
Coronado Bank	Not Applicable (NA)	19 miles southwest	185	7.6	3	0.262
Elsinore	Coyote Mountain	44 miles east	39	6.8	4	0.442
	Glen Ivy	38 miles northwest	36	6.8	5	0.488
	Julian	18 miles east	76	7.1	5	0.462
	Temecula	16 miles north	43	6.8	5	0.4
Newport-Inglewood-Rose Canyon	Oceanside	15 miles west	136	7.1 to 7.2	1.5	0.285
	San Diego	7 miles west				0.263
	Silver Strand	10 miles south				0.255
San Diego Trough	NA	30 miles southwest	93	INA	1.5	0.241
San Jacinto	Anza	39 miles northeast	91	7.2	12	0.620
	Coyote Creek	39 miles east	41	6.8	4	0.597
	Borrego Mountain[5]	50 miles north	18	6.6	4	0.633
	San Jacinto Valley	43 miles north, northeast	43	6.9	12	0.632

Sources: California Geological Survey (CGS), 2014; California Department of Conservation (DOC), 2008, 2014a, and 2014c; San Diego Natural History Museum (SDNHM), 2014; Southern California Earthquake Data Center, 2013; USGS, 2014a and 2014b

[5] This fault section of the San Jacinto fault zone was not identified in the PEA.

3.6.1 Impact Evaluation

Question 3.6a – Human Safety and Structural Integrity

The geologic setting and anticipated soil conditions in the vicinity of the Distribution System Modifications are similar to areas that were previously analyzed in the PEA. Geologic hazards associated with fault rupture, seismic shaking, ground failure, or landslides on the Distribution System Modifications will be similar to those described in PEA Section 4.6 Geology, Soils, and Seismicity because no new geologic hazards were identified in the distribution modifications vicinity that were not already addressed in the PEA. No active faults will be crossed by the Distribution System Modifications, and the modifications will be located farther away from the faults identified in the PEA. The Distribution System Modifications do not cross active faults; they will be designed to minimize potential adverse effects; and the Applicants will comply with applicable codes, including the Uniform Building Code (UBC) earthwork standards and recommendations. In addition, the Applicants will implement all Applicants-proposed measures (APMs) identified in the PEA, including APM-GEO-01. APM-GEO-01 required the completion of additional geotechnical evaluations to ensure that the Proposed Project is constructed in accordance with applicable codes, seismic standards, and requirements set forth by state, county, and city agencies. Therefore, impacts associated with fault rupture, seismic shaking, ground failure, or landslides will remain less than significant with implementation of APMs.

Question 3.6b – Soil Erosion or Topsoil Loss

As discussed in PEA Section 4.6 Geology, Soils, and Seismicity, the Proposed Project activities (e.g., vegetation removal, excavation, and grading) have the potential to cause soil erosion or result in a loss of topsoil, especially in steep slopes. However, as discussed in Chapter 2 – Project Description Supplement, at the distribution system modification locations, the potential for erosion and subsequent sedimentation is low because the majority of work will occur on pavement, and an exposed trench generally has low potential for runoff. The Distribution System Modifications are located within urban areas and will not require cross-country travel. Therefore, clearing and grading will be primarily limited to trimming ornamental trees and vegetation adjacent to workspaces, as necessary. As a result, impacts associated soil erosion and the loss of topsoil will remain less than significant.

Question 3.6c – Geologic Unit Instability

As described previously, the Distribution System Modifications will be located in similar geologic units with similar characteristics as those described in the PEA. Additionally, as discussed in PEA Section 4.6 Geology, Soils, and Seismicity, the Distribution System Modifications will be engineered to withstand ground movement and will comply with all applicable codes, including the UBC earthwork standards and recommendations. The Applicants will implement APM-GEO-01, as proposed in the PEA, and will conduct design-level geotechnical and geologic hazard investigations for the Distribution System Modifications. All of the distribution system modification activities will be conducted in accordance with all applicable regulations and standards. Therefore, impacts due to geological instability will remain less than significant with implementation of APMs.

Question 3.6d – Expansive Soils

As described previously, with the exception of Diablo clay, soil types underlying the distribution system modification activities will be the same as those identified in the PEA. In addition, Diablo clay soil types exhibits similar characteristics as the soil types analyzed in the PEA, and the majority of the Distribution System Modifications will occur in or on soil that was previously disturbed. Further, as discussed in PEA Section 4.6 Geology, Soils, and Seismicity, the Applicants will comply with all applicable codes and UBC earthwork standards and recommendations. The Distribution System Modifications will be designed and installed to minimize damage from expansive soils. Therefore, impacts associated with expansive soils will remain less than significant.

Question 3.6e – Septic Suitability

Soil permeability is a consideration for projects that require septic system installation. Because the Distribution System Modifications will not involve the installation of a septic tank or an alternative wastewater disposal system, the PEA adequately addresses potential impacts to septic tanks or wastewater disposal systems, and no impacts will occur.

3.6.2 Applicants-Proposed Measures

No additional or increased impacts to geology or soils are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.6.3 References

California DOC. 2008. Ground Motion Interpolator. Online. http://www.quake.ca.gov/gmaps/PSHA/psha_interpolator.html. Site visited March 9, 2016.

California DOC. 2014a. Appendix A – 2002 California Fault Parameters: A Faults. Online. http://www.consrv.ca.gov/cgs/rghm/psha/fault_parameters/pdf/Documents/A_flt.pdf. Site visited March 9, 2016.

California DOC. 2014b. Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, Version 2.0. Online. http://www.consrv.ca.gov/cgs/information/publications/Pages/QuaternaryFaults_ver2.aspx. Site visited March 2, 2016.

California DOC. 2014c. Digital Database of Quaternary and Younger Faults from the Fault Activity Map of California, Version 2.0. Online. http://www.consrv.ca.gov/cgs/information/publications/Pages/QuaternaryFaults_ver2.aspx. Site visited March 2, 2016.

CGS. 2014. Information Warehouse. Online. http://www.quake.ca.gov/gmaps/WH/index.htm. Site visited March 2, 2016.

Google. 2015. Google Earth Pro Version 7.1.5.1557 Software. Program used March 7, 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

SDNHM. 2014. Faults and Earthquakes in San Diego County. Thomas A. Deméré, Ph.D.; Curator of Paleontology. Online. https://www.sdnhm.org/archive/research/paleontology/sdfaults.html. Site visited July 14, 2014.

Southern California Earthquake Data Center. 2013. Significant Earthquakes and Faults. Online. http://scedc.caltech.edu/significant/index.html. Site visited March 2, 2016.

USDA. 2014a. NRCS Soil Survey Division. Official Soil Series Descriptions. Online. https://soilseries.sc.egov.usda.gov/osdname.asp. Site visited March 2, 2016.

USDA. 2014b. Web Soil Survey. Online. http://websoilsurvey.nrcs.usda.gov. Site visited March 2, 2016.

USGS. 2014a. Mineral Resources On-Line Spatial Data – California Geologic Map Data. Online. http://mrdata.usgs.gov/geology/state/state.php?state=CA. Site visited March 2, 2016.

USGS. 2014b. Quaternary Faults in Google Earth. Online. http://earthquake.usgs.gov/hazards/qfaults/google.php. Site visited March 2, 2016.

3.7 GREENHOUSE GAS EMISSIONS

3.7.0 Existing Conditions

The Distribution System Modifications performed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. As a result, the Distribution System Modifications are also under the jurisdiction of the San Diego County Air Pollution Control District (SDAPCD). This section describes the potential impacts relating to greenhouse gas (GHG) emissions from the Distribution System Modifications associated with the Pipeline Safety & Reliability Project (Proposed Project). Proponent's Environmental Assessment (PEA) Section 4.7.2 Existing Conditions describes the regulatory and environmental settings related to GHG emissions within the aforementioned jurisdictions, and the Distribution System Modifications will be located within the same air basin as the Proposed Project. Therefore, existing conditions presented in PEA Section 4.7 Greenhouse Gas Emissions also describe the existing conditions for the Distribution System Modifications.

3.7.1 Impact Evaluation

Question 3.7a – Greenhouse Gas Emissions

As discussed in the PEA, the main source of GHG emissions associated with the Proposed Project will continue to be combustion during construction. To account for construction of the Distribution System Modifications, an additional approximately three months will be required. Construction of the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement components may occur concurrently with construction of the Proposed Project. The removal, replacement, and installation of the regulator stations will begin following completion of the Proposed Project and prior to lowering the operating pressure of Line 1600. Therefore, the overall Proposed Project construction schedule will be extended two to three months to complete. GHG emissions for the Distribution System Modifications were estimated based on one crew for the approximately three months required to complete the construction of the Distribution System Modifications. The emissions were calculated using the modeling from the PEA to determine an average monthly emission rate for one crew and the total emissions for the three-month period.[1] In addition to the construction vehicle use, construction of the Proposed Project's Distribution System Modifications will require a one-time release of 12,120 cubic feet of natural gas. Estimated GHG emissions include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), and are summarized in Table 3.7-1: Estimated Greenhouse Gas Construction Emissions. As shown, total amortized construction emissions for the Proposed Project with the Distribution System Modifications will be approximately 785.98 metric tons (MT) of CO_2 equivalent (CO_2e).

[1] The PEA assumed that four separate crews will work simultaneously across an approximately 12-month period to construct the transmission line. The emission rates for the Distribution System Modifications were conservatively assumed to be identical to that of one of the four crews' activity from the Proposed Project during a three-month period.

Table 3.7-1: Estimated Greenhouse Gas Construction Emissions

Category	GHG Emissions (MT)		
	CO_2	CH_4	N_2O
Without Implementation of Applicant's-Proposed Measure (APM-) PUS-01			
Proposed Project (without the Distribution System Modifications)			
Construction Vehicle Emissions	21,521.53	3.30	0.00
Cold Tie-In Emissions	0.03	1.19	0.00
Pre-Lay Purge[2]	0.40	18.40	0.00
Pigging	0.01	0.34	0.00
Water Conveyance	42.74	< 0.01	< 0.01
Distribution System Modifications			
Construction Vehicle Emissions[3]	1,345.10	0.21	0
Natural Gas Releases	<0.01	0.22	0
CO_2e	22,909.81	496.96	0.11
Total CO_2e	**23,406.88**		
Amortized Construction Emissions[4]	**780.23**		
With Implementation of APM-PUS-01[5]			
Proposed Project (without the Distribution System Modifications)			
Construction Vehicle Emissions	21,521.53	3.30	0.00

[2] Use of a temporary liquefied natural gas system will not be required with the addition of the Distribution System Modifications to the Proposed Project. As a result, these emissions have been omitted from the Proposed Project emission rates.

[3] Construction vehicle emissions were conservatively estimated by assuming that one of the four crews from the Proposed Project will continue working for approximately three months. As a result, construction emissions were divided by 48 to obtain a monthly emission rate for one crew, then multiplied by three to achieve total emissions.

[4] Construction emissions were amortized over 30 years in accordance with industry standards. The Proposed Project is anticipated to be in service for more than 30 years; therefore, the reported emissions are conservative.

[5] APM-PUS-01 was incorporated into the PEA to identify and evaluate sources of recycled water from SDG&E's Major Projects Water Sourcing Plan and ensure that the usage of recycled water does not result in new significant impacts to air quality, greenhouse gas emissions, or traffic. As specified in APM-PUS-01, if the transportation and use of recycled water requires more than 132,750 miles traveled or an average of 262 truck trips per day and a maximum of 957 truck trips during hydrostatic testing, impacts to air quality, greenhouse gas emissions, and traffic may increase. Therefore, construction emissions resulting from the exceedance of these thresholds are included in **Error! Reference source not found.** and Table 3.7-2: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions. Per APM-PUS-01, SDG&E will consult with the California Public Utilities Commission to determine if the benefits of using recycled water are sufficient to justify increased impacts to air quality, greenhouse gas emissions, and traffic.

Category	GHG Emissions (MT)		
	CO_2	**CH_4**	**N_2O**
Cold Tie-In Emissions	0.03	1.19	0.00
Pre-Lay Purge[2]	0.40	18.40	0.00
Pigging	0.01	0.34	0.00
Recycled Water Import	215.23	< 0.01	0.00
Distribution System Modifications			
Construction Vehicle Emissions	1,345.10	0.21	0.00
Natural Gas Releases	<0.01	0.22	0.00
CO_2e	23,082.30	496.96	0.00
Total CO_2e	**23,579.26**		
Amortized Construction Emissions	**785.98**		

Table 3.7-2: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions summarizes the annual GHG emissions from the Proposed Project with the Distribution System Modifications. Because 10 regulator stations will be removed and three older stations will be upgraded with new technologies, the operation and maintenance emissions of the Proposed Project's Distribution System Modifications will be less than current levels. As shown in Table 3.7-2: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions, when added to the amortized construction emissions and simulated emissions from the use of construction equipment and vehicles during operation and maintenance activities, the total annual emissions for the Proposed Project with the Distribution System Modifications with implementation of APM-PUS-01 are anticipated to be approximately 1,011 $MTCO_2e$. As described in the PEA, the SDAPCD has not established GHG thresholds under the California Environmental Quality Act; as a result, the South Coast Air Quality Management District's (SCAQMD's) thresholds were utilized for the Proposed Project. This level falls well below the SCAQMD's significance threshold of 10,000 $MTCO_2e$, and the County of San Diego and the City of San Diego's significance threshold of 2,500 $MTCO_2e$ annually. Therefore, impacts related to greenhouse gas emissions will remain less than significant.

Table 3.7-2: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions

Source	GHG Emissions ($MTCO_2e$ per year)
Proposed Project with Distribution System Modifications	
Off-Road Equipment and On-Road Vehicle Use	218.31
Blowdown Emissions	7.12
Amortized Construction Emissions	780.23
Total	**1,005.66**
Proposed Project with Distribution System Modifications and Implementation of APM-PUS-01	
Off-Road Equipment and On-Road Vehicle Use	218.31
Blowdown Emissions	7.12
Amortized Construction Emissions	785.98
Total	**1,011.41**

Question 3.7b – Applicable Greenhouse Gas Plan Conflicts

GHG emissions of the Proposed Project and the Distribution System Modifications will be below the significance thresholds identified by the SCAQMD, the City of San Diego, and the County of San Diego. Equipment and vehicles supporting construction, operation, and maintenance of the Proposed Project will comply with the requirements implemented by the California Air Resources Board to reduce GHG emissions, and will be consistent with the goals of Assembly Bill 32. Accordingly, with the Distribution System Modifications, impacts will remain below established thresholds. No greenhouse gas plan conflicts will result and impacts will remain less than significant.

3.7.2 Applicant-Proposed Measures

No additional or increased impacts to GHG emissions are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.7.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Research regarding hazards and hazardous materials was presented in Section 4.8 Hazards and Hazardous Materials of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project). The State Water Resources Control Board's (SWRCB's) GeoTracker database and the California Department of Toxic Substances Control's (DTSC's) EnviroStor database were reviewed to identify hazardous sites in the vicinity of the Distribution System Modifications. In addition, a search was conducted for schools, airports, and applicable evacuation and emergency plans in the vicinity of the Distribution System Modifications. The findings of this research are summarized in the following subsections.

Existing Hazardous Sites

A total of 12 hazardous sites were identified within one mile of the Distribution System Modifications. Two of these sites pose a potential risk to the Distribution System Modifications due to the presence of subsurface impacts in the vicinity of the Proposed Project. Additional hazardous sites identified in the vicinity of the Distribution System Modifications were either closed and/or do not pose a risk to the Proposed Project based on the distance from relevant Proposed Project components. Hazardous sites listed with a "Completed – Case Closed" or a "No Further Action" status in regulatory documentation include sites for which a closure letter or other formal closure decision has been issued. Based on the closure status, as well as the remediation and/or containment of hazardous materials on these sites, closed sites were not further evaluated. Hazardous sites and the risk associated with each site are provided in Table 3.8-1: Hazardous Materials Sites Records Review.

Fire Hazards

The Distribution System Modifications are located within an area classified by the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) as Very High Threat to People, Extreme Threat to People, High Threat to People, and Moderate Threat to People. The Distribution System Modifications are located within 0.17 acre of the Extreme Threat to People class, and 14.24 acres are located within the Very High Threat to People Class. Approximately 0.29 acre and 0.08 acre of the Distribution System Modifications are located within the High Threat to People and Moderate Threat to People classes, respectively. The Fire Hazards section of PEA Section 4.8.2 Existing Conditions also discusses the environmental setting related to fire hazards in San Diego County.

Table 3.8-1: Hazardous Materials Sites Records Review

Hazardous Materials Site	Closest Distribution System Modification Component	Approximate Distance from the Closest Distribution System Modification Component	Affected Media	Associated Risk	Reason
Linda Vista Landing Field	Regulator Station 1335	0.7 mile north	Soil contaminated with UXO and MD	Low Risk	Based on the distance between this site and Regulator Station 1335, contaminants associated with this site are not anticipated to be encountered during potential excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.
Elegant II Cleaners and Laundry	Regulator Station 1500	0.5 mile northwest	Soil vapor and groundwater contaminated with perchloroethylene (PCE) and trichloroethylene (TCE)	Low Risk	Based on the distance between this site and Regulator Station 1500, contaminants associated with this site are not anticipated to be encountered during potential excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.
Circle K #2966*	Regulator Station B	Adjacent to the south	Groundwater contaminated with petroleum hydrocarbons	Potential Risk	This site is currently in remediation, and on-site groundwater is present between seven and 15 feet below ground surface. In addition, several monitoring wells are located in the vicinity of the Poway Road and Pomerado Road work area. Based on the distance from this site to the Regulator Station B, contaminated groundwater could potentially be encountered during excavation activities.

Hazardous Materials Site	Closest Distribution System Modification Component	Approximate Distance from the Closest Distribution System Modification Component	Affected Media	Associated Risk	Reason
Former Oak Knoll Cleaners	Regulator Station B	0.3 mile west	Soil and soil vapor contaminated with PCE and TCE	Low Risk	Based on the distance between this site and Regulator Station B, contaminants associated with this site are not anticipated to be encountered during potential excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.
12341 Oak Knoll*	Regulator Station B	Adjacent to the west	Soil and soil vapor contaminated with volatile organic carbons (VOCs)	Potential Risk	This site is currently being evaluated for soil vapor impacts. A soil vapor survey conducted for the site concluded that a significant human health risk was not present on site. However, based on the presence of subsurface contaminants adjacent to the Distribution System Modifications, contaminated materials could potentially be encountered during excavation activities.
Marston Cleaners	Regulator Station 1500	0.4 mile southeast	Groundwater contaminated with PCE	Low Risk	Based on the distance between this site and Regulator Station 1500, and also based on available topographical data, contaminants associated with this site are not anticipated to be encountered during potential excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.

Hazardous Materials Site	Closest Distribution System Modification Component	Approximate Distance from the Closest Distribution System Modification Component	Affected Media	Associated Risk	Reason
Hewlett Packard	Regulator Station 1101	0.7 mile northwest	Groundwater contaminated with chlorinated hydrocarbons	Low Risk	Based on the distance between this site and Regulator Station 1101, contaminants associated with this site are not anticipated to be encountered during potential excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.
Installation Restoration Site 5 – San Clemente Canyon Disposal Area	Regulator Station 982	0.4 mile northwest	Soil potentially contaminated with VOCs, petroleum hydrocarbons, metals, pesticides, herbicides, polynuclear aromatic hydrocarbons, lead, dioxins, and furans	Low Risk	Based on the distance between this site and Regulator Station 982 and the location of subsurface impacts, contaminants associated with this site are not anticipated to be encountered during excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.
Installation Restoration Site 20 – San Clemente Canyon Disposal Area	Regulator Station 982	0.4 mile northwest	Soil, sediments, soil vapor, and surface water potentially contaminated with chlordane, chromium, copper, dioxins, furans, lead, pesticides, herbicides, and polychlorinated biphenyls	Low Risk	Based on the distance between this site and Regulator Station 982 and the location of subsurface impacts, contaminants associated with this site are not anticipated to be encountered during excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications.

Hazardous Materials Site	Closest Distribution System Modification Component	Approximate Distance from the Closest Distribution System Modification Component	Affected Media	Associated Risk	Reason
USA Reserve Drop Area	Regulator Station 939	0.6 mile east	Not Specified	Low Risk	Based on the distance between this site and Regulator Station 939, and due to the absence of documented subsurface impacts, contaminants associated with this site are not anticipated to be encountered during excavation activities. Therefore, this site does not pose a significant risk to the Distribution System Modifications

Source: DTSC, 2016; SWRCB, 2016

Note: * = Based on the reported groundwater depth and flow direction at this site, shallow subsurface contaminants may be encountered during excavation activities associated with the Proposed Project's Distribution System Modifications.

Schools

Twenty-nine schools are located within 0.5 mile of the Distribution System Modifications, and are listed in Section 3.14 Public Services.[1]

Airports

The Airports section in PEA Section 4.8.2 Existing Conditions identifies airports in the vicinity of the Proposed Project. No additional public airports are located within one mile of the Distribution System Modifications; however, while the MCAS Miramar airport is located 1.25 miles from the Proposed Project, it is located 0.53 mile northwest of Regulator Station 982. Two private heliports are located within two miles of the Distribution System Modifications. The Palomar Health Downtown Campus heliport is located 1.78 miles northwest of Regulator Station 1316, and the Pomerado Hospital heliport is located 0.88 mile northeast of Regulator Station A.

Emergency Response and Evacuation Plans

No new emergency response and evacuation plans, other than the plans described in the PEA, exist in the vicinity of the Distribution System Modifications.

3.8.1 Impact Evaluation

Question 3.8a – Hazardous Material Transport, Use, or Disposal

The hazardous materials described in PEA Section 4.8.3 Impacts will also be used for the construction, operation, and maintenance of the Distribution System Modifications, but in smaller quantities. No additional hazardous materials will be required for construction of the Distribution System Modifications. Construction of the Distribution System Modifications will be similar to what was described in PEA Section 3.6 Construction and PEA Section 4.8 Hazards and Hazardous Materials. As discussed PEA Section 4.8.4 Applicants-Proposed Measures, the Applicants will implement Applicants-Proposed Measure (APM-) HAZ-01 and APM-HAZ-02, which include the preparation of a Hazardous Materials and Waste Management Plan (HMWMP) and a Health and Safety Plan (HSP), respectively. The HMWMP will outline the proper storage, use, transportation, waste minimization, and disposal of hazardous materials associated with the Distribution System Modifications. The HSP will include preventative measures to ensure the safety of the personnel working on the Distribution System Modifications, will outline procedures for incident response and reporting, and will provide information on the usage and location of safety equipment. In addition, the Applicants will implement APM-HAZ-03 to ensure that all personnel receive adequate training on applicable APMs and best management practices. Therefore, the PEA adequately addresses potential impacts resulting from the transport, use, and disposal of hazardous materials, and impacts will remain less than significant with the implementation of the proposed APMs.

As described in Section 4.17 Utilities and Service Systems of the PEA, non-hazardous waste will be transported to an appropriately licensed local waste management facility. Hazardous

[1] Four of the 29 schools were also identified in the PEA.

materials will be disposed of at facilities that are permitted to accept such materials, in accordance with all applicable federal, state, and local laws and regulations.

Further, as described in the PEA, if contaminated soil or groundwater is unexpectedly encountered during excavation activities, work will be stopped and the impacted materials will be sampled in place and analyzed to determine the appropriate disposal or treatment options. Therefore, impacts associated with uncovering unknown contaminated soil will remain less than significant with implementation of APMs.

Question 3.8b – Reasonably Foreseeable Upset and Accident Conditions

As discussed previously, no additional hazardous materials will be used during construction, operation, or maintenance of the Distribution System Modifications that were not already addressed in the PEA. Similar to the PEA, a potential exists for hazardous materials used during construction to be inadvertently released through spills or leaks. Implementation of APM-HAZ-03, which includes training and compliance with federal and state regulations concerning hazardous materials handling, will reduce the potential for a spill and any associated impacts. As a result, impacts associated with reasonably foreseeable upset and accident conditions will remain less than significant with implementation of APMs.

Question 3.8c – Hazardous Substances in Close Proximity to Schools

As discussed in Section 3.14 Public Services, while there are 11 schools located within 0.25 mile of the Distribution System Modifications, three of these schools were previously identified in the PEA. In addition, the nearest school is 0.03 mile from the Distribution System Modifications and none of the identified schools are located adjacent to the Distribution System Modifications. If hazardous materials are released or encountered, they will be addressed through implementation of APMs as described in PEA Section 4.8.4 Applicants-Proposed Measures. As there are no schools located adjacent to the Distribution System Modifications, impacts will remain less than significant.

Question 3.8d – Existing Hazardous Materials Sites

In addition to the 14 hazardous materials sites identified in the PEA, two sites associated with the Distribution System Modifications may pose a risk to human health and the environment. Based on the proximity of the Proposed Project to subsurface contaminants associated with these sites, hazardous materials could potentially be encountered during excavation activities. As discussed in PEA Section 4.8.3 Impacts, contaminated soil or groundwater could also be encountered during construction of the Proposed Project. As described in PEA Section 4.8 Hazards and Hazardous Materials, the Applicants will implement APM-HAZ-01, APM-HAZ-02, and APM-HAZ-03 to ensure that contaminated soil or groundwater does not pose a risk to human health or the environment, and potential impacts resulting from existing hazardous materials sites will remain less than significant. The HMWMP outlined in APM-HAZ-01 includes procedures on identifying, dewatering, treating, and removing contaminated media encountered during construction activities. The HSP described in APM-HAZ-02 will include procedures for injury prevention and emergency response. The implementation of APM-HAZ-03 will ensure that Proposed Project personnel are familiar with the procedures outlined in the APMs.

Similar to the discussion in PEA Section 4.8.3 Impacts, typical operation and maintenance activities will not involve ground disturbance. If excavation activities are deemed necessary in the vicinity of potentially contaminated soils or groundwater, these activities will be performed in a similar manner for operation and maintenance as they are for construction. The potential for uncovering existing hazardous materials sites during operation and maintenance of the Distribution System Modifications is unlikely, because work will occur in areas that were excavated during construction; however, any potential hazardous waste will be properly identified, treated, and disposed of in accordance with all federal, state, and local laws and regulations. Therefore, impacts associated with hazardous materials sites will remain less than significant with implementation of APMs.

Question 3.8e – Public Airport Hazards

MCAS Miramar is the only public airport in the vicinity of the Distribution System Modifications, and it was also identified in PEA Section 4.8 Hazards and Hazardous Materials. However, while the MCAS Miramar airport is located 1.25 miles from the Proposed Project transmission facilities, it is located approximately 0.53 mile northwest of Regulator Station 982. As discussed in Chapter 2 – Project Description Supplement, Regulator Station 982 is one of the 10 regulator stations that will be removed as part of the Distribution System Modifications, and it will not involve the construction of an aboveground structure that could create an obstruction to navigable airspace. Therefore, the Distribution System Modifications will not create an obstruction to navigable air space, and a notification to the Federal Aviation Administration (FAA) is not required. As a result, the PEA analysis remains consistent and no impact will occur.

Question 3.8f – Private Airstrip Hazards

As previously discussed, two private heliports are located within two miles of the Distribution System Modifications. The Palomar Health Downtown Campus heliport is located 1.78 miles northwest of Regulator Station 1316, and the Pomerado Hospital heliport is located 0.88 mile northeast of Regulator Station A. As discussed in Chapter 2 – Project Description Supplement, Regulator Station 1316 is one of the 10 regulator stations that will be removed as part of the Distribution System Modifications, and it will not involve the construction of an aboveground structure. However, as discussed in Question 3.8e and in Chapter 2 – Project Description Supplement, no permanent aboveground facilities will be installed at the regulator stations, with the exception of steel vault covers and an Electronic Pressure Monitoring (EPM) System. The EPM System consists of a steel pole measuring six to 10 feet high (depending on the location) and two inches in diameter, with an EPM box mounted on it. A small solar panel, measuring approximately two feet by two feet, will be located near the top of the pole. Because of the height of the EPM System and the distance to the Pomerado Hospital heliport, Regulator Station A will not create an obstruction to navigable airspace and will not impact people residing or working in the vicinity of the Pomerado Hospital heliport. Therefore, the Distribution System Modifications will not create an obstruction to navigable air space, and a notification to the FAA is not required. The PEA analysis remains consistent and no impact will occur.

Question 3.8g – Emergency Evacuation and Response Plan Interference

As discussed in Section 4.8 Hazards and Hazardous Materials of the PEA, the County of San Diego Operational Area Evacuation Annex includes hazard-specific evacuation routes for dam failure, earthquakes, tsunamis, floods, and wildfires. Primary evacuation routes consist of the major interstates, highways, and prime arterials within San Diego County. While the Distribution System Modifications will cross prime and major arterials, no freeways or highways are crossed by the Distribution System Modifications. Traffic related to the Distribution System Modifications is anticipated to occur similar to the description provided in Section 4.16.3 Impacts of the PEA. As described in PEA Section 4.16 Transportation and Traffic, construction activities occurring within and across potential evacuation routes will be conducted in accordance with the Traffic Management Plan outlined in APM-TRA-01. In addition, APM-TRA-05 will be implemented to facilitate coordination with emergency service providers and ensure that evacuation routes are not obstructed in the event of an emergency. Emergency service providers will be notified 48 hours prior to any road or lane closures that could potentially disrupt traffic. Therefore, impacts to emergency evacuation and response plans will remain less than significant with implementation of APMs.

Question 3.8h – Wildland Fires

As previously discussed, the Distribution System Modifications are located within the same CAL FIRE FRAP's Threat to People classes as identified in the PEA. As discussed in Section 2.4 Construction in Chapter 2 – Project Description Supplement, construction of the Distribution System Modifications will be similar to the description provided in PEA Section 3.6 Construction. Further, as discussed in PEA 4.8.3 Impacts, the Applicants will assess work areas for wildland fire risks and will reduce the number of hazards inside and around the perimeter of each work area. In addition, the Applicants will implement the existing Operations and Maintenance Wildland Fire Prevention Plan, which is provided in PEA Attachment 4.8-D: SDG&E Operations and Maintenance Wildland Fire Prevention Plan. Because construction methods will be similar, but on a smaller scale, and with the implementation of the Operations and Maintenance Wildland Fire Prevention Plan, the impacts will be similar to those described in Question 4.8h – Wildland Fires of PEA Section 4.8.3 Impacts. Therefore, impacts related to wildland fires during construction and operation of the Proposed Project with the Distribution System Modifications will remain less than significant.

3.8.2 Applicants-Proposed Measures

No additional or increased impacts to hazards or hazardous materials are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.8.3 References

AirNav. 2016. Airport Information. Online. http://www.airnav.com/airports/. Site visited March 8, 2016.

CAL FIRE. 2005. The Fire and Resource Assessment Program. Online. http://frap.fire.ca.gov/. Site visited March 2, 2016.

DTSC. 2014. EnviroStor. Online. http://www.envirostor.dtsc.ca.gov/public/. Site visited March 2, 2016.

FAA. 2015. Airport Data & Contact Information. Online. http://www.faa.gov/airports/airport_safety/airportdata_5010/. Site visited March 8, 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

SWRCB. 2014. GeoTracker. Online. http://geotracker.waterboards.ca.gov/. Site visited March 2, 2016.

3.9 HYDROLOGY AND WATER QUALITY

3.9.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Section 4.9.2 Existing Conditions of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project) describes the regulatory and environmental settings related to hydrological resources. The Distribution System Modifications are located in the San Diego River Hydrologic Basin Region, which is the same basin described in the PEA.

Data regarding hydrology and water quality within the vicinity of the Distribution System Modifications were obtained through a field reconnaissance survey and a literature review of applicable reference materials and reports. An Insignia Environmental (Insignia) biologist conducted a reconnaissance-level hydrological survey of the Distribution System Modifications on March 1, 2016. The primary objective of the reconnaissance-level survey was to assess the existing conditions in the vicinity of the Distribution System Modifications, identify hydrological features, and determine if any jurisdictional resources are present.

General Setting

The Distribution System Modifications will be located in close proximity (i.e., within three miles) of the Proposed Project transmission facilities. Therefore, the general hydrological setting presented in PEA Section 4.9.2 Existing Conditions adequately describes the existing conditions of the Distribution System Modifications. All proposed Distribution System Modifications are located within the San Dieguito and Peñasquitos hydrological units, both of which were discussed within the PEA.

Surface Waters

Four potentially jurisdictional drainages, concrete-lined drainage ditches, and numerous storm drains and culverts were identified within or adjacent to the Distribution System Modifications work areas, as summarized in Table 3.9-1: Hydrological Features Observed and shown on Attachment 3.9–A: Potentially Jurisdictional Features Map. Most of the storm drains observed in this urbanized environment convey storm water from roads, hardscape, and upland vegetation into a municipal separate storm water sewer system (MS4).

The four potentially jurisdictional drainage features are summarized in Table 3.9-1: Hydrological Features Observed. These features are potentially jurisdictional non-wetland waters, as defined by Sections 401 and 404 of the Clean Water Act, and are also potentially jurisdictional under Section 1600 of the California Fish and Game Code. Peñasquitos Creek, a perennial drainage, was noted outside of and approximately 100 feet north of the work areas associated with Regulator Station 1248.

Table 3.9-1: Hydrological Features Observed

Component	Hydrological Features Observed
Regulator Station 1316	None
Regulator Station 939	None
Regulator Station 1101	One storm drain is located directly in front of the regulator station.
Regulator Station 1516	One v-ditch is located at the far western edge of the work area and carries storm water northwest into a one-foot-wide culvert. The v-ditch is located within an upland area. Storm water originates from the slope located immediately southeast of the work area.
Regulator Station 141	None
Regulator Station 1500	None
Regulator Station 1248	Peñasquitos Creek, a perennial creek, is located approximately 100 feet north of the work area.
Regulator Station 1494	None
Regulator Station 1051	One concrete ditch is located approximately eight feet east of Regulator Station 1051 and entirely within an upland area. The concrete ditch carries storm water from a parking lot.
Regulator Station 1335	None
Regulator Station 982	San Clemente Canyon Creek, a blue-line feature, is located approximately 200 feet west of Regulator Station 982.
Regulator Station A	No hydrological features were observed within the temporary work areas associated with Regulator Station A. One blue-line feature is mapped as crossing the new connection pipeline associated with this new regulator station. However, this blue-line feature is entirely underground and culverted where the new Regulator Station A connection pipeline is proposed with no outlet visible near the Proposed Project. The aboveground portion of this drainage was mapped as drainage (D-) 304 in the PEA, but the new connection pipeline does not cross the aboveground portion of D-304.
Regulator Station B	None.
Regulator Station C	One ephemeral drainage was mapped just outside of and west of the Regulator Station C temporary work area.
Mira Mesa Extension	Multiple storm drains are located along Black Mountain Road, Hillery Drive, and the unnamed access road south of Hillery Road.

Component	Hydrological Features Observed
Line 49-31B Replacement	The Line 49-31B replacement crosses Carroll Canyon Creek, a potentially jurisdictional intermittent drainage, between Interstate 15 and Willow Creek Road. In addition, six non-jurisdictional culverts cross under Pomerado Road where the Line 49-31B replacement is proposed. The inlets are located on the north side of Pomerado Road, and the outlets are located on the south side of Pomerado Road. Storm water flow out of these culverts is attenuated by riprap, and is quickly reduced to sheet flow lacking any ordinary high water mark or surface connectivity to Carroll Canyon Creek.
Pre-Lay Segment Replacement	The pre-lay segment replacement crosses two blue-line streams—Poway Creek and an unnamed ephemeral drainage south of Poway Creek located north of Scripps Poway Parkway Road. Both of these drainages were mapped in the PEA.[1]

[1] Poway Creek is labeled as "D-301," and the unnamed ephemeral blue-line creek is labeled as "D-300" in Attachment C: Wetlands and Waters Assessment, which is located within PEA Attachment 4.4-A Biological Resources Technical Report. The figure showing these drainages is Attachment B: Wetland and Waters Assessment Map within Attachment C: Wetlands and Waters Assessment.

Groundwater

Groundwater conditions are the same as those described in the PEA. A portion of the pre-lay segment replacement is located within the Poway Valley Groundwater Basin, which was described in PEA Section 4.9.2 Existing Conditions.

Surface Water Quality

Poway Creek will be crossed by the pre-lay segment replacement, as described in Chapter 2 – Project Description Supplement. Poway Creek is a 303(d)-listed waterbody for elevated concentrations of selenium and excess toxicity. PEA Section 4.9.3 Impacts disclosed impacts to Poway Creek in the same locations as those proposed for the pre-lay segment replacement. No other waterbodies crossed by the Distribution System Modifications are designated as 303(d)-listed waterbodies.

Floodplains

According to the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Maps, the Distribution System Modifications do not cross or lie within a 100-year or 500-year flood zone.

Dam Failure Inundation Area

The Distribution System Modifications will not be located within an inundation area for dam failure.

3.9.1 Impact Evaluation

Question 3.9a – Water Quality Standards and Waste Discharge Violations

PEA Section 4.9.3 Impacts disclosed potential impacts to water quality and waste discharge resulting from the Proposed Project. These potential impacts include an increase in erosion, sedimentation, and storm water runoff, as well as an increased potential for hazardous spills into surface waters. The anticipated impacts from the Distribution System Modifications will be similar to the potential impacts from the Proposed Project because the types of construction tasks (e.g., vegetation removal, trenching, etc.) are similar. Construction of the Distribution System Modifications will result in very small (approximately 0.1 acre) of vegetation removal within non-developed areas, resulting in a slight increase in the potential for these impacts to occur to surface water quality over the potential that was discussed in the PEA.[2]

As described in PEA Section 4.9.3 Impacts and as required by law, a Proposed Project-specific Storm Water Pollution Prevention Plan (SWPPP) and a Spill Prevention, Control, and Countermeasure (SPCC) Plan will be implemented to avoid and minimize indirect impacts to water quality and avoid waste discharge violations. In addition, best management practices

[2] The total temporary impact area associated with the Distribution System Modifications is 14.2 acres, including 0.6 acre that overlaps the temporary disturbance areas already discussed in the PEA, resulting in a total of 14.2 acres of temporary impacts that were not previously discussed in the PEA. Developed areas account for 14.1 acres, resulting in 0.1 acre of vegetation removal within native habitats that may result in an increase in sedimentation and erosion.

(BMPs) from SDG&E's Water Quality Construction BMPs Manual will also be implemented, as described in PEA Section 3.6.17 Erosion and Sediment Control and Pollution Prevention during Construction. As a result, impacts to water quality and waste discharge will remain less than significant.

Question 3.9b – Groundwater Depletion or Recharge

As described in PEA Section 4.9.3 Impacts, groundwater may be encountered during trenching activities and horizontal boring, and the groundwater will be dewatered to maintain a safe work area and/or to complete tie-ins. Construction of the Distribution System Modifications will also use trenching or horizontal boring techniques, and as a result, the potential for groundwater dewatering is similar to the discussion in the PEA. The Applicants will use the same techniques to minimize impacts to groundwater supplies during construction of the Distribution System Modifications, as presented in the PEA (i.e., allowing the water to be discharged to land or surface waters and allowed to percolate back into the groundwater system).

Impervious surfaces created by the Distribution System Modifications will be small (i.e., 392 square feet) and discontinuous. Removing the regulator stations will decrease the amount of impervious surface present in the area by 0.9 acre, resulting in a net decrease in impervious surfaces. As a result, the Distribution System Modifications will not substantially alter groundwater recharge capabilities, which was the finding of the PEA analysis. No groundwater supply wells were found within 150 feet of the Distribution System Modifications; therefore, no impacts to groundwater supply wells will occur.

The PEA provided an estimate for the amount of water required for dust control during construction and for hydrostatic testing following construction. The water supply for these activities is not anticipated to be derived from groundwater sources, as described in PEA Section 4.9.3 Impacts. As a result, it was determined that the Proposed Project will not have any impact on groundwater supplies. Therefore, impacts to groundwater supply will remain less than significant.

Question 3.9c – Drainage Patterns – Erosion/Siltation

The Distribution System Modifications will cross four blue-line hydrological features, as noted in Table 3.9-1: Hydrological Features Observed and shown on Attachment 3.9–A: Potentially Jurisdictional Features Map. Potential impacts to two potentially jurisdictional features along the pre-lay segment replacement (i.e., D-300 and D-301/Poway Creek) were identified in the PEA because the pre-lay segment replacement is located in approximately the same location as the Proposed Project transmission alignment analyzed in the PEA. No impacts to the culverted blue-line drainage at D-304 is anticipated because the distribution pipeline will be installed above or below the culverted drainage. The crossing of Carroll Canyon Creek, which is located along Pomerado Road and associated with the Line 49-31B segment replacement, is not anticipated to result in any impacts to this drainage because the Applicants will use a horizontal bore technique—or another technique described in the PEA—at this crossing. Construction of the Distribution System Modifications is not expected to permanently alter the existing drainage patterns in the Proposed Project area, which is the conclusion drawn in the PEA, because impacts to drainage features will be temporary in nature, and aquatic resources will be restored to pre-construction conditions once construction is complete. Any contours or vegetation altered by the

Proposed Project (including the Distribution System Modifications) will be recontoured to their pre-construction conditions to maintain the existing drainage patterns. These measures were described in PEA Section 4.9.3 Impacts; therefore, impacts to drainage patterns will remain less than significant.

Question 3.9e – Stormwater Runoff

Potential impacts to hydrological features resulting from an increase in storm water runoff are similar to those described in PEA Section 4.9.3 Impacts because the infrastructure and construction techniques are similar to those described in the PEA. In addition, both the Proposed Project transmission facilities and the Distribution System Modifications are located in a predominantly urban area where storm water runoff is managed via MS4s. Therefore, impacts to hydrological features from storm water runoff potentially will remain less than significant.

Question 3.9f – Water Quality Degradation

Potential impacts to hydrological features from the Distribution System Modifications that may cause water quality degradation due to soil disturbance will be similar to those described in PEA Section 4.9.3 Impacts because the infrastructure and construction techniques are similar to those described in the PEA. Further, both the Proposed Project transmission facilities and the Distribution System Modifications will be subject to BMPs, a SWPPP, and an SPCC, as described in PEA Section 4.9.3 Impacts. Therefore, the impacts to water quality will remain less than significant.

Question 3.9g – Housing in Flood Hazard Areas

According to the FEMA Flood Hazard Boundary maps, neither the Proposed Project transmission facilities nor the Distribution System Modifications will result in the construction of housing within either a 100-year or 500-year flood hazard area. Therefore, no impacts related to housing built in floodplains will result.

Question 3.9h – Structures in Flood Hazard Areas

According to the FEMA Flood Hazard Boundary maps, neither the Proposed Project transmission facilities nor the Distribution System Modifications will result in the permanent structures being built within either a 100-year or 500-year flood hazard area. Therefore, no impacts related to structures built in floodplains will result.

Question 3.9i – Flood Exposure

As discussed in Question 3.9h, the Distribution System Modifications are not located in a flood hazard area. The Proposed Project transmission facilities described in PEA Section 4.9.3 Impacts and the Distribution System Modifications will not be impacted by floods, nor will they impede or redirect flood flows. Therefore, impacts related to flood exposure will remain less than significant.

Question 3.9j – Flooding, Seiche, Tsunami, and Mudflow

The Proposed Project transmission facilities and the Distribution System Modifications are not located in a tsunami inundation area or an area susceptible to seiches. The risks of mudflows

within areas proposed for the Distribution System Modifications are also similar to those described in PEA Section 4.9.3 Impacts, though the risks are likely less because the Distribution System Modifications are entirely on flat to level ground in highly urbanized areas, whereas the Proposed Project transmission facilities will be constructed in closer proximity to steeper slopes. Therefore, impacts associated with flooding, seiches, tsunamis, and mudflows will remain less than significant.

3.9.2 Applicants-Proposed Measures

No additional or increased impacts to hydrological resources will result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.9.3 References

FEMA. 2016. Flood Map Service Center. Online. https://msc.fema.gov/. Site visited March 2, 2016.

Insignia. 2015. Proponent Environmental Assessment for the Pipeline Safety & Reliability Project. Prepared for San Diego Gas & Electric Company and the Southern California Gas Company. September.

San Diego Regional Water Quality Control Board (RWQCB). 1995. San Diego Hydrologic Basin Planning Area Map. Online. http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/sdrwqcb_basinplanmap.pdf. Site visited March 2, 2016.

San Diego RWQCB. 2008. CWA Section 303(d) List of Water Quality Limited Segments Requiring TMDLs. Online. http://www.swrcb.ca.gov/sandiego/water_issues/programs/303d_list/docs/updates_020910/CWA_305(b)_and_303(d)_Integrated_Report_final_2009-12-16.pdf. Site visited March 2, 2016.

United States Geological Survey. 2016. Map Locator & Downloader. Online. http://store.usgs.gov/b2c_usgs/usgs/maplocator/(ctype=areaDetails&xcm=r3standardpitrex_prd&carea=%24ROOT&layout=6_1_61_48&uiarea=2)/.do. Site visited March 2, 2016.

ATTACHMENT 3.9–A: POTENTIALLY JURISDICTIONAL FEATURES MAP

Attachment 3.9-A: Potentially Jurisdictional Features Map 1 of 4

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Proposed Project Route
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance
- Proposed Project Route Workspace
- Distribution System Modifications Survey Area
- Biological Resources Survey Area for Proponent Environmental Assessment
- Culvert
- USACE/RWQCB Drainage
- Culverted segment
- CDFW Riparian Vegetation
- USACE/RWQCB Wetland

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Attachment 3.9-A: Potentially Jurisdictional Features Map 2 of 4

Pipeline Safety & Reliability Project

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Attachment 3.9-A: Potentially Jurisdictional Features Map 3 of 4

Pipeline Safety & Reliability Project

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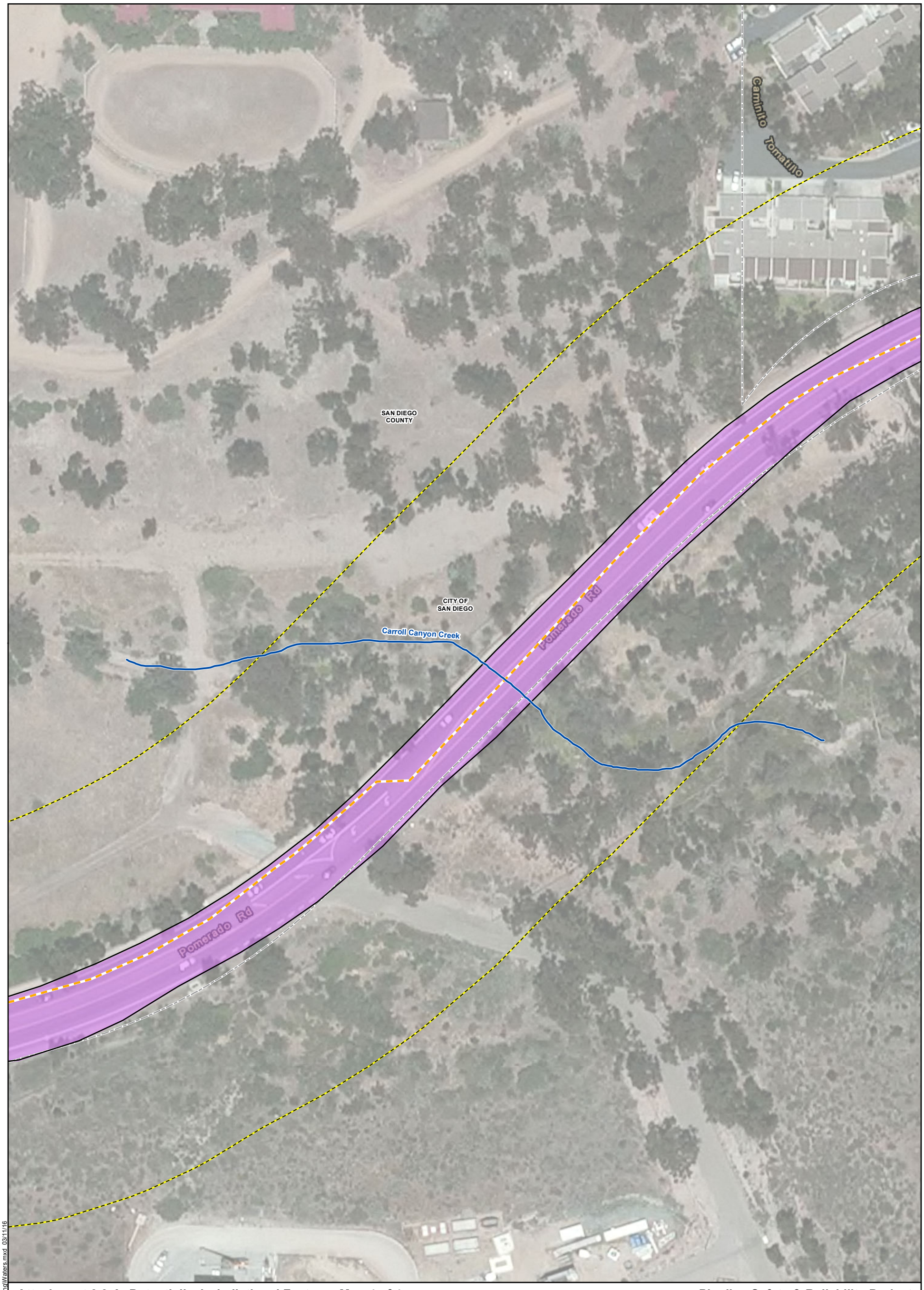

Attachment 3.9-A: Potentially Jurisdictional Features Map 4 of 4

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
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3.10 LAND USE AND PLANNING

3.10.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—will be located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. The regulatory background for each of these municipalities is discussed in Proponent's Environmental Assessment (PEA) Section 4.10.2 Existing Conditions for the Pipeline Safety & Reliability Project (Proposed Project). Pursuant to Article XII, Section 8 of the California Constitution, the California Public Utilities Commission (CPUC) has exclusive jurisdiction in relation to local government to regulate the design, siting, installation, operation, maintenance, and repair of natural gas pipeline transmission facilities. Other state agencies have concurrent jurisdiction with the CPUC. Although local governments do not have the power to regulate such activities, the CPUC encourages, and the Applicants participate in, cooperative discussions with affected local governments to address their concerns where feasible. As part of the environmental review process, the Applicants considered relevant regional and county policies and issues, and have prepared this evaluation of the Distribution System Modifications' potential impacts to land use and planning.

Attachment 4.10-A: Local Land Use Plans and Policies Consistency Analysis in the PEA summarizes the Proposed Project's consistency with local land uses. The relevant sections of Attachment 4.10-A: Local Land Use Plans and Policies Consistency Analysis were reviewed to confirm that the Proposed Project's updated scope, which includes the Distribution System Modifications, remains consistent with local land use plans and policies. In addition, land use-related geographic information system data was obtained from San Diego Geographic Information Source (SanGIS) and was used to determine the zoning, general plan, and existing land uses crossed by the Distribution System Modifications. While the majority of the Distribution System Modifications and associated workspaces are located within and adjacent to transportation corridors, they are surrounded by small areas of residential uses, commercial uses, a community college, and open space. Attachment 3.10-A: General Plan Land Uses Crossed and Attachment 3.10-B: Existing Land Uses Crossed depict the land uses designated by local general plans and the existing land uses crossed by the Distribution System Modifications.

As identified in Section 2.2 Proposed Project Components Table 2-1: Regulator Stations to be Removed, the 10 regulator stations to be removed are typically located within SDG&E's existing right-of-way (ROW[1]). Two new check valves will be installed at two of the removed regulator station locations (at Regulator Station 1516 and Regulator Station 1500). One replacement regulator station and regulator connection pipeline will be installed at Regulator Station 939. The check valves, replacement regulator station, and regulator connection pipeline will be installed within the existing facility footprint and SDG&E's ROW. New, permanent facilities to be installed, include Regulator Station A, Regulator Station B, and Regulator Station C, as well as the Mira Mesa extension. In addition, new pipe will be installed for the Line 49-31B replacement, and the pre-lay segment replacement. The zoning designations and general plan

[1] For the purposes of this PEA Supplement, SDG&E's ROW includes franchise rights and easement rights.

Table 3.10-1: Zoning Designations

Permanent Component/Facility[2]	Jurisdiction	Zoning Designation	Approximate Area or Length Crossed by Proposed Project Component
Regulator Station A	City of Poway	Rural Residential (RR-C)	<0.01 acre (98 square feet)
Regulator Station A Connection Pipeline	City of Poway	Rural Residential (RR-C)	0.05 mile
Regulator Station B	City of Poway	Community Business (CB)	<0.01 acre (98 square feet)
Regulator Station B Connection Pipeline	City of Poway	Community Business (CB)	0.01 mile
Regulator Station C	City of San Diego	Residential Single Unit (RS-1-8)	<0.01 acre (98 square feet)
Mira Mesa Extension	City of San Diego	Residential Multiple Unit (RM-1-1)	0.25 mile
		Commercial Community (CC-1-3)	0.06 mile
		Agriculture Residential (AR-1-2)	0.57 mile
Line 49-31B Replacement	County of San Diego	Special Purpose; Transportation and Utility Corridor (S94)	0.69 mile
	City of San Diego	Residential Single Unit (RS-1-8)	0.01 mile
Pre-Lay Segment Replacement	City of Poway	Community Business (CB)	0.07 mile
		Planned Community 7 – South Poway Business Park (PC-7)	0.28 mile
		RR-C (Rural Residential C)	0.29 mile
		Residential Single Family (RS-7)	0.24 mile
		Residential Condo (RC)	0.20 mile

Source: SanGIS, 2012

[2] Regulator Station A, Regulator Station B, Regulator Station C, and the pre-lay segment replacement are located within and adjacent to the Proposed Project's temporary workspace; land uses at these locations were also identified in PEA Section 4.10 Land Use and Planning.

Table 3.10-2: General Plan Land Use Designations

Permanent Component/Facility[3]	Jurisdiction	General Plan Designation	Approximate Area or Length Crossed by Proposed Component
Regulator Station A	City of Poway	Infrastructure	<0.01 acre (98 square feet)
Regulator Station A Connection Pipeline	City of Poway	Infrastructure	0.05 mile
		Recreation/Open Space	<0.01 mile (31 feet)
Regulator Station B	City of Poway	Infrastructure	<0.01 acre (8 square feet)
		Commercial	<0.01 acre (98 square feet)
Regulator Station B Connection Pipeline	City of Poway	Infrastructure	<0.01 mile (33 feet)
		Commercial	<0.01 mile (31 feet)
Regulator Station C	City of San Diego	Public/Quasi-Public Facilities	<0.01 acre (98 square feet)
Mira Mesa Extension	City of San Diego	Roads/Freeways/ Transportation	0.31 mile
		Residential	<0.01 mile (43 feet)
		Public/Quasi-Public Facilities	0.56 mile
Line 49-31B Replacement	City of San Diego	Public/Quasi-Public Facilities	0.68 mile
	County of San Diego	Public/Quasi-Public Facilities	<0.01 mile (23 feet)
Pre-Lay Segment Replacement	City of Poway	Infrastructure	1.01 miles
		Commercial	0.06 mile

Source: SanGIS, 2012

[3] Regulator Station A, Regulator Station B, Regulator Station C, and the pre-lay segment replacement are located within and adjacent to the Proposed Project's temporary workspace; land uses at these locations were also identified in PEA Section 4.10 Land Use and Planning.

Table 3.10-3: Existing Land Uses

Permanent Component/Facility[4]	Generalized Land Use (Existing)	Approximate Area or Length Crossed by Proposed Component
Regulator Station A	Infrastructure[5]	<0.01 acre (98 square feet)
Regulator Station A Connection Pipeline	Infrastructure	0.05 mile
	Open Space	<0.01 mile (31 feet)
Regulator Station B	Infrastructure	<0.01 acre (8 square feet)
	Commercial	<0.01 acre (98 square feet)
Regulator Station B Connection Pipeline	Infrastructure	<0.01 mile (33 feet)
	Commercial	<0.01 mile (31 feet)
Regulator Station C	Infrastructure	<0.01 acre (98 square feet)
Mira Mesa Extension	Infrastructure	0.66 mile
	Residential	<0.01 mile (43 feet)
	Junior College	0.21 mile
Line 49-31B Replacement	Infrastructure	0.58 mile
	Infrastructure	0.11 mile
Pre-Lay Segment Replacement	Infrastructure	1.08 mile

Source: SanGIS, 2012

[4] Regulator Station A, Regulator Station B, Regulator Station C, and the pre-lay segment replacement are located within and adjacent to the Proposed Project transmission temporary workspace; land uses at these locations were also identified in PEA Section 4.10 Land Use and Planning.

[5] The infrastructure land use category refers to existing road ROW or freeway use.

land uses that are crossed by the new permanent facility footprints and pipeline segments are provided in Table 3.10-1: Zoning Designations and Table 3.10-2: General Plan Land Use Designations. Table 3.10-3: Existing Land Uses provides the current land uses at the new facility locations. Locations that only involve the removal or replacement of existing facilities are not included in these tables as they already exist within SDG&E's ROW.

3.10.1 Impact Evaluation

The Distribution System Modifications are located in urbanized areas and within the same jurisdictions presented in the PEA. While installation of the pipeline components may require temporary lane closures, similar to the Proposed Project transmission facilities, the Distribution System Modifications will not physically divide a community as they are generally located underground and within/adjacent to existing road corridors. No new zoning designations or existing generalized land uses are crossed by the Distribution System Modifications. The only general plan land use crossed by the Distribution System Modifications that was not previously described in the PEA is the Commercial designation in the City of Poway General Plan. However, these areas are relatively small and isolated, and the Distribution System Modifications will not cause a change in the existing or planned commercial land use. As depicted in Table 3.10-3: Existing Land Uses, the permanent facilities will generally be installed within land currently used as road infrastructure.

The Distribution System Modifications include the construction of underground natural gas distribution pipeline segments and the removal and construction of underground regulator stations. These activities are consistent with those described in PEA, which include the construction of an underground natural gas distribution pipeline and construction of associated aboveground and underground facilities. Therefore, the analysis presented in PEA Attachment 4.10-A: Local Land Use Plans and Policies Consistency Analysis will not change with the Distribution System Modifications, and the activities will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction in the Proposed Project area, including any applicable Habitat Conservation Plan or Natural Communities Conservation Plan. Therefore, impacts to land use will remain less than significant.

Operation and maintenance activities for the Proposed Project will be similar to those currently performed by the Applicants in the Proposed Project area to maintain existing facilities. Thus, no additional impacts or increase in an impact to land use and planning will result from construction and operation of the Distribution System Modifications.

3.10.2 Applicants-Proposed Measures

No additional or increased impacts to land use and planning are anticipated to result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.10.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

SanGIS. 2012. Download Data. Online. http://www.sangis.org/download/index.html. Site visited February 26, 2016.

ATTACHMENT 3.10-A: GENERAL PLAN LAND USES CROSSED

Attachment 3.10 A: General Plan Land Uses Crossed Map 1 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 2 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 3 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 4 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 5 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 6 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
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- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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Attachment 3.10 A: General Plan Land Uses Crossed Map 7 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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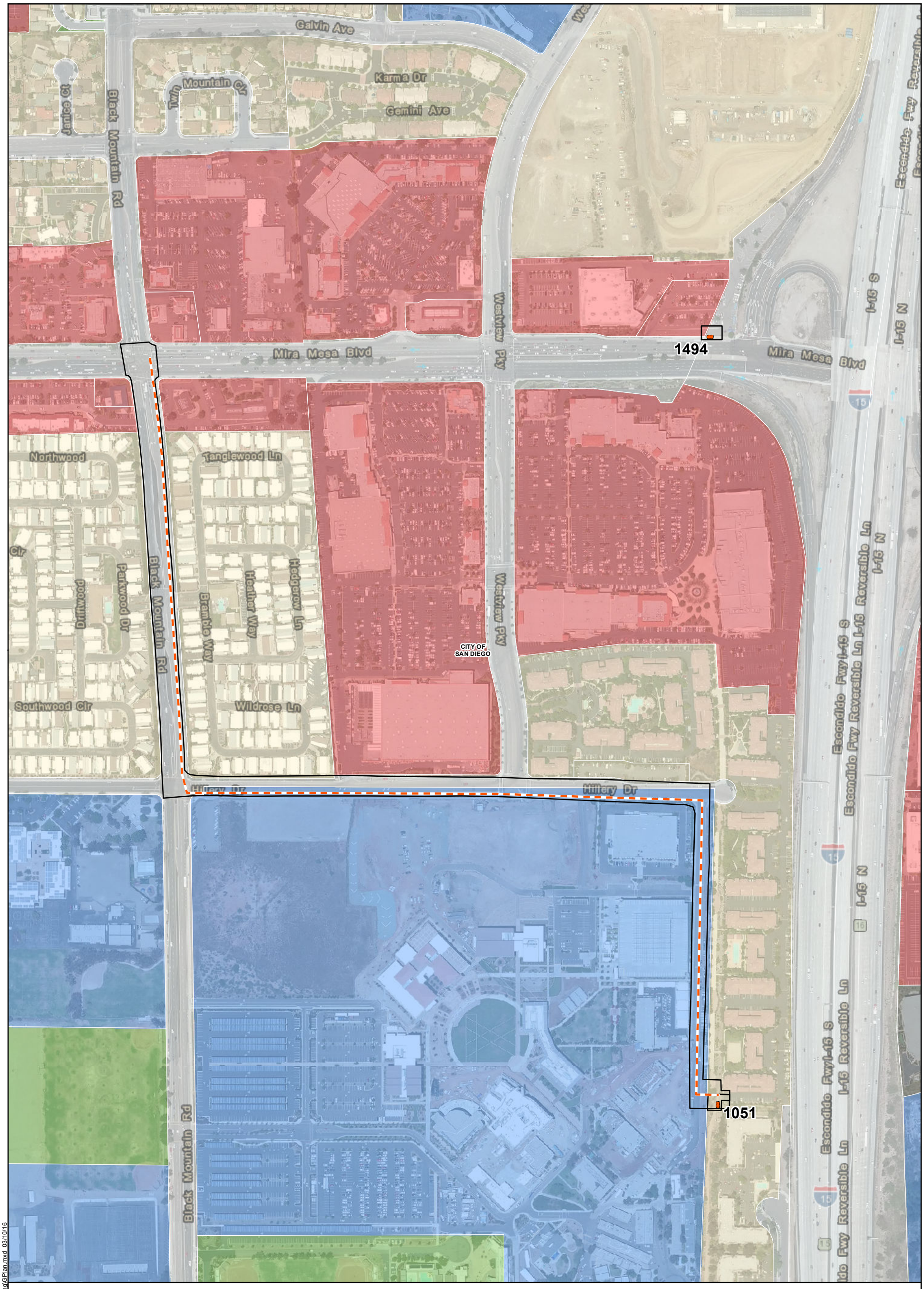

Attachment 3.10 A: General Plan Land Uses Crossed Map 8 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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0 280 560 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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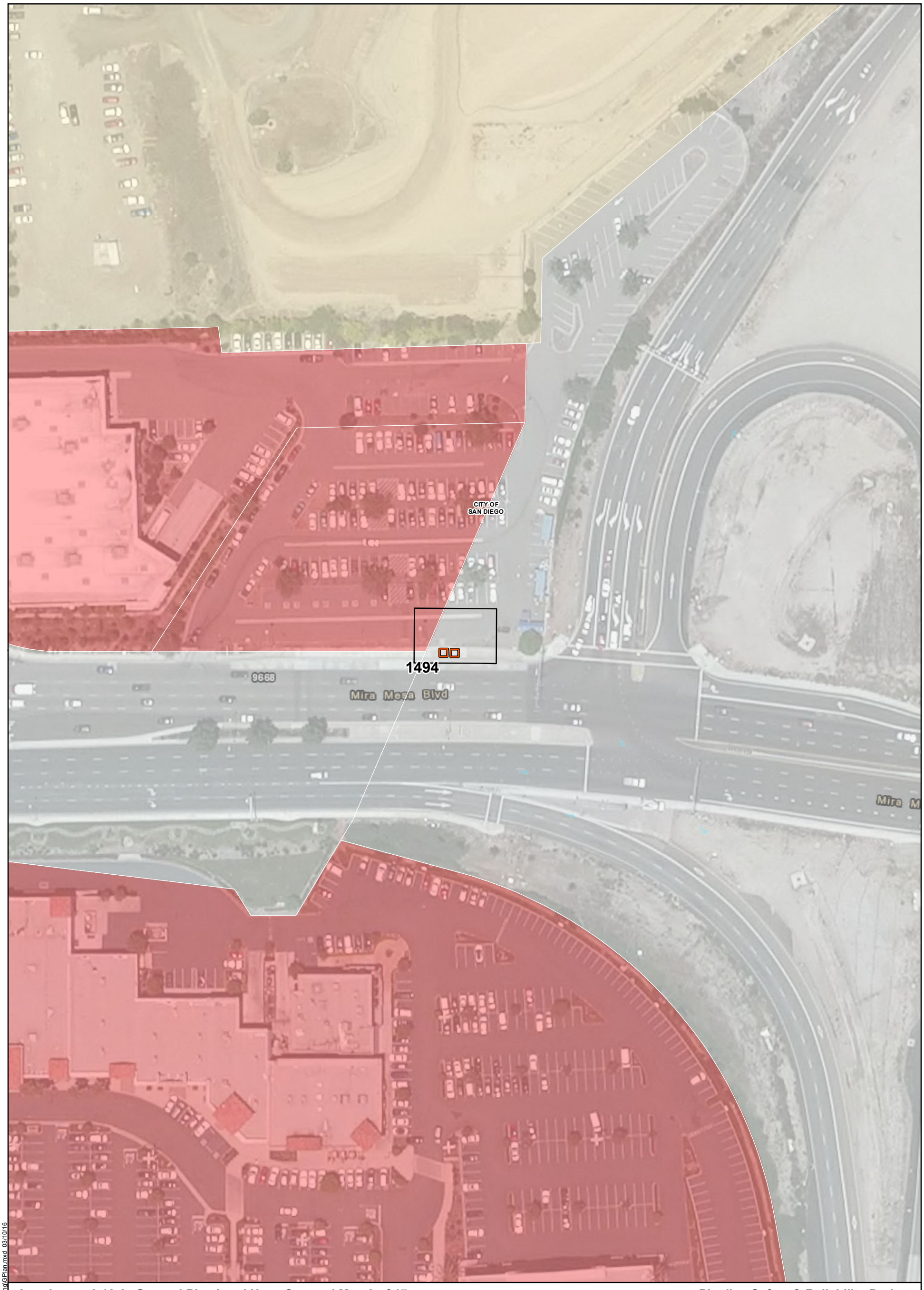

Attachment 3.10 A: General Plan Land Uses Crossed Map 9 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.10 A: General Plan Land Uses Crossed Map 10 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
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- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | ENSIGNIA ENVIRONMENTAL

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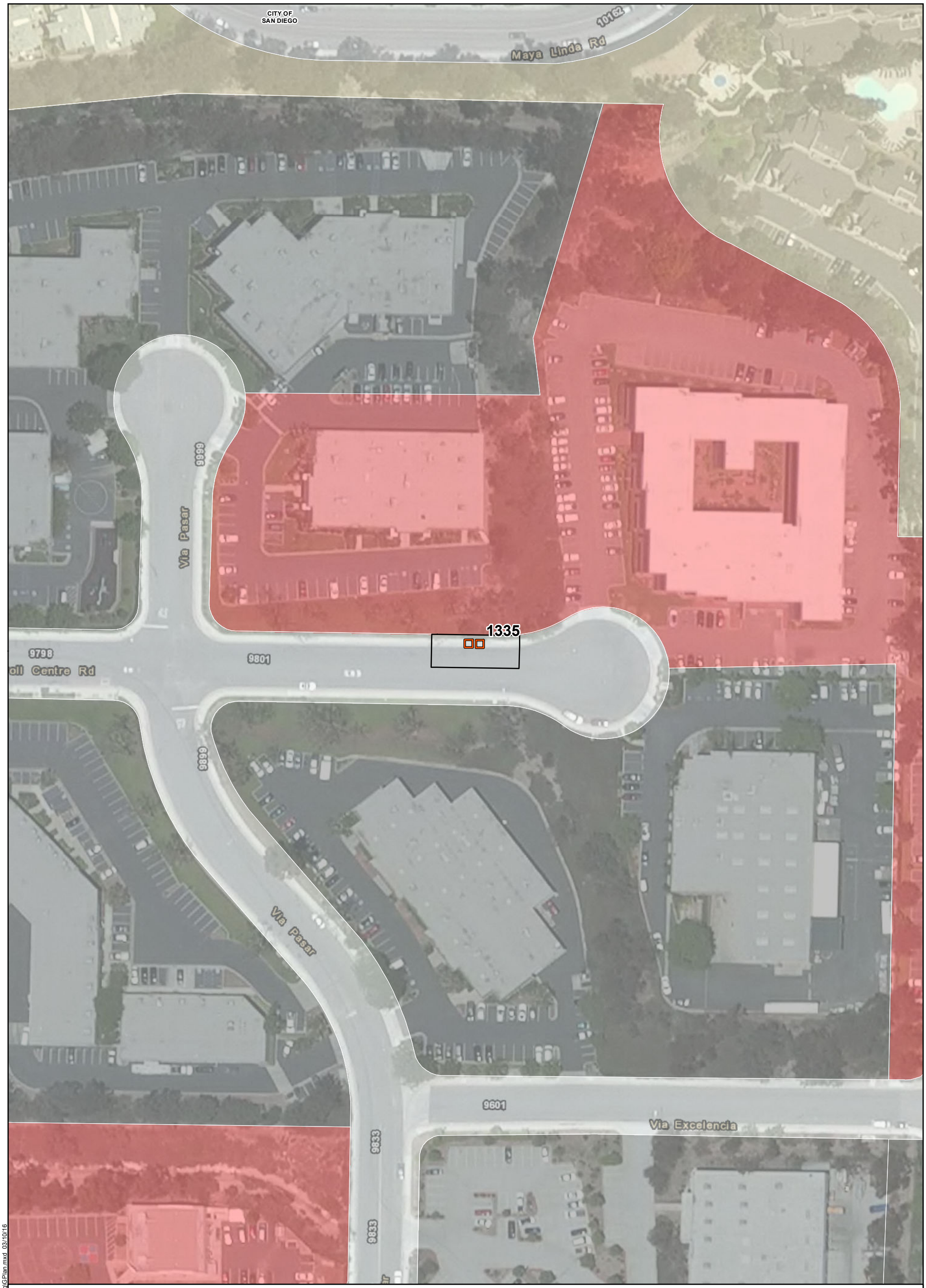

Attachment 3.10 A: General Plan Land Uses Crossed Map 11 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
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- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.10 A: General Plan Land Uses Crossed Map 12 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
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Note: Pipelines are shown on maps 8, 16, and 14

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.10 A: General Plan Land Uses Crossed Map 13 of 17 **Pipeline Safety & Reliability Project**

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
- Industrial
- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:1,000
0 60 120 Feet

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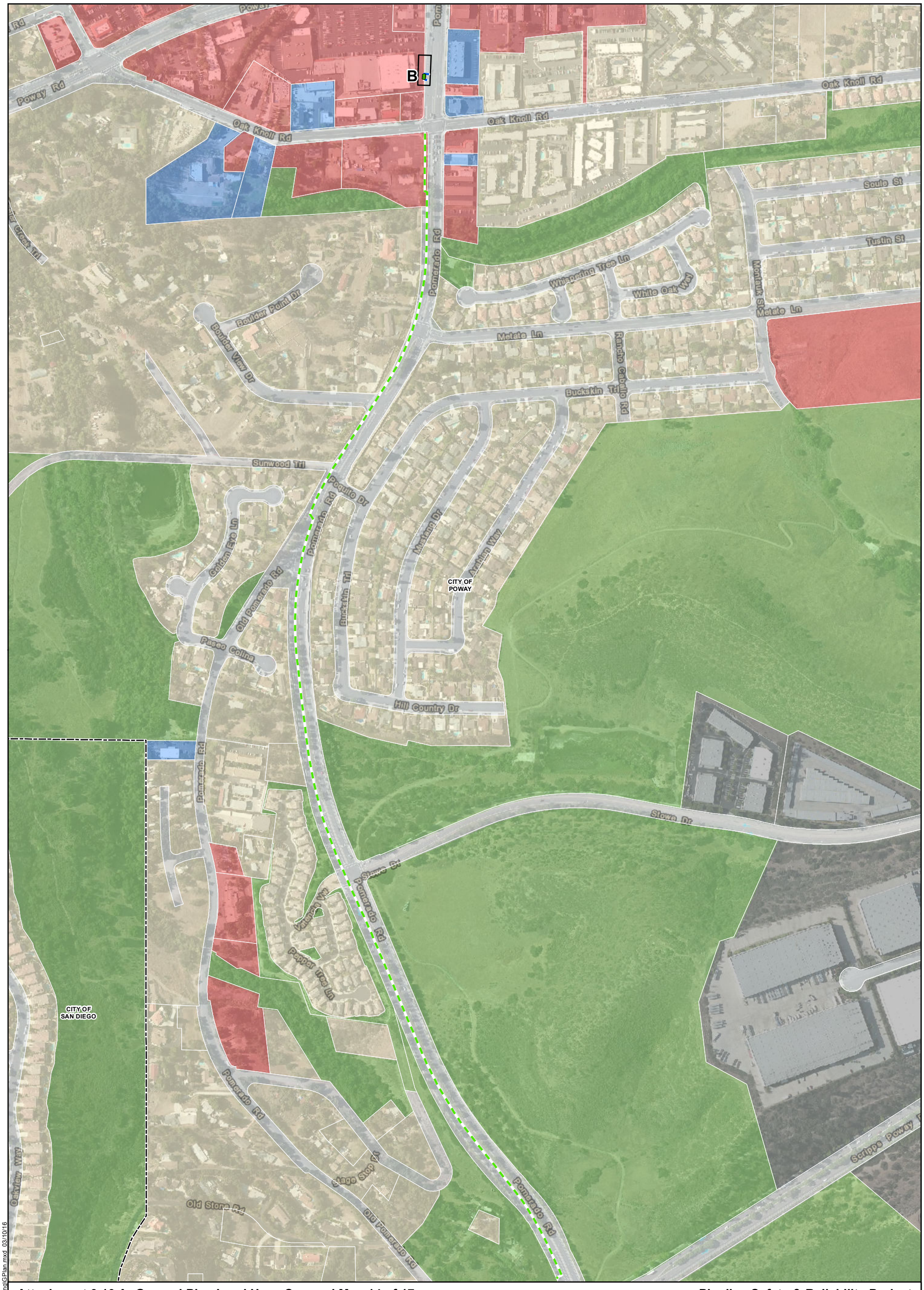

Attachment 3.10 A: General Plan Land Uses Crossed Map 14 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
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- Industrial
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- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
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- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:5,000

0 350 700 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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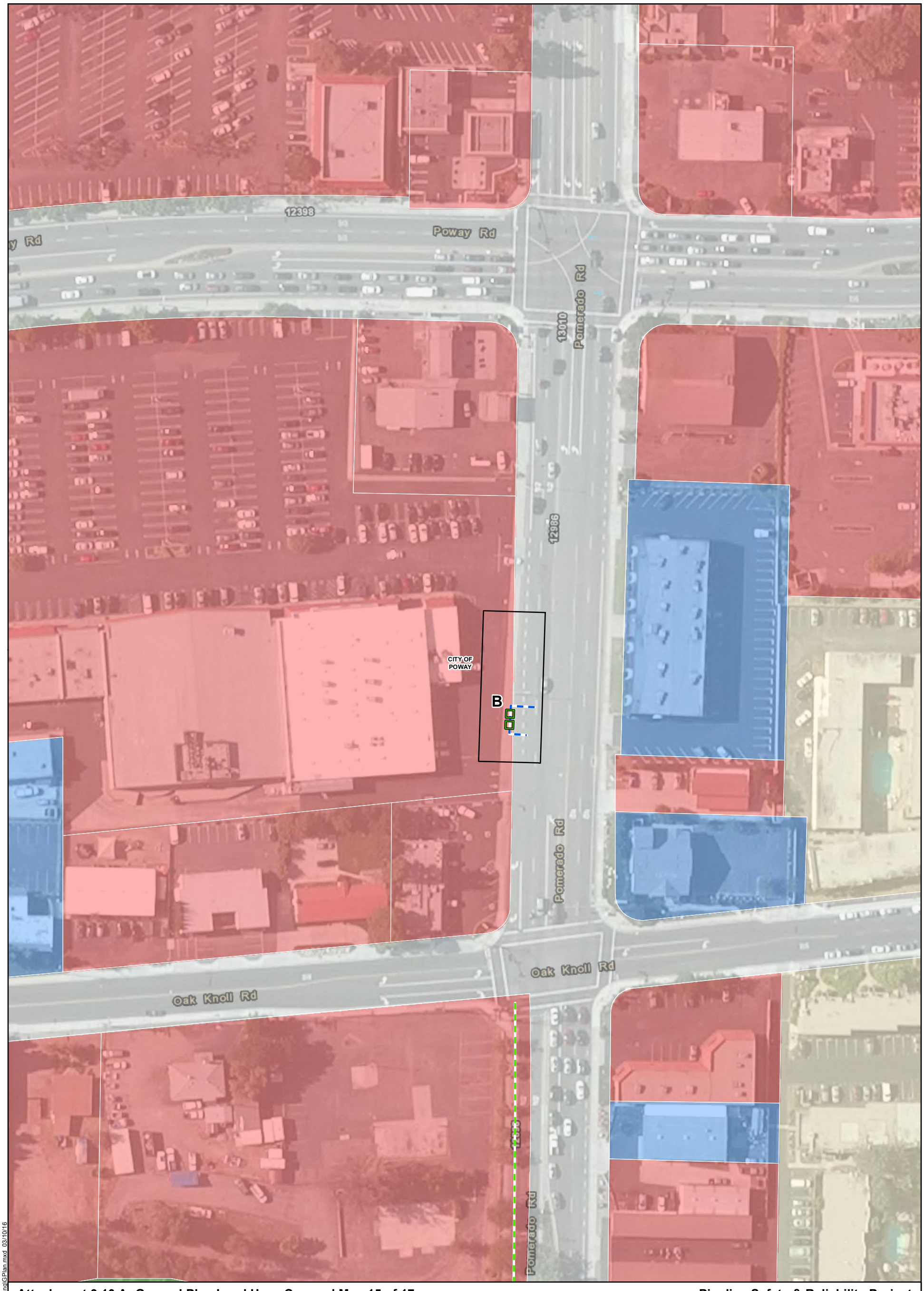

Attachment 3.10 A: General Plan Land Uses Crossed Map 15 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

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- Industrial
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- Military
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- Recreation/Open Space
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- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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Attachment 3.10 A: General Plan Land Uses Crossed Map 16 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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General Plan Catagories

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- Commercial
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- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
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- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

1:5,000

0 350 700 Feet

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Attachment 3.10 A: General Plan Land Uses Crossed Map 17 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

General Plan Catagories

- Agriculture
- Commercial
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- Infrastructure
- Military
- Mixed Use
- Public/Quasi-Public
- Recreation/Open Space
- Residential
- City/County Boundary

Note: Pipelines are shown on maps 8, 16, and 14

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0 60 120 Feet

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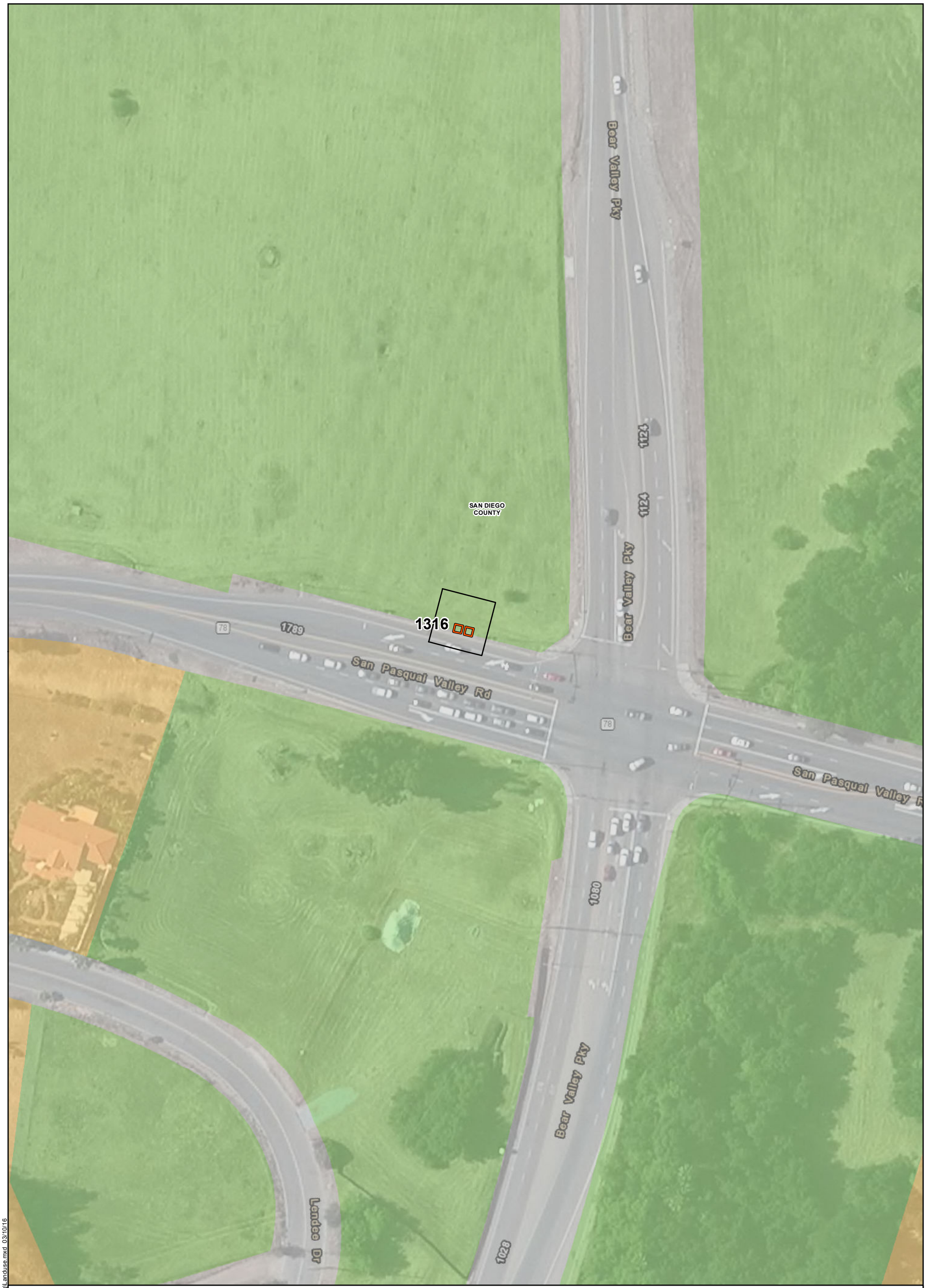
ATTACHMENT 3.10-B: EXISTING LAND USES CROSSED



Attachment 3.10-B: Existing Land Uses Crossed Map 1 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

N

SoCalGas A Sempra Energy utility

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Attachment 3.10-B: Existing Land Uses Crossed Map 2 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

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Attachment 3.10-B: Existing Land Uses Crossed Map 3 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

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SoCalGas A Sempra Energy utility

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Attachment 3.10-B: Existing Land Uses Crossed Map 4 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility

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Attachment 3.10-B: Existing Land Uses Crossed Map 5 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Attachment 3.10-B: Existing Land Uses Crossed Map 6 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

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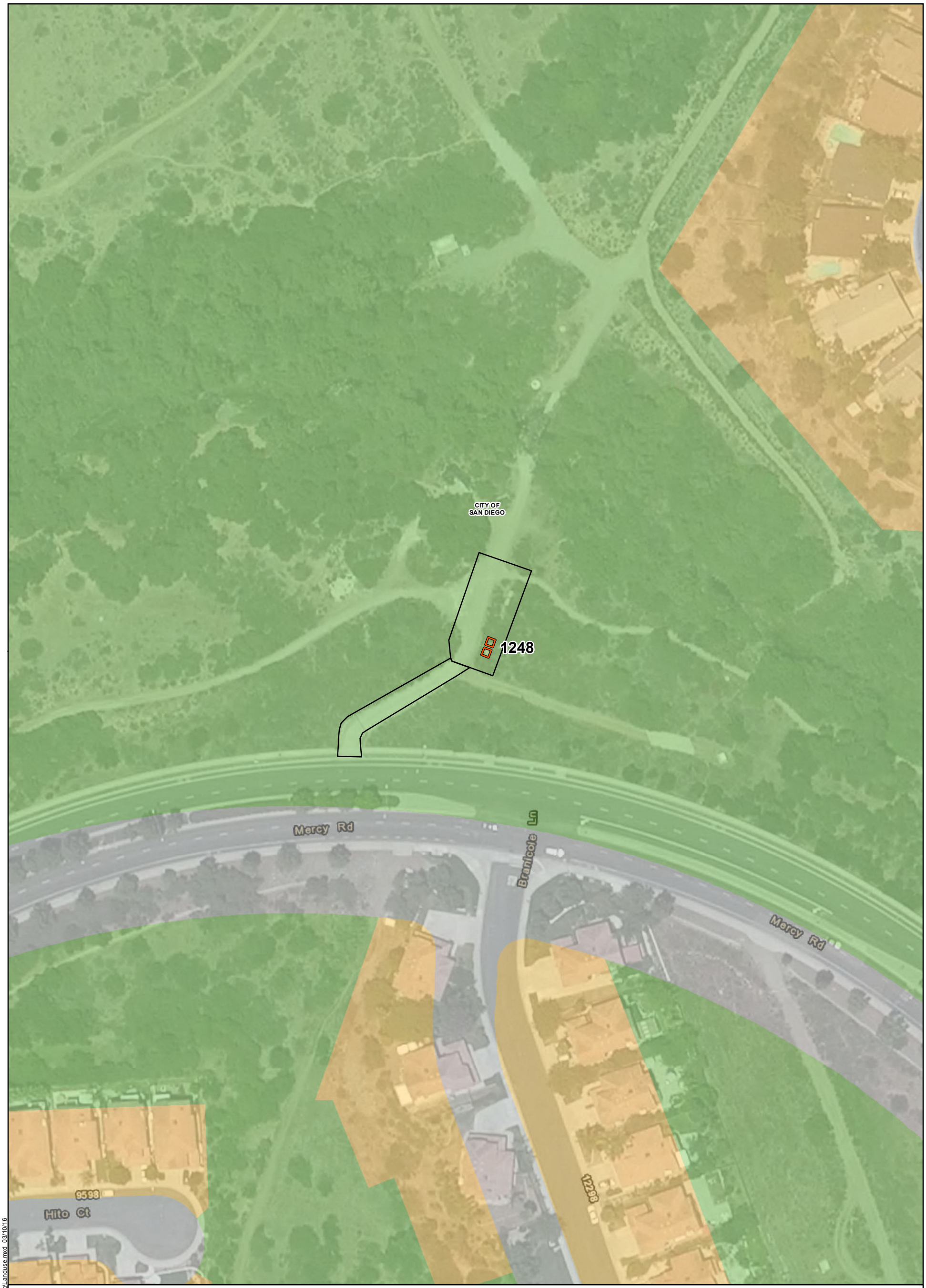

Attachment 3.10-B: Existing Land Uses Crossed Map 7 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

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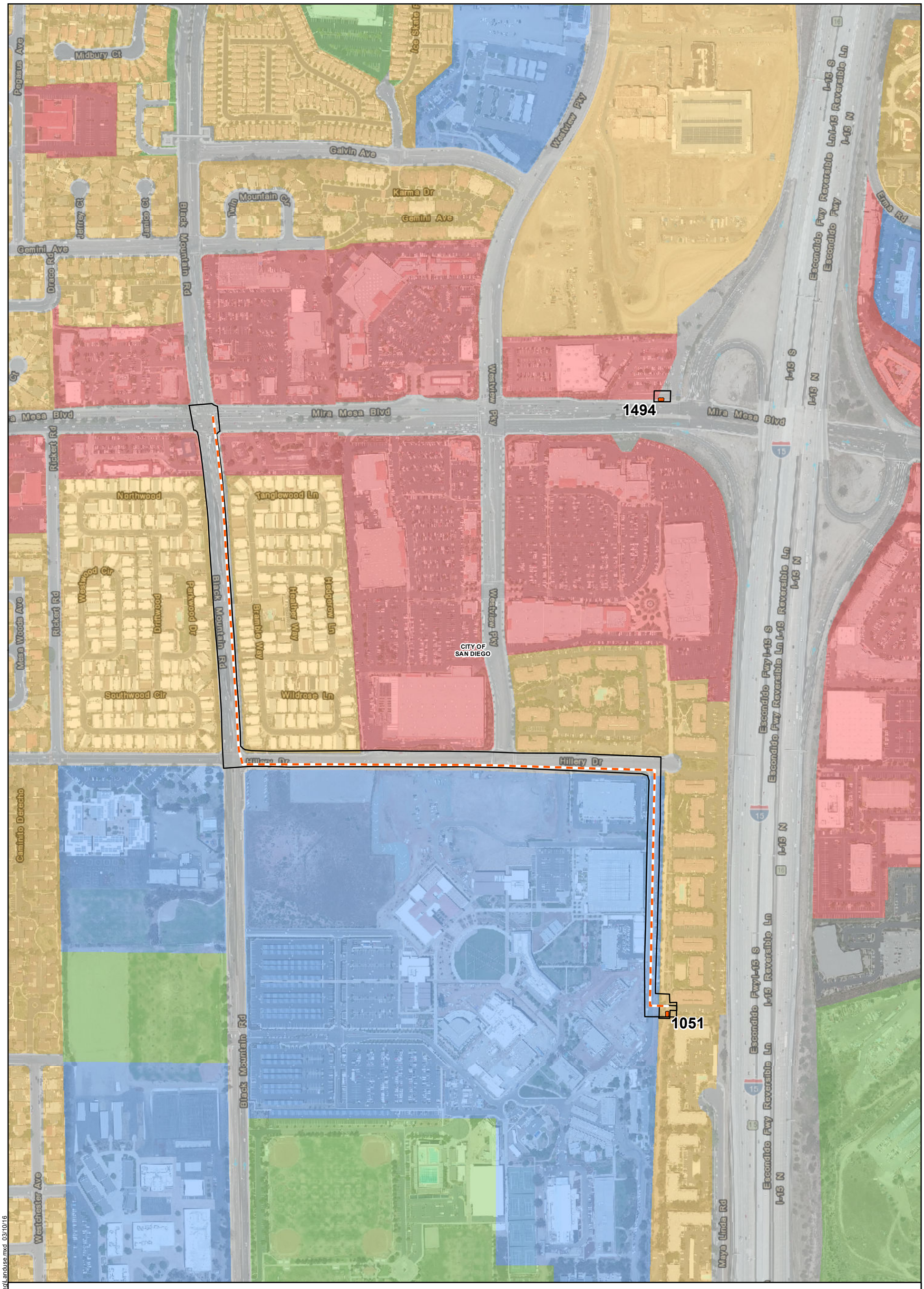

Attachment 3.10-B: Existing Land Uses Crossed Map 8 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 350 700 Feet

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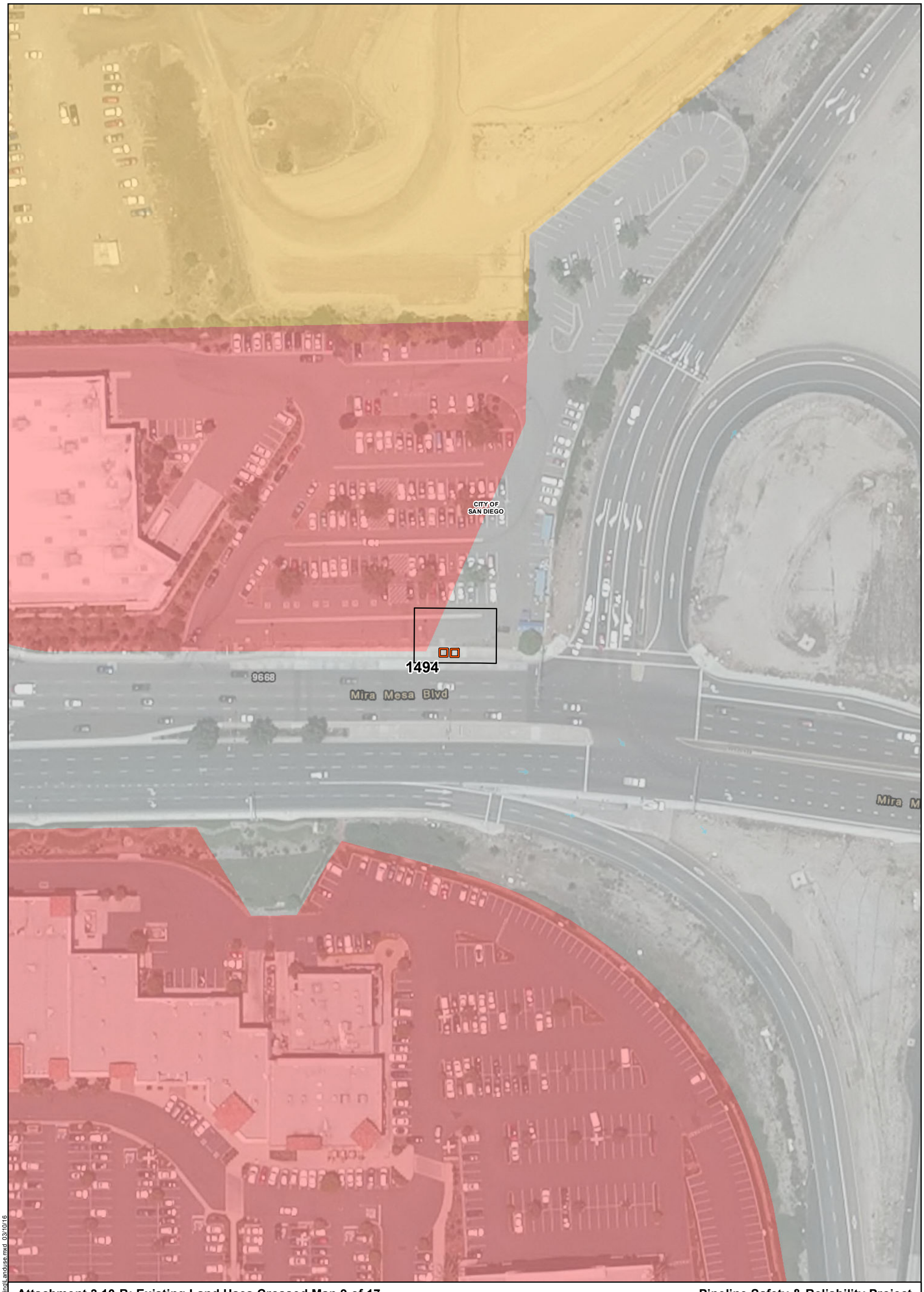

Attachment 3.10-B: Existing Land Uses Crossed Map 9 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
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- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

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Attachment 3.10-B: Existing Land Uses Crossed Map 10 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
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- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

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SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

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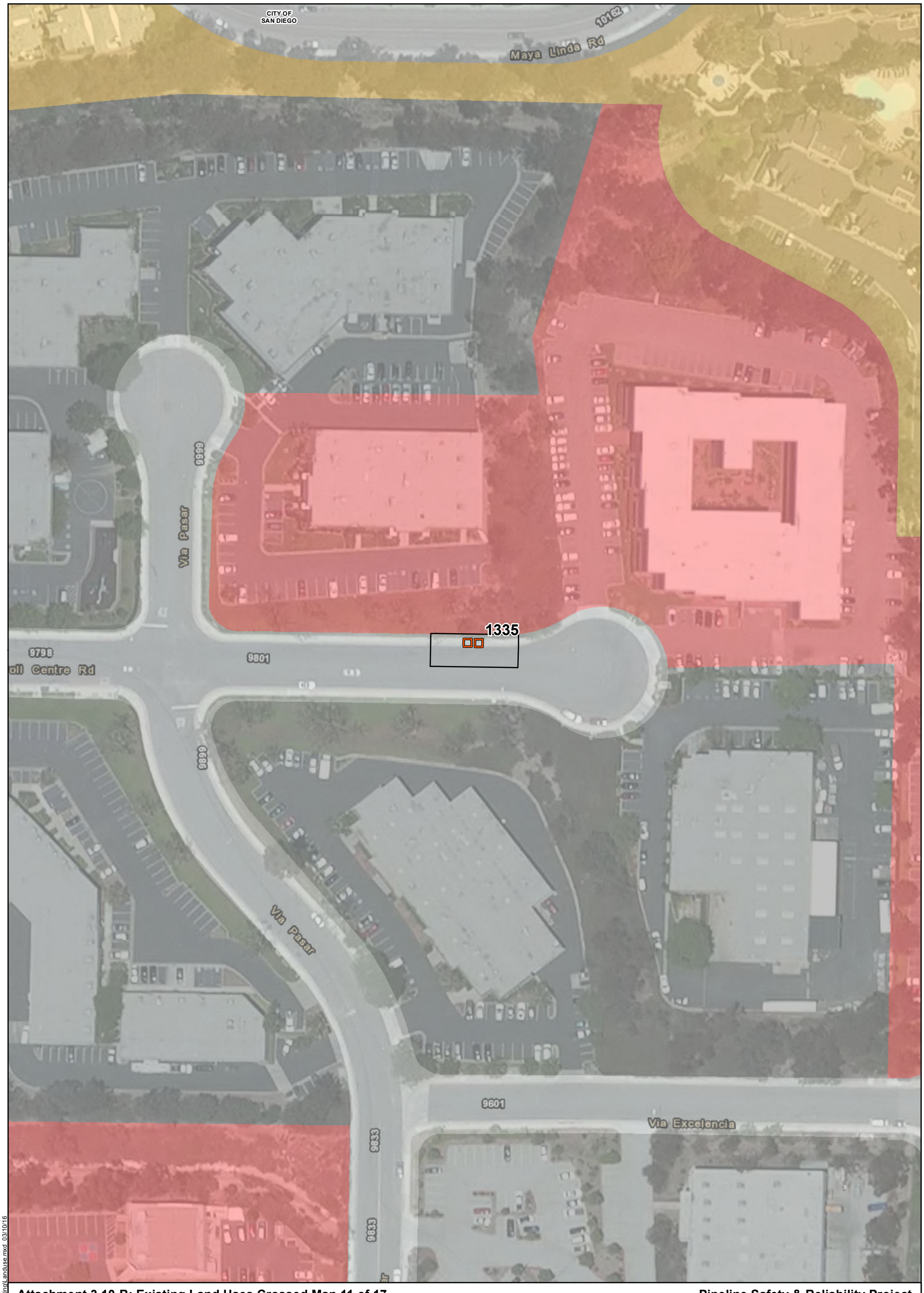

Attachment 3.10-B: Existing Land Uses Crossed Map 11 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
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Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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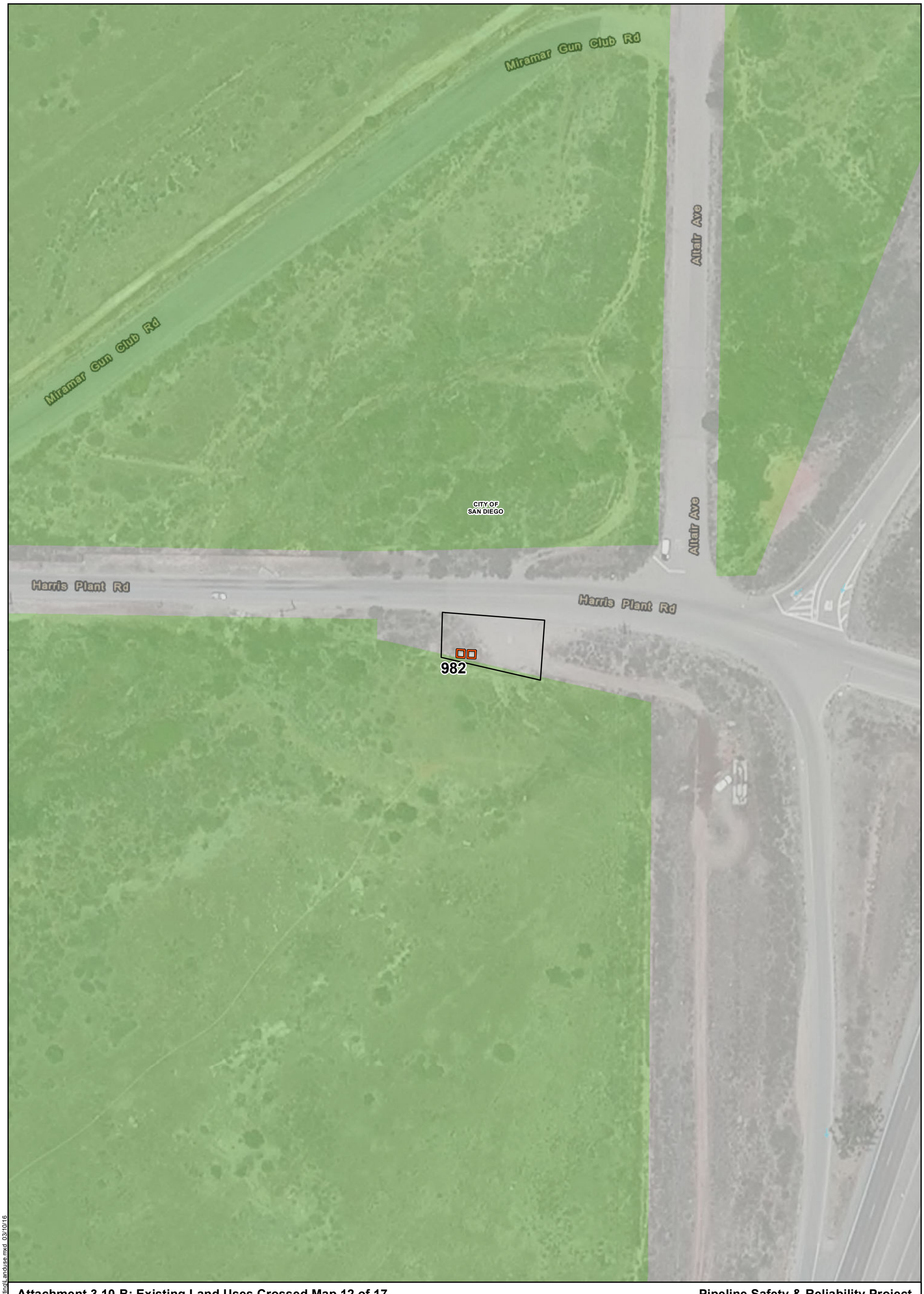

Attachment 3.10-B: Existing Land Uses Crossed Map 12 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Temporary Disturbance Area

Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

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0 60 120 Feet

SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Attachment 3.10-B: Existing Land Uses Crossed Map 13 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
- Public/Quasi-Public
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- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

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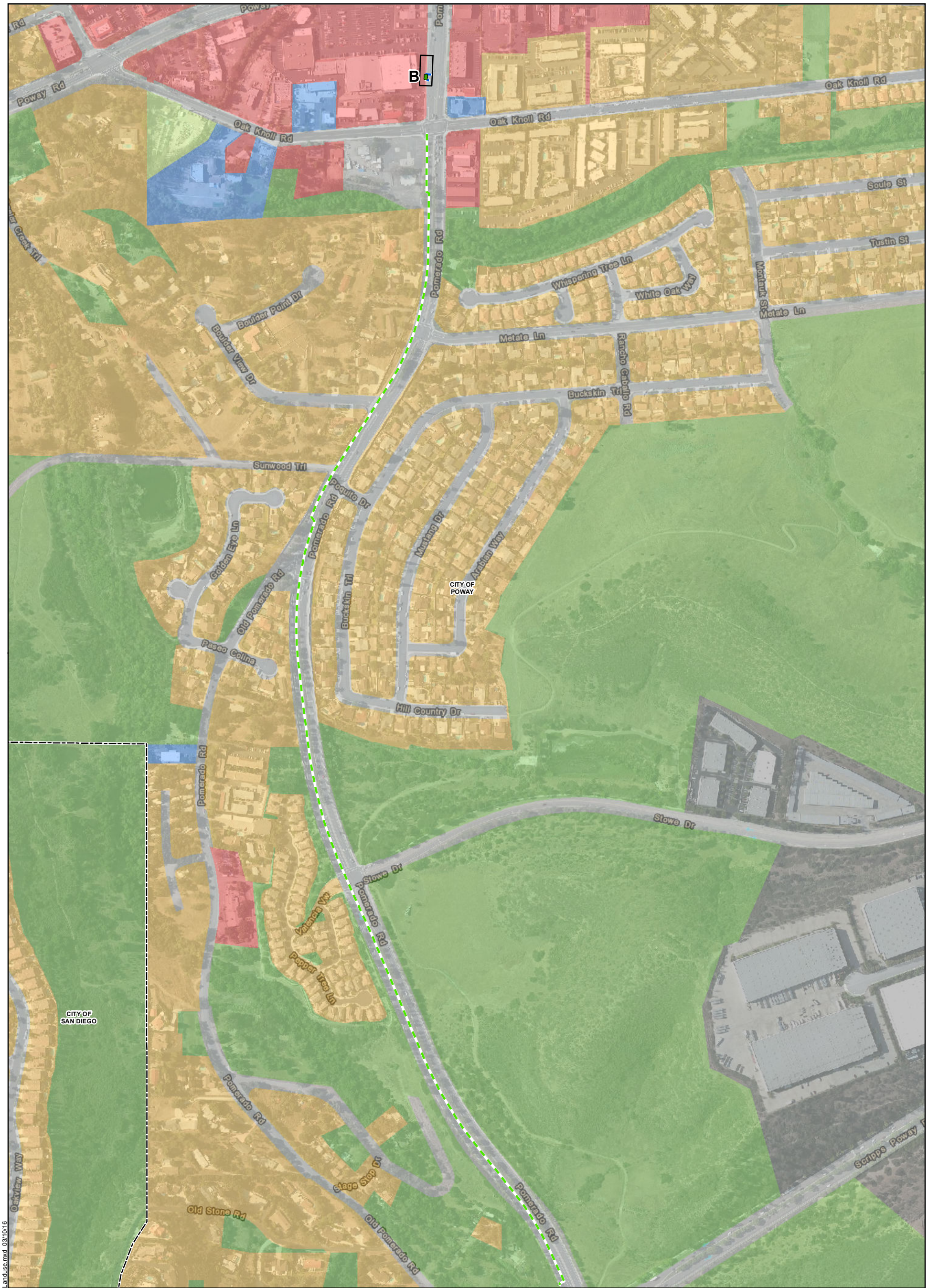

Attachment 3.10-B: Existing Land Uses Crossed Map 14 of 17 — **Pipeline Safety & Reliability Project**

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
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Current Land Use Catagories

- Commercial
- Infrastructure
- Residential
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Note: Pipelines are shown on maps 8, 14, and 16

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0 350 700 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

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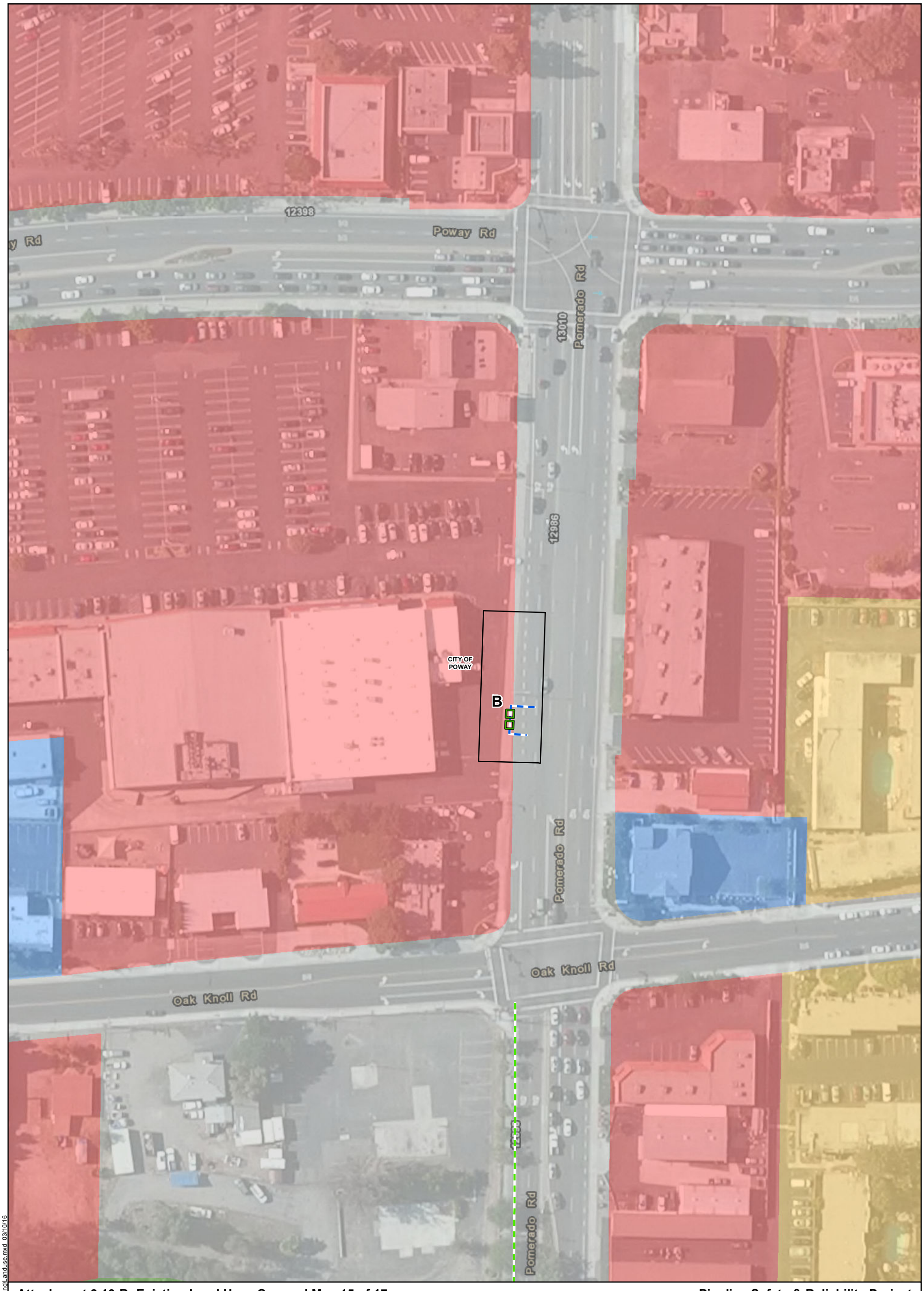

Attachment 3.10-B: Existing Land Uses Crossed Map 15 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
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Current Land Use Catagories

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- Infrastructure
- Residential
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- Agriculture
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- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

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SoCalGas A Sempra Energy utility

SDGE A Sempra Energy utility

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Attachment 3.10-B: Existing Land Uses Crossed Map 16 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
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0 350 700 Feet

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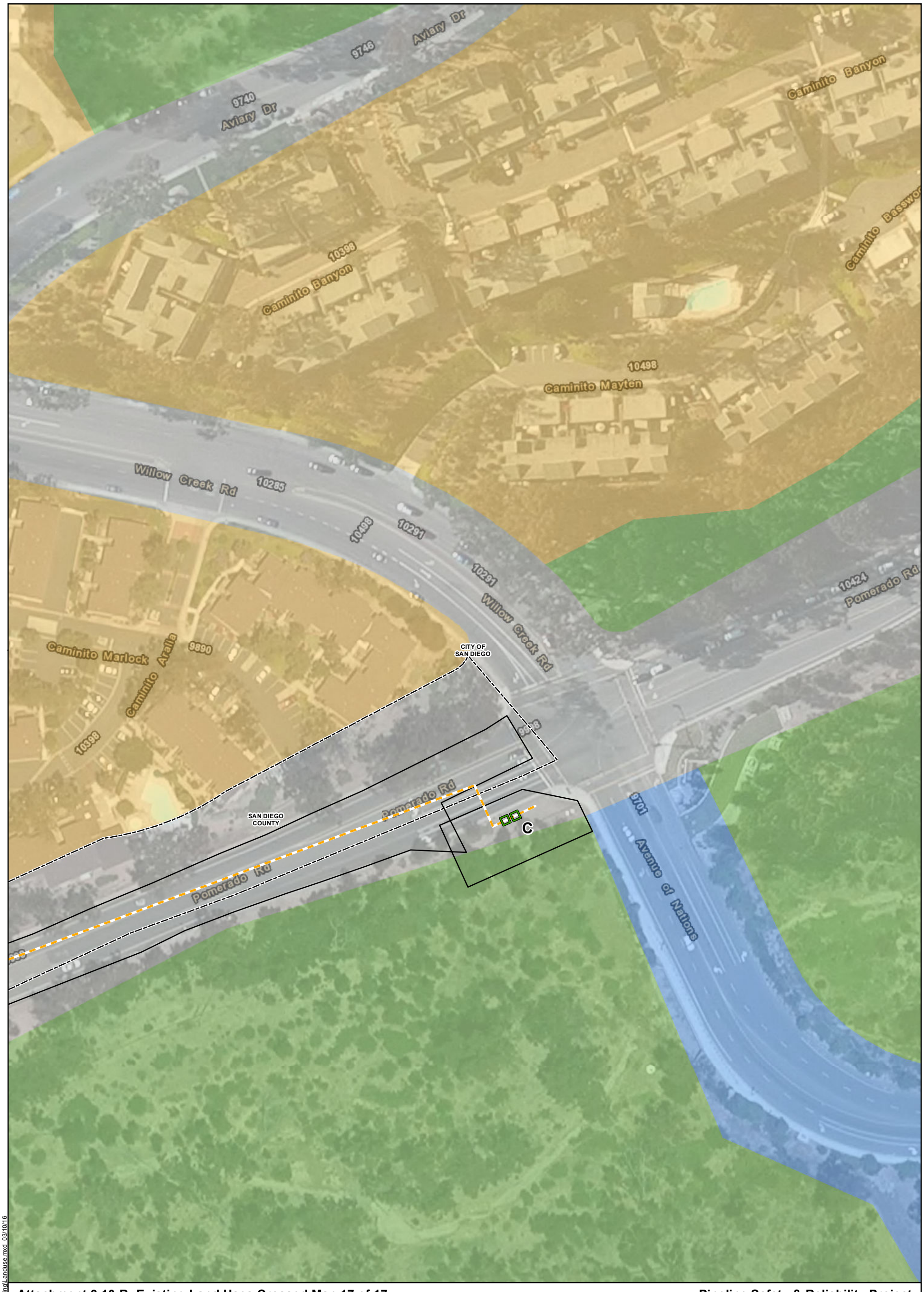

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Attachment 3.10-B: Existing Land Uses Crossed Map 17 of 17

Pipeline Safety & Reliability Project

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
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- Industrial
- Agriculture
- Recreation
- Military
- City/County Boundary

Note: Pipelines are shown on maps 8, 14, and 16

1:1,000

0 60 120 Feet

SoCalGas A Sempra Energy utility | SDGE A Sempra Energy utility | INSIGNIA ENVIRONMENTAL

3.11 MINERAL RESOURCES

3.11.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.11.2 Existing Conditions of the Pipeline Safety & Reliability Project's (Proposed Project's) describes the regulatory and environmental settings related to mineral resources within these jurisdictions. PEA Figure 4.11-1: Mineral Resource Zone Map depicts the Mineral Resource Zone (MRZ-) 2 sectors present in the vicinity of the Proposed Project. Four of the Distribution System Modifications cross areas designated as MRZ-2, which indicates that significant mineral deposits are present or highly likely. In total, approximately 2.1 miles of lands designated as MRZ-2 are crossed by the Distribution System Modifications components, including portions of the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement. In addition, the approximately 0.002-acre permanent footprint of the new Regulator Station C is located within land designated as MRZ-2. The Distribution System Modifications are located in urban areas and are not located on any lands currently used for mining or extractive purposes. In addition, the City of Poway, City of San Diego, and County of San Diego general plans and zoning ordinances do not designate land that will be crossed by the distribution system modification components modifications for extractive use. Two current granite mining operations and one current stone mining operation were identified within 0.5 mile of the Distribution System Modifications. In addition, five past sand and gravel mining operations, three past stone mining operations, and one prospective gold mine were identified within 0.5 mile of the Distribution System Modifications.

3.11.1 Impact Evaluation

The Distribution System Modifications are not located within or directly adjacent to any current or proposed extractive operations. None of the mining operations identified within 0.5 mile of the Distribution System Modifications will be affected by construction due to the location and distance from construction activities. Though portions of the Distribution System Modifications cross areas designated as MRZ-2, the modifications will be constructed within existing roads, road shoulders, and SDG&E's existing right-of-way (ROW)[1], which already preclude future extraction of aggregate resources. In addition, the land surrounding the Distribution System Modifications are excluded from mining due to existing land uses, which include transportation and utility corridors and residential and commercial uses. Operation and maintenance activities will occur within the permanent ROW and will not involve the extraction of any known regionally or state-valued mineral resources. Because the Distribution System Modifications are located in transportation and utility corridors, which are already precluded from mining, these modifications will not result in the loss of a locally important mineral resource. Therefore, no change in impacts will occur and impacts to mineral resources will remain less than significant.

[1] For the purposes of this PEA Supplement, SDG&E's ROW includes franchise rights and easement rights.

3.11.2 Applicant-Proposed Measures

No additional or increased impacts to mineral resources are anticipated to result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.11.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

California DOC. Division of Mines and Geology. 1996. Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production-Consumption Region. Online. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_96-04/OFR_96-04_Text.pdf. Site visited March 4, 2015.

San Diego Geographic Information Source. 2012. Download Data. Online. http://www.sangis.org/download/index.html. Site visited February 26, 2016.

United States Geological Survey. 2015. Mineral Resources Data System. Online. http://mrdata.usgs.gov/mineral-resources/mrds-us.html. Site visited March 3, 2016.

3.12 NOISE

3.12.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Research regarding noise within each of these jurisdictions was presented in Proponent's Environmental Assessment (PEA) Section 4.12 Noise for the Pipeline Safety & Reliability Project (Proposed Project). PEA Section 4.12.2 Existing Conditions describes the regulatory and environmental settings related to noise in these jurisdictions. The nearest noise-sensitive receptors[1] within the vicinity of the Distribution System Modifications are residences, which are adjacent to the Proposed Project's right-of-way (ROW). Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Distribution System Modifications provides a summary of the types of sensitive receptors located within 300 feet of the Proposed Project. Similar to the PEA, a distance of 300 feet was chosen to adequately capture the nearby sensitive receptors that could be exposed to construction noise from the Proposed Project's Distribution System Modifications, and to correspond to the typical distance used for noticing property owners in the event of an expected exceedance of relevant noise standards.

Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Distribution System Modifications

Receptor Type	Approximate Number of Sensitive Receptors[2]	Distance of Nearest Receptor to Distribution System Modifications (feet)
Residential	21	Adjacent
Schools	1	158
Hospitals	0	N/A
Places of Worship	0	N/A
Parks/Outdoor Recreation Areas	4	Adjacent or crossed

Sources: San Diego Geographic Information Source (SanGIS), 2012; Google, 2015

As shown in Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Distribution System Modifications, there are approximately 21 residences and four parks/outdoor recreation areas[3] in addition to those discussed in PEA Table 4.12-8: Sensitive Noise Receptors within 300 feet of the Proposed Project. However, none of the additional sensitive receptors are closer to the Distribution System Modifications than those addressed in the PEA. Therefore, the existing

[1] As described in the PEA, for the purposes of this analysis, "noise-sensitive receptors" include facilities or areas (e.g., residences, hospitals, parks, and schools) where excessive noise levels will be considered an annoyance. Some jurisdictions define noise-sensitive receptors by ordinance.

[2] As described in the PEA, the approximate number of residential sensitive receptors is based on the number of parcels zoned for each land use type within 300 feet of the Proposed Project's temporary ROW.

[3] As described in Section 3.15 Recreation, one of the two parks/outdoor recreation areas adjacent to the Proposed Project's Distribution System Modifications—the Carmel Highland Golf Course—is permanently closed.

conditions presented in the PEA adequately describe current noise in the vicinity of the Distribution System Modifications.

3.12.1 Impact Evaluation

The Distribution System Modifications will occur within the same jurisdictions as described in the PEA. As described in the PEA, the Proposed Project will exceed noise standards established by each jurisdiction, resulting in a potentially significant impact during construction, operation, and maintenance. As discussed in Section 2.4.11 Construction Workforce and Equipment of Chapter 2 – Project Description Supplement, the equipment required for the Distribution System Modifications is anticipated to be the same as the list provided in PEA Attachment 3-B: Typical Construction Equipment; therefore, the impacts analysis in PEA Section 4.12 Noise construction would also apply to the Distribution System Modifications. Construction of the Distribution System Modifications will not increase the noise levels described in the PEA because construction activities will occur at different locations and at different times. Further, construction noise impacts as a result of the Distribution System Modifications will not be additive to the impacts analysis in the PEA because different sensitive receptors will be affected than the receptors analyzed in the PEA.

Similar to the PEA, construction activities will occur directly adjacent to residences. Additionally, construction activities will occur adjacent to two parks/outdoor recreation areas and 158 feet from one school. There are no other additional sensitive receptors (e.g., libraries or places of worship) within 300 feet of the Distribution System Modifications, as shown in Table 3.12-1: Sensitive Noise Receptors within 300 Feet of the Distribution System Modifications. As a result, the temporary construction noise impacts presented in the PEA are consistent with the anticipated temporary construction noise impacts from the Distribution System Modifications. To address potential noise impacts, the Applicants will implement Applicant-Proposed Measure (APM)-NOI-01 and APM-NOI-04 from PEA Section 4.12.4 Applicants-Proposed Measures. APM-NOI-01 requires that the Applicants meet and confer with the relevant local jurisdiction(s)—if it is anticipated that construction noise levels will exceed adopted standards—and apply for deviations from the standards if necessary. To further reduce potential construction noise impacts, the Applicants will implement APM-NOI-04, which requires the noticing of potentially affected noise-sensitive receptors. Therefore, with the implementation of APMs, the potential impacts to noise during construction will remain potentially significant.

Operation and maintenance will not cause an increase in noise levels beyond the levels provided in the PEA, because all of the regulator stations will be below ground and will not emit noise. Therefore, no additional or increased impacts to noise levels are anticipated to result from the Distribution System Modifications.

3.12.2 Applicant-Proposed Measures

No additional or increased impacts to noise are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.12.3 References

City of San Diego. 2016. Municipal Code Chapter 13, Zones. Online. http://google.sannet.gov/search?site=scs_municode_ch13&partialfields=&requiredfields=PATH%3Amunicode&client=scs_ocd&filter=0&config=muni_ch13.js&layout_type=titlelink&getfields=DOCUMENT_URL.DOC_NUM.TITLE&proxystylesheet=scs_ocd&output=xml_no_dtd&proxyreload=1&sort=date:A:S:d1&num=100. Site visited March 7, 2016.

Google. 2015. Google Earth Pro Version 7.1.5.1557 Software. Program used March 7, 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

SanGIS. 2012. San Diego Geographic Information Source. Online. http://sdgis.sandag.org/. Site visited March 7, 2016.

3.13 POPULATION AND HOUSING

3.13.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.13 Population and Housing for the Pipeline Safety & Reliability Safety Project (Proposed Project) describes the existing conditions relevant to population and housing in these jurisdictions. PEA Table 4.13-1: Population Totals and Trends lists the past, present, and projected future populations of the City of Poway, the City of San Diego, and San Diego County. In addition, PEA Table 4.13-2: Housing Units and Vacancy Rates provides the number of housing units and associated vacancy rates for these areas.

3.13.1 Impact Evaluation

The Distribution System Modifications are required to maintain existing natural gas distribution service following construction of the Proposed Project, and the upgrades are not anticipated to facilitate regional growth. All new facilities will be installed within or adjacent to existing roads and/or within SDG&E's existing right-of-way[1]. No land acquisition is required to construct the Distribution System Modifications, and access through all roads and driveways crossed by the Distribution System Modifications will be maintained during construction. Therefore, no residents or people will be displaced.

Construction of the Distribution System Modifications will not require additional personnel from the construction workforce identified in the PEA. Population and housing impacts resulting from a workforce of approximately 600 personnel were assessed in PEA Section 4.13.3 Impacts. Because construction of the Distribution System Modifications will not require additional personnel, the conclusions of the analysis presented in PEA Section 4.13.3 Impacts will not change.

Operation and maintenance activities associated with the Distribution System Modifications will be performed by personnel currently employed by the Applicants. As with the Proposed Project transmission facilities, the Distribution System Modifications will not facilitate substantial population growth in the area because the upgrades will not create any infrastructure that will draw visitors, employees, or residents to the area. The PEA concluded the Proposed Project will result in a less-than-significant impact to population growth, and no impacts related to the displacement of existing housing or people will occur. Based on the previous discussion, no additional impacts or increase in an impact to regional population and housing demand will result from construction and operation of the Distribution System Modifications.

[1] For the purposes of this PEA Supplement, SDG&E's ROW includes franchise rights and easement rights.

3.13.2 Applicants-Proposed Measures

No additional or increased impacts to population and housing are anticipated to result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.13.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

3.14 PUBLIC SERVICES

3.14.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Research regarding fire and emergency services, police and protection services, hospitals, schools, and other services located within each of these jurisdictions was presented in Proponent's Environmental Assessment (PEA) Section 4.14 Public Services for the Pipeline Safety & Reliability Project (Proposed Project). Data pertaining to public services was obtained through online research.

Fire and Emergency Services

The following fire stations are within approximately 1 mile of the Distribution System Modifications:

- MCAS Miramar Fire Department Station 62 is located at 21134 H Avenue in the City of San Diego and 0.69 mile west of Regulator Station 982.[1]
- San Diego Fire-Rescue Department (SDFD) Station 40 is located at 13393 Salmon River Road in the City of San Diego and 0.80 mile northwest of Regulator 1500.
- SDFD Station 38 is located at 8441 New Salem Street in the City of San Diego and 1.01 miles west of the Mira Mesa extension.
- SDFD Station 42 is located at 12110 World Trade Center Drive in the City of San Diego and 0.68 mile southwest of Regulator Station A in the City of Poway.[2]
- SDFD Station 44 is located at 10011 Black Mountain Road in the City of San Diego and 0.27 mile northwest of Regulator Station 1335.[3]

Police and Protection Services

One police station is located within one mile of the Distribution System Modifications. The Northeastern Division Headquarters of the San Diego Police Department (SDPD) is located at 13396 Salmon River Road in the City of San Diego and 0.83 mile northwest of Regulator Station 1500.[4]

Hospitals

One hospital is located within one mile of the Distribution System Modifications. Palomar Hospital is located at 15615 Pomerado Road in the City of Poway and 0.92 mile north of Regulator Station A.[5]

[1] MCAS Miramar Fire Department Station 62 was identified as 0.84 mile from the Proposed Project in the PEA.
[2] SDFD Station 42 was identified as 0.62 mile from the Proposed Project in the Proposed Project's PEA.
[3] SDFD Station 44 was identified as 1.28 miles from the Proposed Project in the Proposed Project's PEA.
[4] The Northeastern Division Headquarters of the SDPD was identified as 3.49 miles from the Proposed Project in the Proposed Project's PEA.
[5] Palomar Hospital was identified as 0.01 mile from the Proposed Project in the Proposed Project's PEA.

Schools

Table 3.14-1: Schools Within 0.50 Mile of the Distribution System Modifications identifies schools in the vicinity of the Distribution System Modifications. Four of the schools listed in Table 3.14-1: Schools Within 0.50 Mile of the Distribution System Modifications were previously identified in Section 4.14 of the PEA.

Other Services

The following libraries are located within one mile of the Distribution System Modifications:

- Carmel Mountain Ranch Library is located at 12095 World Trade Drive in the City of San Diego and 0.70 mile west of Regulator Station A.
- Rancho Peñasquitos Library is located at 13330 Salmon River Road in the City of San Diego and 0.76 mile west of Regulator Station 1500.
- San Diego Miramar College Library is located at 10440 Black Mountain Road in the City of San Diego and 0.11 mile south of the Mira Mesa extension.
- Scripps Ranch Library is located at 10301 Scripps Lake Drive in the City of San Diego and 0.75 mile east of Regulator Station 1051.
- Walter Library is located at 10455 Pomerado Road in the City of San Diego and 0.45 mile east of Regulator Station C.

There are 27 regional, city, and local parks located within 0.5 mile of the Distribution System Modifications. Section 3.15 Recreation provides more information on parks and recreational facilities.

3.14.1 Impact Evaluation

The Distribution System Modifications will not result in a permanent need for new or additional public services because they will not directly induce population growth nor result in the construction of residential or other land uses that will indirectly promote population growth in the area. There are no police stations, fire departments, or hospitals located within 0.25 mile of the Distribution System Modifications; therefore, the modifications will not have any impacts to these facilities. As discussed in Section 3.15 Recreation, 27 additional parks/outdoor recreation areas were identified within 0.5 mile of the Distribution System Modifications, including two that are adjacent to the modifications. However, the Proposed Project's PEA also addresses impacts to parks/outdoor recreation facilities that are adjacent to the Proposed Project, and any increase in construction-related impacts will be negligible because construction activities associated with the Distribution System Modifications will be similar to the activities discussed in the Proposed Project's PEA, but on a smaller scale. Additionally, the Applicants will implement Applicants-Proposed Measure (APM-) REC-01, which is identified in PEA Section 4.15 Recreation. APM-REC-01 requires the Applicants to notify park authorities six weeks prior to construction activities within or adjacent to parks, as well as post signage within parks to notify park users four to six weeks prior to construction beginning within or adjacent to a park, as appropriate. Therefore, impacts to parks/outdoor recreation areas will remain less than significant with implementation of APMs. More information about park facility impacts and the associated APM is provided in Section 3.15 Recreation.

Table 3.14-1: Schools Within 0.50 Mile of the Distribution System Modifications

School	Address	Approximate Distance (miles)	Distribution System Modifications Component
Poway KinderCare	12370 Adobe Ridge Road, Poway	0.03	Regulator Station A
Kiddies Korner[6]	12334 Oak Knoll Road, Poway	0.07	Regulator Station B
Walker Elementary School	9225 Hillery Drive, San Diego	0.11	Mira Mesa extension
Mira Mesa Christian School	9696 Candida Street, San Diego	0.11	Regulator Station 1335
Mira Mesa Christian Preschool	10770 Rickert Road, San Diego	0.14	Mira Mesa extension
NewBridge School	12285 Oak Knoll Road, Poway	0.15	Regulator Station B
Oak Knoll Montessori[7]	15010 Pomerado Road, Poway	0.18	Regulator Station A
Pooh's Pals Daycare	15362 Paseo Ajanta, San Diego	0.21	Regulator Station 1500
Thurgood Marshall Middle School[8]	9700 Avenue of Nations, San Diego	0.22	Line 49-31B replacement
Scripps Exploring Academy	9855 Elma Road #128, San Diego	0.23	Regulator Station 1051
Scripps Ranch High School	10410 Treena Street, San Diego	0.24	Regulator Station 1051
Poway Unified School District	15250 Avenue of Science, San Diego	0.26	Regulator Station 1516
New Generations Learning Center	9878 Hibert Street, San Diego	0.27	Regulator Station 1051
Banyan Tree Learning Center	9636 Tierra Grande Street, San Diego	0.29	Regulator Station 1335

[6] Kiddies Korner was identified as 0.06 mile from the Proposed Project in the Proposed Project's PEA.
[7] Oak Knoll Montessori was identified as 0.02 mile from the Proposed Project in the Proposed Project's PEA.
[8] Thurgood Marshall Middle School was identified as 0.04 mile from the Proposed Project in the Proposed Project's PEA.

School	Address	Approximate Distance (miles)	Distribution System Modifications Component
Discovery Isle	14521 Ted Williams Parkway, Poway	0.31	Regulator Station A
Mira Mesa KinderCare	8989 Mira Mesa Boulevard, San Diego	0.31	Mira Mesa extension
Kid's Care Club Preschool	9995 Carmel Mountain Road, San Diego	0.32	Regulator Station 1500
San Diego Miramar College	10440 Black Mountain Road, San Diego	0.34	Regulator Station 1051
Scripps Montessori School	9939 Old Grove Road, San Diego	0.35	Regulator Station 1335
Preschool Power Hour	12636 Poway Road #4, Poway	0.36	Regulator Station B
The Growing Place Montessori	13242 Pomerado Road, Poway	0.37	Regulator Station B
Hage Elementary School	9750 Galvin Avenue, San Diego	0.37	Mira Mesa extension
San Diego Unified School District	9230 Gold Coast Drive, San Diego	0.38	Regulator Station 1051
The Learning Choice Academy	9950 Scripps Lake Drive #105, San Diego	0.39	Regulator Station B
Hope Christian Preschool	16550 Bernardo Heights Parkway, San Diego	0.40	Regulator Station 1101
Le Petite Academy Day Care Center	10050 Carmel Mountain Road, San Diego	0.45	Regulator Station 1500
Discovery Isle Child Development Center Preschool[9]	10125 Azuaga Street, San Diego	0.46	Regulator Station 1500
Wangenheim Middle School	9230 Gold Coast Drive, San Diego	0.46	Regulator Station 1051
Halstrom Academy	9988 Hibert Street, San Diego	0.47	Regulator Station 1051

[9] Discovery Isle Child Development Center Preschool was identified as 0.16 mile from the Proposed Project in the Proposed Project's PEA.

There are 11 schools and one library located within 0.25 mile of the Distribution System Modifications; however, three of these schools were previously identified in the PEA. None of the schools or the library are adjacent to the modifications. The closest library—San Diego Miramar College Library—is 0.11 mile south of the Mira Mesa extension. The Distribution System Modifications will not increase the local population or otherwise result in a change that will necessitate alteration or expansion of the public library or other existing public services. Construction activities associated with the Distribution System Modifications will be similar to the activities discussed in the Proposed Project's PEA, but on a smaller scale. In addition, the Proposed Project's PEA analyzes impacts to schools within 0.25 mile of the Proposed Project. However, due to the close proximity of Poway KinderCare, which is located 0.03 mile from Regulator Station A, the Applicants will implement APM-PS-01, which requires coordination with schools no less than 60 days prior to beginning construction to ensure that access is maintained and that impacts to schools are minimized. Therefore, potential impacts to public services remain less than significant with the implementation of APM-PS-01.

As discussed in the Proposed Project's PEA, operation and maintenance activities for the Distribution System Modifications will be conducted in the same manner as the activities described in PEA Section 3.6 Construction. These procedures will be completed by the Applicants' current employees, and the Applicants will not be required to hire any additional employees to maintain the pipeline and its appurtenant facilities. Further, no new commercial or residential development will be required or caused by the Proposed Project's Distribution System Modifications.

An emergency could arise during the operation and maintenance phase of the Distribution System Modifications, but such an incident is unlikely and will be within the current capabilities of the existing emergency services personnel to resolve. In the event that operation and maintenance activities need to be conducted where they could have the potential to block driveway access or could otherwise impact emergency services (e.g., exposing buried sections of the pipe for inspection or replacement), the Applicants will conduct the activities in the same manner as such activities are conducted on existing natural gas facilities. No additional employees will need to be hired, and no new commercial or residential development will occur as a result of the Distribution System Modifications; therefore, no additional public services or facilities—and no physical changes to existing facilities that could impact the environment—will be needed as a result of operation and maintenance of the Proposed Project's Distribution System Modifications. Therefore, impacts to public services will remain less than significant.

3.14.2 Applicant-Proposed Measures

No additional or increased impacts to public services are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.14.3 References

Google. 2015. Google Earth Pro Version 7.1.5.1557 Software. Program used March 7, 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

3.15 RECREATION

3.15.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.15 Recreation for the Pipeline Safety & Reliability Safety Project (Proposed Project) describes the existing conditions relevant to recreation in these jurisdictions. Some of the Distribution System Modifications (i.e., the pre-lay segment replacement, Regulator Station A, Regulator Station B, and Regulator Station C) occur in locations along the Proposed Project transmission route, and recreational facilities in the vicinity were listed in Table 4.15-1: Recreational Facilities within 0.5 Mile of the Proposed Project. Google Earth Pro aerial maps of the Proposed Project area and geographic information system data from the California Protected Areas Database (CPAD) were reviewed to obtain the locations of parks and other recreational facilities in the vicinity of the Distribution System Modifications. The results are presented in Table 3.15-1: Recreational Facilities within 0.5 Mile of the Distribution System Modifications and Figure 3.15-1: Recreational Facilities within 0.5 Mile of the Distribution System Modifications.

Only two recreational areas are located within or adjacent to the distribution system modification workspaces—Carmel Highland Golf Course and Los Peñasquitos Canyon Preserve. The Carmel Highland Golf Course is located at the DoubleTree Golf Resort by Hilton Hotel San Diego in the City of San Diego. Regulator Station 141 is currently located in a landscaped area between the golf course and adjacent residences that overlook the golf course; however, the course is permanently closed.[1]

Los Peñasquitos Canyon Preserve encompasses approximately 4,000 acres of Peñasquitos and Lopez Canyons, located in the City of San Diego. The preserve is jointly owned and administered by the City of San Diego and the County of San Diego. Several trail networks traverse the approximately seven-mile-long preserve, which generally follows Peñasquitos Creek, Lopez Creek, and associated riparian corridors. Hiking, bicycling, and/or equestrian uses are allowed on the trails. Several utility rights-of-way (ROWs) cross the preserve network. Regulator Station 1248 is currently located within SDG&E's ROW[2] that intersects Los Peñasquitos Canyon Preserve and is directly adjacent to a portion of the San Diego Trans County Trail. The Trans County Trail is an east-west trail corridor that begins in the desert region of San Diego County and ends at the coastal bluffs in the City of Del Mar.

[1] Due to rising costs, the Carmel Highland Golf Course closed in March 2015.
[2] For the purposes of this PEA Supplement, SDG&E's ROW includes franchise rights and easement rights.

Table 3.15-1: Recreational Facilities within 0.5 Mile of the Distribution System Modifications

Park	Location	Distribution System Modifications Component	Approximate Distance to Closest Distribution System Modifications Component (miles)
Los Peñasquitos Canyon Preserve	City of San Diego	Regulator Station 1248	0.00
Carmel Highland Golf Course	City of San Diego	Regulator Station 141	0.00
Scripps-Miramar Ranch Open Space*	City of San Diego	Line 49-31B Replacement	0.02
Bernardo Heights Community Center	City of San Diego	Regulator Station 1101	0.03
Rancho Bernardo Inn Golf Course*	City of San Diego	Regulator Station 939	0.08
Rancho Peñasquitos Open Space	City of San Diego	Regulator Station 1500	0.09
Aviary Park and Open Space*	City of San Diego	Line 49-31B Replacement	0.12
Ridgewood Park	City of San Diego	Regulator Station 1248	0.12
Scripps Miramar Saddlebreds	City of San Diego	Line 49-31B Replacement	0.14
Hourglass Field Community Park	City of San Diego	Mira Mesa Extension and Regulator Station 1051	0.15
Bernardo Heights Country Club	City of San Diego	Regulator Station 1516	0.15
		Regulator Station 1101	0.35
Walker-Wangenheim School Park	City of San Diego	Mira Mesa Extension	0.16
Mesa Village Park	City of San Diego	Mira Mesa Extension	0.23
Black Mountain Open Space	City of San Diego	Regulator Station 141	0.25
San Dieguito River Park	City of San Diego	Regulator Station 939	0.27
Scripps Ranch High School Sports Fields	City of San Diego	Mira Mesa Extension and Regulator Station 1051	0.30
Sun Ridge Vista Mini Park	City of San Diego	Regulator Station 1500	0.31

Park	Location	Distribution System Modifications Component	Approximate Distance to Closest Distribution System Modifications Component (miles)
Canyon Hills Park and Open Space	City of San Diego	Regulator Station 1248	0.33
Views West Park	City of San Diego	Regulator Station 1500	0.34
Westview Park	City of San Diego	Regulator Station 1494	0.34
Kumeyaay-Ipai Interpretive Center*	City of Poway	Regulator Station B	0.37
Rancho Bernardo Open Space*	City of San Diego	Regulator Station 1101	0.38
		Regulator Station 939	0.47
Polaris Breen Neighborhood Park	City of San Diego	Mira Mesa Extension	0.41
Battle Mountain Open Space	City of San Diego	Regulator Station 939	0.44
Miramar Reservoir	City of San Diego	Regulator Station 1494	0.46
Miramar Ranch North Open Space*	City of San Diego	Regulator Station 1494	0.47
Sabre Springs North Open Space*	City of San Diego	Regulator Station 1500	0.48

Sources: CPAD, 2016; Google, 2016
*Denotes parks that are also listed in PEA Table 4.15-1: Recreational Facilities within 0.5 Mile of the Proposed Project.

3.15.1 Impact Evaluation

Question 3.15a – Recreational Facilities Use

The Distribution System Modifications will be constructed utilizing the same construction workforce described in the PEA and will not require any additional personnel. As discussed in PEA Section 4.15.3 Impacts, construction personnel are not expected to significantly increase the use of local parks and recreational facilities, and construction of the Proposed Project will not put additional demand on existing recreational facilities.

Regulator Station 1248 is the only component located within or directly adjacent to an active recreational area, which is Los Peñasquitos Canyon Preserve. Regulator Station 1248 and the workspace required to remove the facility are located entirely within and adjacent to SDG&E's existing ROW. SDG&E's existing ROW is located adjacent to the San Diego Trans County Trail; however, construction will not block access to or along the trail. While temporary construction disturbances (e.g., noise and dust) may occur, impacts will be short term (e.g., approximately a few weeks at each location). Applicants-Proposed Measure (APM-) REC-01 requires signage to be posted in parks that are crossed by or adjacent to the Proposed Project no less than four weeks prior to the beginning of construction; the signage will notify park and trail users of the impending construction activities and their duration, and will also provide contact information for the Proposed Project's public liaison. Implementation of APM-REC-01 will be implemented at Los Peñasquitos Canyon Preserve prior to beginning the removal activities at Regulator Station 1248. The impacts to recreation associated with the Distribution System Modifications are consistent with the analysis presented in the PEA. Given the limited duration of construction activities, unaffected access to the San Diego Trans County Trail, and the availability of other trails in Los Peñasquitos Canyon Preserve, construction of the Distribution System Modifications will be consistent with the analysis presented in the PEA. Therefore, impacts to recreation will remain less than significant with the implementation APMs.

Operation and maintenance activities will be completed by the Applicants' existing staff, and the Applicants will not be required to hire any additional employees to maintain the pipeline and their appurtenant facilities, including the Distribution System Modifications. In addition, as described in Section 3.13 Population and Housing of this PEA Supplement, the Proposed Project will not create a need for additional housing nor cause long-term population growth. Therefore, a permanent increase in park and recreational facility use will not result. Based on the previous discussion, construction and operation of the Distribution System Modifications will not result in an additional impact or increase in the previously identified less-than-significant impact to the use of recreational facilities.

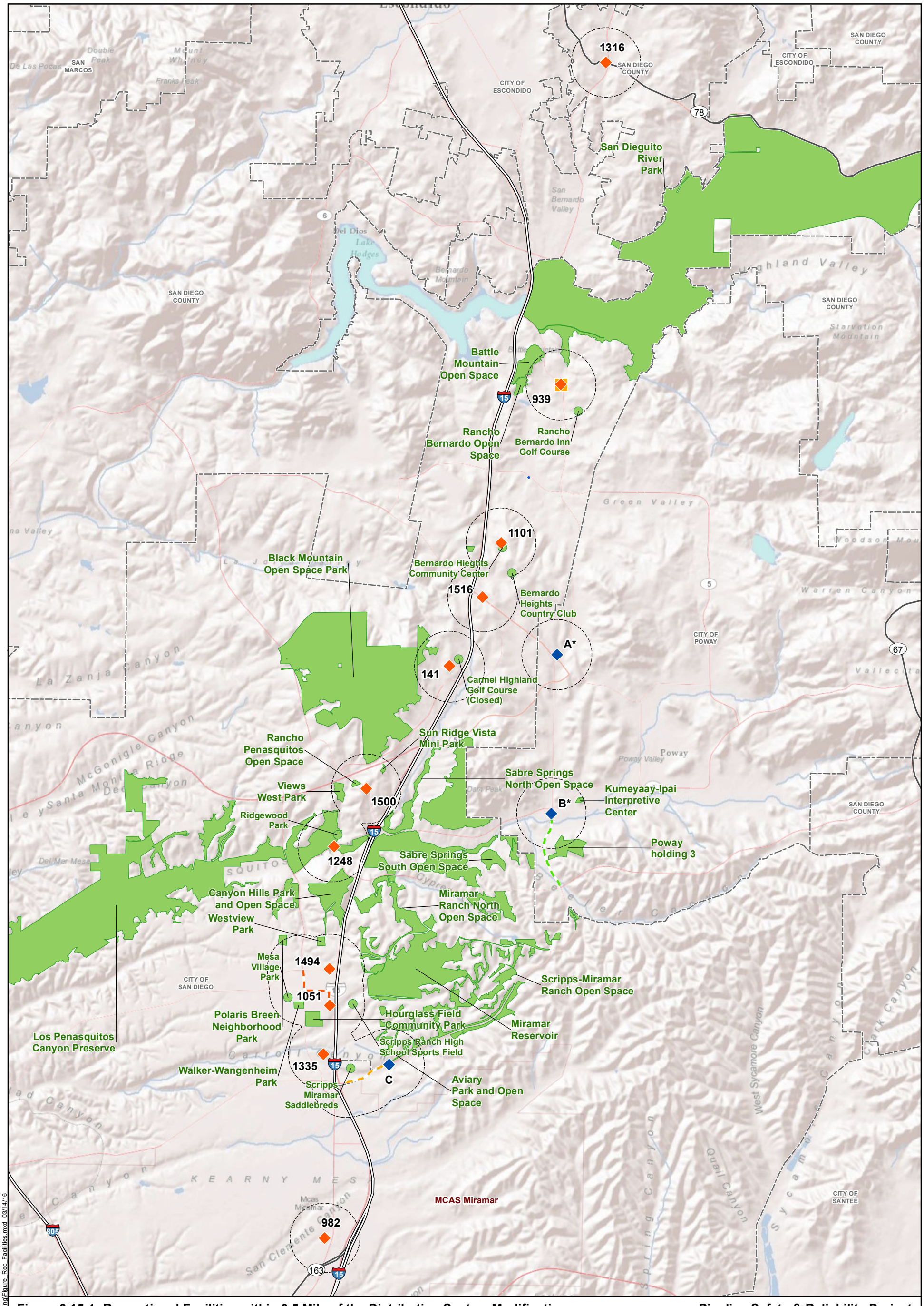

Figure 3.15-1: Recreational Facilities within 0.5 Mile of the Distribution System Modifications **Pipeline Safety & Reliability Project**

- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement*
- Regulator Station Connection Pipeline
- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Park
- Half-Mile Project Buffer
- City/County Boundary

* Recreational facilities in the vicinity of these components are identified in Figure 4.15-1: Recreational Facilities within 0.5 mile of the Proposed Project

1:84,301
0 1 2 Miles

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Question 3.15b – Recreational Facilities Changes

As discussed in PEA Section 4.15.3 Impacts, the Proposed Project will not include the construction or expansion of any recreational facilities, nor will it result in an increase in demand for existing recreational facilities. The distribution system upgrades are consistent with this conclusion as they consist of similar activities as the Proposed Project. Temporary disturbances (e.g., noise and dust) during the removal of Regulator Station 1248 will not result in lasting effects to Los Peñasquitos Canyon Preserve and the San Diego Trans County Trail. The distribution system modification activities will last approximately a few weeks at each location and will not necessitate the expansion of Los Peñasquitos Canyon Preserve or any other park or recreational facility. In addition, construction activities at this location will be limited to within and adjacent to SDG&E's existing ROW. Therefore, the Distribution System Modifications will not result in a significant impact or substantial increase in previously identified impact to recreational resources. Therefore, impacts to recreation will remain less than significant with the implementation of APMs.

Operation and maintenance of the Distribution System Modifications will be performed by the Applicants' existing personnel and will not add new recreational users to the San Diego County area. Because operation and maintenance personnel will not increase the number of local recreational facility users, the expansion or creation of new recreational facilities will not be required. Therefore, no additional impact or increase in the previously identified less-than-significant impact to recreational resources will result from the construction and operation of the Distribution System Modifications.

3.15.2 Applicants-Proposed Measures

No additional or increased impacts to recreation are anticipated to result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.15.3 References

City of San Diego Park & Recreation. Open Space Parks: Los Peñasquitos Canyon Preserve. Online. http://www.sandiego.gov/park-and-recreation/parks/osp/lospenasquitos/. Site visited March 2, 2016.

County of San Diego Parks and Recreation. 2005. *County Trails Program and Community Trails Master Plan*. Online. http://atfiles.org/files/pdf/SanDiegoCoTrailsPlan.pdf. Site visited March 2, 2016.

CPAD. 2016. California Protected Areas Data Portal. Online. http://www.calands.org/data. Site visited April 26, 2016.

Google. 2016. Google Earth Pro Version 7.1.5.1557 Software. Program used March 2016.

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

The San Diego Union-Tribune. *Carmel Highland Closing in March*. Online. http://www.sandiegouniontribune.com/news/2015/feb/16/carmel-highland-closing-golf/. Site visited March 3, 2016.

3.16 TRANSPORTATION AND TRAFFIC

3.16.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.16 Transportation and Traffic for the Pipeline Safety & Reliability Project (Proposed Project) describes the regulatory and environmental settings related to transportation in these jurisdictions. The Distribution System Modifications are located partially or wholly within the roadway segments listed in Attachment 3.16-A: Distribution System Modifications LOS Analysis. Attachment 3.16-A: Distribution System Modifications LOS Analysis also provides the existing capacity, average daily traffic (ADT) volumes, and level of service (LOS) of these roadway segments, along with the anticipated capacity, ADT volumes, and LOS during construction of the Distribution System Modifications. The following roadway classifications are crossed by the Distribution System Modifications:

- eight-lane prime arterial,
- six-lane prime arterial,
- four-lane major arterial,
- two-lane collector, and
- two-lane local collector.

No freeways or highways are crossed by the Distribution System Modifications.

3.16.1 Impact Evaluation

Question 3.16a – Traffic Plan or Policy Conflicts

The Distribution System Modifications include the construction of underground natural gas distribution pipeline segments and the removal and construction of underground regulator stations. These activities are consistent with those described in PEA, which include the construction of an underground natural gas distribution pipeline and construction of associated aboveground and underground facilities. PEA Section 4.16.3 Impacts analyzed consistency with traffic plans, ordinances, and policies relevant to the City of Poway, the City of San Diego, and San Diego County. Therefore, the Distribution System Modifications do not change the conclusions of the analysis presented in PEA Section 4.16.3 Impacts, and no additional or increased impacts related to applicable transportation plans, policies, and ordinances will occur.

Question 3.16b – Level of Service Changes

Traffic related to the Distribution System Modifications is anticipated to occur similar to the description provided in PEA Section 4.16.3 Impacts. Temporary or partial lane closures will likely be required during installation of the Distribution System Modifications within roadways. Table 3.16-1: Temporary Lane Closures Required to Install Distribution System Modifications lists the public roadway segments that are anticipated to require temporary lane closures, which have the potential to adversely affect traffic conditions. As presented in Attachment 3.16-A: Distribution System Modifications LOS Analysis, temporary LOS changes will occur along the

following roadway segments as a result of the lane closures that are anticipated to be required during construction:

- Rancho Peñasquitos Boulevard, between Calle De Las Rosas and Via Del Sud;
- Hillery Drive, between Black Mountain Road and Interstate (I-) 15;
- Mira Mesa Boulevard, between the I-15 southbound ramps and Westview Parkway;
- San Pasquale Valley Road, between Bear Valley Parkway and 17th Street; and
- Pomerado Road, between the I-15 northbound ramps and Willow Creek Road.

LOS is a long-term standard, and short-term construction impacts are unlikely to have a lasting impact on LOS. Though traffic related to construction of the Distribution System Modifications may result in an increase in existing daily traffic and road congestion due to lane closures, it is not anticipated to result in a permanent change to LOS after the approximately three months it will take to complete construction of the Distribution System Modifications. During construction, the Applicants will implement strategies to mitigate for direct and cumulative traffic-related impacts as part of the Traffic Management Plan (TMP) required as a part of Applicants-Proposed Measure (APM-) TRA-01, including restoring all roadways impacted by construction to pre-existing conditions or better. APM-TRA-03 will further reduce impacts to LOS by requiring construction personnel to park their personal vehicles at staging yards and utilize contractor-operated buses, vans, and trucks to access areas of active construction. In addition, construction activity impacts at any one location will generally be short-term in duration, and will last several days to install pipe under major intersections. Workspaces required to remove and/or install regulator stations will also cause temporary lane closures; however, construction impacts at each regulator station will generally last a few weeks. Regardless, temporary impacts to LOS will remain potentially significant.

Operation and maintenance activities for the new facilities will be completed by the Applicants' existing staff and will be similar to the current operation and maintenance activities conducted at existing natural gas facilities in the area. In contrast, the Distribution System Modifications will result in less frequent maintenance visits to the locations where existing regulator stations will be removed. Operation and maintenance visits at the regulator station removal locations will be limited to those required for the existing distribution pipelines and other existing, co-located facilities that are not required to be removed. Because operation and maintenance activities will have a negligible change to traffic, impacts will remain less than significant.

Table 3.16-1: Temporary Lane Closures Required to Install Distribution System Modifications

Distribution System Modifications Component	Roadway or Roadway Segment	Lane Closure Detail[1]
Regulator Station 1316	San Pasquale Valley Road (from Bear Valley Parkway to 17th Street)	Assumed closure of the westbound merge lane near Bear Valley Parkway.
Regulator Station 939	Pomerado Road (from Mirasol Drive to Paseo Del Verano Norte)	Assumed closure of a single southbound travel lane.
Regulator Station 1101	Bernardo Heights Parkway (from Via Embeleso to Calle Nobleza)	Assumed closure of a single northbound travel lane.
Regulator Station 1516	Camino Del Norte (near I-15)	Closure of the westbound bicycle lane and right turn lane to the I-15 northbound on-ramp.
Regulator Station 1500	Rancho Peñasquitos Boulevard (from Calle De Las Rosas to Via Del Sud)	Assumed closure of a single northbound travel lane.
Regulator Station 1494	Mira Mesa Boulevard (from I-15 southbound ramps to Westview Parkway)	Assumed closure of single westbound travel lane near the I-15 southbound off-ramp.
Regulator Station 1335	Carroll Centre Road[2]	Located on a local road near a cul-de-sac.
Regulator Station A	Pomerado Road	Assumed closure of the bicycle lane and right turn lane on southbound Pomerado Road.
Regulator Station B	Pomerado Road (between Poway Road and Oak Knoll Road)	Assumed closure of a single southbound travel lane.
Regulator Station C	Pomerado Road (near Willow Creek Road)	Assumed closure of a single eastbound travel lane on Pomerado Road near Willow Creek Road.

[1] Lane closures will typically occur during working hours over a period of approximately a few weeks at each location.

[2] ADT volumes were not available from San Diego Associated of Governments Series 13 model; therefore, the roadway was not included in the LOS analysis.

Distribution System Modifications Component	Roadway or Roadway Segment	Lane Closure Detail[1]
Mira Mesa Pipeline Extension	San Diego Miramar College Driveway Access	Assumed single lane closure for northbound travel along the college driveway.
	Hillery Drive (from Black Mountain Road to I-15 access ramp)	Assumed single eastbound lane closure.
	Black Mountain Road (from Hillery Drive to Mira Mesa Boulevard)	Assumed single northbound lane closure.
Line 49-31B Replacement	Pomerado Road (from Willow Creek Road to I-15 northbound ramp)	Closure of a single westbound travel lane.
Pre-Lay Segment Replacement	Pomerado Road (from Oak Knoll Road to Scripps Poway Parkway)	Lane closures required for construction at this component were included in Attachment 4.16-A: Traffic Analysis of the PEA.

Question 3.16c – Air Traffic Changes

Helicopter use is not anticipated during construction of the Distribution System Modifications, and no changes to air traffic patterns will be required to accommodate construction. Annual aerial patrol with a helicopter and/or through ground patrols will be conducted to inspect the facilities; this is consistent with operation and maintenance activities that currently occur and is also consistent with the information presented in PEA Section 4.16.3 Impacts. As a result, there will be no change in impacts related to air traffic changes.

Question 3.16d – Increase in Hazards

Hazards that have the potential to occur during construction of the Distribution System Modifications will be similar to those described in PEA Section 4.16.3 Impacts. As discussed previously, potential short-term impacts associated with temporary lane closures during construction will be less than significant, and will be further reduced with the implementation of APM-TRA-01. Incorporation of the TMP, as required by APM-TRA-01, will govern how construction of the Distribution System Modifications will comply with roadside safety protocols in order to reduce the potential for increased hazards. In addition, the Applicants will obtain all required road encroachment permits and other approvals prior to construction and will comply with all the applicable conditions of approval. The permanent facilities associated with the Distribution System Modifications do not include design features or incompatible uses that will result in a substantial increase in hazards. No new access roads or driveways will be constructed, and any aboveground portion of the facilities will be located a sufficient distance from the road in accordance with local regulations so that they will not create a potential hazard to vehicular travel. In general, operation and maintenance visits will be performed using standard pickup trucks or similarly sized vehicles; otherwise, the distribution system modification facilities will be monitored remotely. As a result, the Distribution System Modifications will not result in additional or increased impacts to design hazards.

Question 4.16e – Emergency Access Effects

Similar to the activities described in the PEA, the Distribution System Modifications have the potential to impact emergency services due to increased vehicle traffic and temporary lane closures during construction. As discussed PEA Section 4.16.3 Impacts, the Applicants will implement APM-TRA-05, which includes strategies and procedures to avoid impacts to emergency vehicle access and response times. Further, as part of the comprehensive TMP required by APM-TRA-01 and the required applicable encroachment permits, the Applicants will implement measures to reduce impacts to emergency services and response times to a less-than-significant level. Because the Distribution System Modifications include similar activities to those described in the PEA, and with the implementation of APM-TRA-01, impacts to emergency access will remain less than significant.

As previously described, the new facilities will be unmanned during operation, with only occasional maintenance and monitoring visits needed. No road or lane closures will be required during normal operation of the Distribution System Modifications. If maintenance or an emergency repair will span a road or occur where a lane closure is required, activities will be coordinated with the applicable local jurisdiction (as they are currently) to avoid closing any emergency access routes or to designate temporary emergency vehicle detour routes. Therefore,

the Distribution System Modifications will not result in an additional impact or increase in a previously identified impact to emergency access. Impacts to emergency access will remain less than significant with implementation of APMs.

Question 4.16f – Alternative Transportation Conflicts

The Distribution System Modifications will be constructed in roadways that are also utilized by public bus routes, bicycle routes, and pedestrian sidewalks. As discussed in PEA Section 4.16.3 Impacts, the Applicants will include requirements in the TMP, as required by APM-TRA-01, to reduce the potential impacts to alternative transportation facilities. As previously discussed, construction of the Distribution System Modifications will occur in a similar manner as the construction activities described in the PEA. Therefore, impacts to alternative transportation will remain less than significant with the implementation of APMs.

Operation and maintenance activities for the Distribution System Modifications will be the same as those conducted for other existing facilities operated by the Applicants and located in the vicinity. The operation and maintenance activities associated with the Distribution System Modifications will have the same type of effects, if any, on rail, bus, bicycle, and pedestrian traffic as the effects presented in PEA Section 4.16.3 Impacts, because they involve similar construction methods in similar locations. Therefore, no additional or increased impacts to alternative transportation will result from construction and operation of the Distribution System Modifications.

3.16.2 Applicant-Proposed Measures

No additional or increased impacts to transportation and traffic are anticipated to result from the Distribution System Modifications; therefore, no additional APMs are proposed.

3.16.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

Kimley-Horne. March 2015. Station Modifications Temporary Construction Impacts Roadway Segment Level of Service Summary.

ATTACHMENT 3.16-A: DISTRIBUTION SYSTEM MODIFICATIONS LOS ANALYSIS

STATION MODIFICATIONS
TEMPORARY CONSTRUCTION IMPACTS (w lane closures)
ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY

ROADWAY SEGMENT	ROADWAY CLASSIFICATION	EXISTING				With Construction (c)				Δ in ADT	Δ in V/C	SIGNIFICANT?
		LOS E CAPACITY	ADT (b)	V/C RATIO (a)	LOS	LOS E CAPACITY	ADT (d)	V/C RATIO (a)	LOS			
Bernardo Heights Parkway												
Via Embeleso to Calle Nobleza	4 Lane Major Arterial	40,000	9,400	0.235	A	30,000	9,908	0.330	A	508	0.095	NO
Rancho Penesquitos Boulevard												
Calle De Las Rosas to Via Del Sud	4 Lane Major Arterial	40,000	29,500	0.738	**E**	30,000	30,008	1.000	**F**	508	0.262	**YES**
Hillery Drive												
Black Mountain Road to I-15 DAR	2 Lane Collector (continuous left-turn lane)	15,000	7,800	0.520	**F**	7,500	8,308	1.108	**F**	508	0.588	**YES**
Black Mountain Road												
Hillery Drive to Mira Mesa Blvd	4 Lane Major Arterial	40,000	14,300	0.358	B	30,000	14,808	0.494	B	508	0.136	NO
Mira Mesa Boulevard												
I-15 SB Ramps to Westview Parkway	8 Lane Prime Arterial	80,000	71,600	0.895	**F**	70,000	72,108	1.030	**F**	508	0.135	**YES**
San Pasquale Valley Road												
Bear Valley Pkwy to 17th Street	2 Lane Local Collector	12,500	12,600	1.008	**F**	6,250	13,108	2.097	**F**	508	1.089	**YES**
Pomerado Road												
I-15 NB Ramps to Willow Creek Road	2 Lane Collector (continuous left-turn lane)	15,000	35,600	2.373	**F**	7,500	36,108	4.814	**F**	508	2.441	**YES**
Mirasol Drive to Paseo Del Verano Norte	4 Lane Major Arterial	40,000	14,000	0.350	B	30,000	14,508	0.484	B	508	0.134	NO
Heath Drive to Camino Del Norte	4 Lane Major Arterial	40,000	24,496	0.612	D	40,000	25,004	0.625	D	508	0.013	NO
Poway Rd to Oak Knoll Rd	4 Lane Major Arterial	40,000	16,578	0.414	C	30,000	17,086	0.570	C	508	0.156	NO
Camino Del Norte												
I-15 NB Ramps to Paseo Lucido	6 Lane Prime Arterial	60,000	54,500	0.908	D	60,000	55,008	0.917	**E**	508	0.009	NO

Notes:

Bold values indicate roadway segments operating at LOS E or F. **Bold and shaded** values indicate a project significant impact

(a) The v/c Ratio is calculated by dividing the ADT volume by each respective roadway segment's capacity.

(b) Average Daily Traffic (ADT) volumes for the roadway segments were provided by SANDAG Series 13 Model

(c) Construction includes construction traffic and the closure of one lane on each roadway segment

(d) ADT determined by adding the estimated construction trip generation to the exisiting ADT. Construction Trip Generation based on the assumption that there will be 600 personnel in four separate crews (150 workers per site) and 413 truck trips at the four sites (104 truck trips per site). Both the workers and the trucks are assumed to have 1 trip in and one trip out per day.

3.17 UTILITIES AND SERVICE SYSTEMS

3.17.0 Existing Conditions

The Distribution System Modifications proposed by San Diego Gas & Electric Company and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located within the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Information regarding utilities and service systems was collected from websites for the County of San Diego and the cities of Poway and San Diego, and is described in Section 4.17 Utilities and Service Systems of the Proponent's Environmental Assessment (PEA) for the Pipeline Safety & Reliability Project (Proposed Project). Internet searches were also conducted to gather information regarding utility service providers in the vicinity of the Proposed Project. The Distribution System Modifications will not be located in areas served by any providers of potable water, water drainage facilities, electricity and natural gas, cable and telephone, sewer, or solid waste beyond those already identified and described in the PEA.

3.17.1 Impact Evaluation

Question 3.17a – Wastewater Treatment Requirement Exceedances

As discussed in the PEA, up to 4.7 million gallons of water will be used to hydrostatically test the integrity of the approximately 47-mile-long, 36-inch-diameter Proposed Project natural gas transmission pipeline. As discussed in Section 2.4.6 Hydrostatic Testing of Chapter 2 – Project Description Supplement, 33,206 gallons of water will be required to test the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement. It is anticipated that the test water will be obtained during hydrostatic testing of the new 36-inch pipeline. Therefore, the approximately 4.7 million gallons of water anticipated to be required to test the Proposed Project transmission pipeline will remain unchanged and will remain less than significant with the implementation of Applicants-proposed measures (APMs).". No additional portable restrooms will be required for the Proposed Project's Distribution System Modifications. As a result, the Proposed Project's Distribution System Modifications will not exceed the wastewater treatment requirements of the San Diego Regional Water Quality Control Board, and impacts to wastewater treatment requirements will remain less than significant.

During operation and maintenance, the Proposed Project's Distribution System Modifications activities will not generate additional wastewater. As a result, additional wastewater will not require treatment, and no additional impact will occur. Therefore, impacts from wastewater will remain less than significant.

Question 3.17b – Water and Wastewater Treatment Facility Expansion

As discussed in the PEA, potable water used for the Proposed Project will come from existing municipal sources, and no new water treatment facilities will be required to meet the demands of the Proposed Project. The Point Loma Wastewater Treatment Plant—which is located 14.82 miles southwest of the southern terminus of the Proposed Project—currently treats approximately 180 million gallons of wastewater per day and has the capacity to treat approximately 240 million gallons per day. As previously stated, 33,206 gallons of water will be required to hydrostatically test the Distribution System Modifications. It is anticipated that the test water will be obtained from hydrostatic testing of the new 36-inch pipeline. Therefore, the

approximately 4.7 million gallons of water anticipated to be required to test the Proposed Project pipeline will remain unchanged. There is also a small amount wastewater associated with portable restrooms. The Point Loma Wastewater Treatment Plant has significant excess capacity to treat wastewater, and the potential discharge required to hydrostatically test the Proposed Project and the Distribution System Modifications (plus the small amount of wastewater associated with portable restrooms) will not require the extension or expansion of the existing Point Loma Wastewater Treatment Plant to accommodate the potential discharge. As a result, an extension of sewer or water lines will not be required to serve the Proposed Project's Distribution System Modifications, and no new or expanded water or wastewater treatment facilities will be needed. Though wastewater will be generated by the Proposed Project and its Distribution System Modifications from portable restroom facilities, as well as from hydrostatic testing of the pipeline, the amount of wastewater will be well within the current capabilities of existing wastewater treatment facilities. As a result, additional wastewater will not require treatment, and no impact will occur.

Normal operation and maintenance of the Proposed Project's Distribution System Modifications will not require a water supply or produce wastewater that results in the need for any new water or wastewater treatment facilities, and the expansion of any existing facilities will not be required. Therefore, additional wastewater will not require treatment, and no impact will occur.

Question 3.17c – Water Drainage Facility Expansion

Construction of the Proposed Project's Distribution System Modifications will require the excavation of asphalt, concrete, and other excavated spoils. The removed regulator stations will be backfilled and paved over where they are located in city streets, or they will be replaced with similar material where they are located in road shoulders. As described in the PEA, post-construction storm water runoff from the Proposed Project area is expected to be similar to pre-existing conditions. Construction of the Distribution System Modifications will not result in a significant increase in impervious surfaces that will increase storm water runoff from Proposed Project areas as compared to pre-construction conditions. As a result, no new storm water drainage facilities will be constructed, and no additional impact will occur. Therefore, impacts will remain less than significant.

As discussed in the PEA, operation and maintenance activities for the Proposed Project will be conducted in the same manner as they are for the existing natural gas transmission lines operated by the Applicants in the vicinity of the Proposed Project. Following the completion of construction activities, the Proposed Project will not result in a significant increase in impervious surfaces that will increase storm water runoff from Proposed Project areas as compared to pre-construction conditions. As there will not be a significant increase in impervious areas or corresponding runoff, impacts will remain less than significant.

Question 3.17d – Water Supply Availability

As discussed in the PEA, water is anticipated to be the primary means of dust control during construction of the Proposed Project and its Distribution System Modifications. It is estimated that approximately six million gallons of water will be used on access roads and at active work areas to suppress fugitive dust during construction of the Proposed Project, and the Proposed Project's Distribution System Modification activities are anticipated to require approximately

14,000 gallons of water for saw cutting and dust control activities. This 14,000 gallons of water can be allocated from the approximately six million gallons of water described in the PEA for dust control. Therefore, impacts to water supply from the use of water for dust control will remain less than significant with the implementation of Applicants-proposed measures (APMs). As discussed previously, 33,206 gallons of water will be required to test the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement. It is anticipated that the test water will be obtained from hydrostatic testing of the new 36-inch pipeline. Therefore, the approximately 4.7 million gallons of water anticipated to be required to test the Proposed Project pipeline will remain unchanged. Thus, impacts to water supply from the use of water for hydrostatic testing will remain less than significant with the implementation of APMs.

Operation and maintenance activities will not require the use of water unless a repair or testing is necessary. Therefore, impacts will remain less than significant.

Question 3.17e – Wastewater Treatment Capacity

As discussed in the PEA, two facilities that have approximately 62.4 million gallons of available wastewater treatment capacity per day are in close proximity to the Proposed Project, and the Proposed Project is expected to generate 4,680 to 5,460 gallons of wastewater from portable restrooms per week during peak construction. Additionally, 33,206 gallons of water will be required to test the Mira Mesa extension, the Line 49-31B replacement, and the pre-lay segment replacement. It is anticipated that the test water will be obtained from hydrostatic testing of the new 36-inch pipeline. Therefore, the approximately 4.7 million gallons of water anticipated to be required to test the Proposed Project pipeline will remain unchanged and the impacts to waste water treatment facilities will remain less than significant.

Operation and maintenance activities for the Proposed Project's Distribution System Modifications will be conducted in the same manner as the activities are currently conducted for existing pipelines in the vicinity. No new restrooms will be required for the operation and maintenance of the Proposed Project's Distribution System Modifications, and no additional wastewater will be generated. As a result, no impacts to wastewater treatment capacity will occur from operation and maintenance of the Proposed Project's Distribution System Modifications.

Question 3.17f – Landfill Capacity

The Proposed Project's Distribution System Modifications will generate approximately 4,800 cubic yards of solid waste, in addition to the approximately 320,000 cubic yards of solid waste that will be generated from the Proposed Project. As discussed in the PEA, the Miramar Landfill, Sycamore Landfill, and Otay Landfill combined are estimated to have more than 54.5 million cubic yards of storage capacity remaining as of January 1, 2018. Solid waste generated by the construction of the Proposed Project will still account for less than 0.6 percent of the estimated combined landfill capacity in 2018. Therefore, the impact to landfill capacity will remain less than significant.

After construction has been completed, operation and maintenance of the Distribution System Modifications will continue in generally the same manner as other existing natural gas transmission lines operated by the Applicants. As discussed in the PEA, wastes generated during

operation and maintenance activities may include minor amounts of packaging materials, worn equipment, and food wastes from maintenance crew meals. Therefore, the impact to landfill capacity will remain less than significant.

Question 3.17g – Solid Waste Statutes and Regulations

The Applicants will dispose of all wastes during Proposed Project construction in accordance with federal, state, and local statutes and regulations related to solid waste and no impact will occur.

3.17.2 Applicants-Proposed Measures

No additional or increased impacts to utilities and service systems are anticipated to result from the Distribution System Modifications; therefore, no additional Applicants-proposed measures are proposed.

3.17.3 References

Insignia Environmental. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

3.18 CUMULATIVE ANALYSIS

3.18.0 Introduction

The Distribution System Modifications proposed by San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company—hereinafter referred to as "the Applicants"—are located in the City of Poway, the City of San Diego, and unincorporated areas of San Diego County. Proponent's Environmental Assessment (PEA) Section 4.18 Cumulative Analysis for the Pipeline Safety & Reliability Project (Proposed Project) describes the potential cumulative impacts related to the construction, operation, and maintenance of the Proposed Project. Consistent with the methodology used for the PEA, existing conditions and reasonably foreseeable projects were identified within a one-mile radius of each distribution system modification component. Information was gathered from Internet searches of local planning department and state agency websites and through correspondence with agency staff. The websites of the following entities were reviewed, and/or these agencies were contacted regarding development projects, road and utility improvement projects, and capital investment projects:

- California Energy Commission,
- California Department of Transportation (Caltrans),
- California Independent System Operator,
- California Public Utilities Commission (CPUC),
- City of Poway,
- City of San Diego,
- County of San Diego,
- California High Speed Rail Authority,
- San Diego Association of Governments (SANDAG),
- United States (U.S.) Department of Transportation, and
- Marine Corps Air Station Miramar.

3.18.1 Timeframe of Analysis

As discussed in PEA Section 3.7 Construction Schedule and Cost, construction of the Proposed Project is anticipated to begin in the third quarter of 2019 and is expected to take 15 to 21 months to complete. As discussed in Chapter 2 – Project Description Supplement, the overall Proposed Project construction schedule will be extended two to three months. For the purposes of this analysis, the construction of the Distribution System Modifications was assumed to occur approximately from September 2020 through March 2021.

3.18.2 Area of Analysis

A list of past, present, and planned future projects within one mile of the Distribution System Modifications has been analyzed in accordance with Section 15130(b) of the California Environmental Quality Act (CEQA) Guidelines.

3.18.3 Foreseeable Projects Inventory

For the purposes of this document, "reasonably foreseeable" refers to projects that federal, state, or local agency representatives have knowledge of, resulting from the formal application process.

Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications lists known projects that are within one mile of the Distribution System Modifications. The one-mile radius is appropriate based on the size, location, and the anticipated impacts associated with the Distribution System Modifications. The locations of the identified planned and proposed projects are depicted in Figure 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications.

3.18.4 Potential Cumulative Impact Evaluation

This section discusses whether the Distribution System Modifications will result in significant short-term or long-term environmental impacts when combined with other past, present, and reasonably foreseeable future projects in the area. Short-term impacts are generally associated with construction of the Distribution System Modifications, while long-term impacts are those that result from operation and maintenance of the Distribution System Modifications. The construction schedules were not available for some planned and proposed projects; thus, in order to be conservative, it was assumed that the schedules could potentially occur simultaneously with the construction schedule of the Distribution System Modifications.[1]

For the purposes of this document, past projects are defined by looking at existing land uses and known projects that have recently been completed or are ongoing. The majority of the Distribution System Modifications and associated workspaces are located within and adjacent to transportation corridors and are surrounded by small areas of residential uses, commercial uses, a community college, and open space. Attachment 3.10-B: Existing Land Uses Crossed in Section 3.10 Land Use and Planning depicts the existing land uses crossed by the Distribution System Modifications.

Cumulative impacts to the following resources could occur as a result of construction, operation, and maintenance of the Distribution System Modifications in conjunction with the other planned and proposed future projects:

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural, Tribal, and Paleontological Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas (GHG) Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise

[1] At the time of this analysis, the City of San Diego website containing information regarding the location of capital improvement projects was unavailable. Therefore, this list may not include all capital improvement projects within one mile of the Distribution System Modifications from Districts 5, 6, and 7 in the City of San Diego.

Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications

Project	Approximate Location	Jurisdiction	Approximate Distance from the Distribution System Modifications (miles)	Nearest Distribution System Modification Component	Project Description	Status	Anticipated Construction Schedule	
							Start	End
Interstate (I-) 15 Bikeway – Poway Road to Carmel Mountain Road	Poway Road to Carmel Mountain Road	SANDAG	0.02	Regulator Station 1500	Construction of a regional bikeway that follows I-15.	--	--	2050
Bear Valley Parkway North	Bear Valley Parkway, from San Pasqual Valley Road to Boyle Avenue	SANDAG	0.03	Regulator Station 1316	Widening of Bear Valley Parkway from San Pasqual Valley Road to Boyle Avenue from two lanes to four lanes, with a center median, a bike lane, and a shoulder in each direction of travel.	--	--	2020
I-15 Bikeway – Murphy Canyon Road to Affinity Court	Murphy Canyon Road to Affinity Court	SANDAG	0.05	Line 49-31B Replacement	Construction of a regional bikeway that follows I-15.	--	--	2050
Trench and Conduit Installation (Willow Creek Road)	Willow Creek Road between Caminito Membrillo and Aviary Road, San Diego	City of San Diego	0.09	Line 49-31B Replacement	Trenching of approximately 209 linear feet, installation of two-inch conduit and installation of pull boxes from an existing to a future streetlight that would be installed on Willow Creek Road. The trench depths would be approximately 18 inches and would be resurfaced once installation is complete. No street trees would be affected, and a traffic control plan would be implemented.	--	--	--
California High-Speed Train Project from Los Angeles to San Diego*	An alignment is pending engineering and environmental evaluation; however, the I-215/I-15 alignment generally follows I-215 and then the I-15 corridor to Mira Mesa.	California High Speed Rail Authority/ SANDAG	0.09	Regulator Station 1051	Construction of the Los Angeles to San Diego corridor of the California High-Speed Train, which extends over 170 miles, starting at a connection with the Los Angeles to Anaheim corridor and terminating in downtown San Diego.	Environmental review	2029[2]	--
I-15 Bikeway – Camino Del Norte to Aguamiel Road	Camino Del Norte to Aguamiel Road	SANDAG	0.18	Regulator Station 1516	Construction of a regional bikeway that follows I-15.	--	--	2050
Silvergate Care Facility PDP	16061 Avenida Venusto, San Diego	City of San Diego	0.22	Regulator Station 1101	Development of a 200 unit residential care facility on approximately 10.88 acres.	In review	--	--
State Route (SR-) 56 Bikeway - Azuaga Street to Rancho Penasquitos Boulevard	Azuaga Street to Rancho Peñasquitos Boulevard	SANDAG	0.24	Regulator Station 1500	Construction of a bike path.	--	--	2050

[2] An exact construction timeline is unknown; however, construction of the Los Angeles to San Diego phase of the high-speed train is not anticipated until the first phase from Los Angeles to San Francisco is completed. The Los Angeles to San Francisco phase of the high-speed train is anticipated to be completed by 2029.

Project	Approximate Location	Jurisdiction	Approximate Distance from the Distribution System Modifications (miles)	Nearest Distribution System Modification Component	Project Description	Status	Anticipated Construction Schedule	
							Start	End
Sycamore-Peñasquitos 230-kilovolt (kV) Transmission Line Project*	Sycamore Canyon Substation to Carmel Valley Road	SDG&E	0.25	Regulator Station 1500	Installation of a new 230 kV transmission line between the existing SDG&E Sycamore Canyon and Peñasquitos substations. A new 230 kV transmission line and the consolidation of two existing 69 kV power lines onto new double-circuit, steel structures that will replace existing, predominantly wood structures.	Environmental review	2016	2017
SR-56 I-5 to I-15 Project Study Report	SR- 56 from I-5 to I-15	Caltrans	0.28	Regulator Station 1500	Completion of a study on the upgrade of SR-56 to a six-lane freeway.	Engineering study	2014	--
Carroll Canyon Mixed Use*	9850 Carroll Canyon Road, San Diego	City of San Diego	0.39	Mira Mesa Pipeline Extension	Demolition of approximately 76,241 square feet of existing structures and on-site surface parking, and construction of a mixed-use development consisting of 260 residential units and approximately 12,200 square feet of commercial retail/restaurant space on approximately 9.28 acres.	Environmental review	--	--
The Glen at Scripps Ranch*	10455 Pomerado Road, San Diego	City of San Diego	0.43	Regulator Station C	Development of 450 assisted living units and 60 skilled nursing beds on an approximately 53-acre site. Construction of a facilities building and a commons building consisting of learning centers, a lecture hall, a library, an auditorium, fine dining, fine arts facilities, a tennis court, gardens, a fitness center, a pool, and approximately 9.90 acres dedicated to the Multi-Habitat Planning Area.	Approved February 2016	--	--
Aurora San Diego Hospital Amendment	11878 Avenue of Industry, San Diego	City of San Diego	0.46	Regulator Station 1516	Remodel and addition of 4,665 square feet to an existing hospital, including a 21-bed addition that results in a total of 101 beds.	Permits issued March 2015	--	--
Callado Road Green Street Infiltration Best Management Practice (BMP)*	Along Callado Road between Pastoral Road and Hispano Drive, and along Lomica Drive between Bolero Drive and Hispano Drive, San Diego	City of San Diego	0.46	Regulator Station 1101	Pilot BMP project to reduce pollutants entering the San Dieguito watershed; installation of pervious pavement, bioretention areas, landscaping, and planting along Callado Road between Pastoral Road and Hispano Drive in the Ranch Bernardo community.	Design	2016	2017
Miramar PL Segment Replacement	Immediately north of Scripps Lake Drive and east of the intersection of Scripps Lake Drive and Scripps Ranch Boulevard	City of San Diego	0.47	Mira Mesa Pipeline Extension	Replacement of four sections of existing Pre-stressed Concrete Cylinder Pipe with diameters ranging from 51 to 66 inches with new Cement Mortar Lined and Coasted pipe, totaling a length of 80 feet. All work would occur within existing trenches located within the right-of-way (ROW), with the exception of one section located within a business parking lot. Trenching would require a maximum trench width of six feet 10 inches and excavation depth of eight feet, which would not exceed the current pipe depth and previous soil disturbance.	Design	2017	2018
I-15 Bikeway – Carmel Mountain Road to Poway Road	Carmel Mountain Road to Poway Road	SANDAG	0.53	Regulator Station 1500	Construction of a regional bikeway that follows I-15.	--	--	2050

Project	Approximate Location	Jurisdiction	Approximate Distance from the Distribution System Modifications (miles)	Nearest Distribution System Modification Component	Project Description	Status	Anticipated Construction Schedule	
							Start	End
Use and Occupancy Permit – San Diego County Water Authority (SDCWA)	Adjacent to Miramar Reservoir, north of Scripps Lake Drive and west of Scripps Ranch Boulevard	City of San Diego	0.55	Mira Mesa Pipeline Extension	Non-exclusive use of the permit area solely as a temporary construction easement to facilitate the SDCWA trenching, tunneling, and replacement of two sections of existing pipelines located within the existing easement adjacent to the permit area. No equipment, material storage, or construction-related activities will be allowed in the permit area. Implementation of storm water BMPs in accordance with the City of San Diego's Storm Water Standards.	Environmental review	--	--
Mohnike Adobe and Barn Restoration	12115 Black Mountain Road, San Diego	City of San Diego	0.56	Regulator Station 1248	Design and construction of critical structural deficiencies that need to be made to the adobe and hay barn to extend the life of significant historic resources.	Preliminary engineering	2018	2018
Watermark/Medimpact	10182 Scripps Gateway Court, San Diego	City of San Diego	0.63	Regulator Station 1248	Office and retail development on an approximately 39.96-acre site.	In review	--	--
Pacific Village	10955 Carmel Mountain Road, San Diego	City of San Diego	0.66	Regulator Station 141	Redevelopment of an existing residential complex site with a new 564-unit residential complex consisting of 99 single-family dwelling units, 105 triplex units, 120 three-story townhomes, and 240 apartment units on approximately 41.45 acres.	Environmental review	--	--
I-15 Bikeway – Rancho Bernardo Community Park to Lake Hodges	Rancho Bernardo Community Park to Lake Hodges	SANDAG	0.87	Regulator Station 939	Construction of a regional bikeway that follows I-15.	--	--	2050
MC Addition at Remington Club	16916 Hierba Drive, San Diego	City of San Diego	0.98	Regulator Station 1101	Construction of a 41,480-square-foot, two-story, 48-unit-memory care wing expansion over subterranean parking, which is an addition to an existing 105,369-square-foot assisted living facility on approximately eight acres.	Application created	--	--
Heritage Bluffs II	South of Bernardo Center Drive and Carmel Valley Road and west of I-5	City of San Diego	0.99	Regulator Station 141	Development of 171 single-family residential units and construction of various site improvements, including associated public and private streets, hardscape, retaining walls, and landscaping on approximately 170 acres.	Environmental review	--	--
Casa De Las Campanas*	18655 West Bernardo Drive, San Diego	City of San Diego	0.99	Regulator Station 939	Removal of an existing 99-bed, 33,320-square-foot nursing facility and construction of a new 96,019-square-foot elderly care residential facility on an approximately 22.29-acre property.	Approved	2016	2018

Sources: Bose 2015; Gargas 2015; CPUC 2016; City of San Diego 2013; City of San Diego 2015a, 2015b, 2015c, 2015d, 2015e, 2015f, 2015g, 2015h, 2015i, 2015j; City of San Diego 2016a, 2016b, 2016c, 2016d, 2016e, 2016f, 2016g, 2016h; Google 2015; Insignia Environmental (Insignia) 2015; Mezo 2016; Fisher 2016; SANDAG 2015; Tirandazi 2016; Tucker 2016.

Notes: "--" = Information not available; "*" = this planned or proposed project was identified in the PEA.

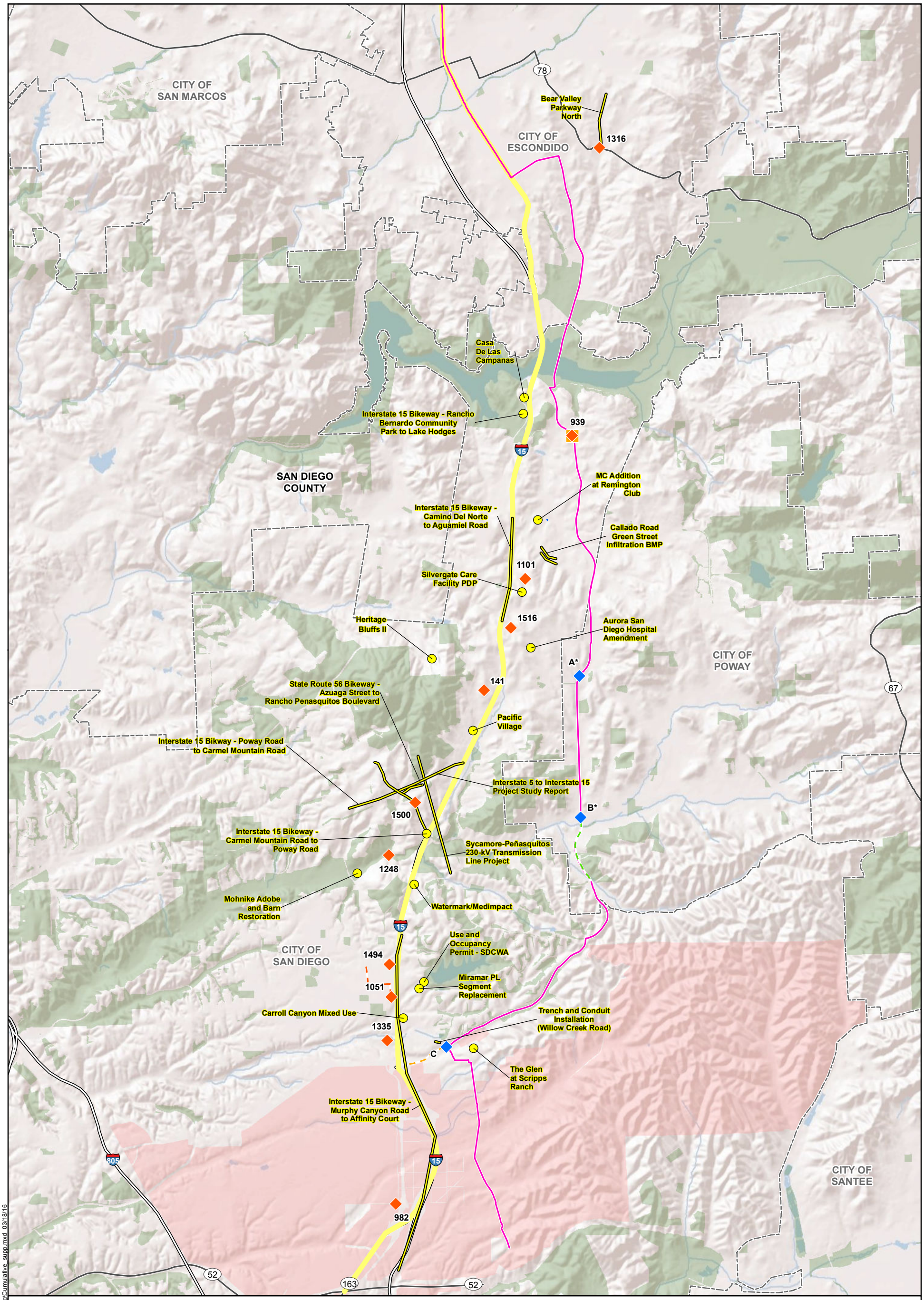

Figure 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications **Pipeline Safety & Reliability Project**

- Regulator Station Removal
- New Regulator Station
- Replacement Regulator Station
- Line 49-31B Replacement
- Mira Mesa Pipeline Extension
- Pre-Lay Segment Replacement
- Regulator Station Connection Pipeline
- Proposed Project Route
- Planned or Proposed Project Location
- Linear Planned or Proposed Project Location
- Proposed California High Speed Train Corridor
- City/County Boundary
- Parks
- Military
- Bureau of Indian Affairs

1:95,000

0 1 2 Miles

SoCalGas A Sempra Energy utility · SDGE A Sempra Energy utility · INSIGNIA ENVIRONMENTAL

- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems

These resources are discussed further in the subsections that follow.

Aesthetics

As discussed in the PEA, cumulative impacts to visual resources could occur where the Distribution System Modifications are viewed in combination with other past, present, planned, and probable developments in the same viewshed. The significance of cumulative visual impacts depends on a number of factors, including the degree to which the viewshed is altered and the extent to which scenic resources in the area are disrupted due to either view obstructions or direct impacts to scenic resource features. The Distribution System Modifications' viewshed is defined as the general area from which it is visible or can be seen. For the purpose of this analysis, the potential effects on foreground viewshed conditions are emphasized. The foreground is defined as the zone between 0.25 and 0.5 mile from the viewer. Landscape detail is most noticeable and objects generally appear most prominent when seen in the foreground.

Of the planned and proposed projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications, 15 are located within approximately 0.5 mile of the Distribution System Modifications and could have a cumulative impact on visual quality in the area. In addition, 11 of the 15 have a construction schedule that may overlap or is unknown and could overlap with construction of the Distribution System Modifications. The following 11 planned and proposed projects are located within 0.5 mile of the Distribution System Modifications and have a construction schedule that may overlap or is unknown and could overlap with the Distribution System Modifications:

- I-15 Bikeway – Poway Road to Carmel Mountain Road,
- Bear Valley Parkway North,
- I-15 Bikeway – Murphy Canyon Road to Affinity Court,
- Trench and Conduit Installation (Willow Creek Road),
- I-15 Bikeway – Camino Del Norte to Aguamiel Road,
- Silvergate Care Facility PDP,
- SR-56 Bikeway – Azuaga Street to Rancho Penasquitos Boulevard,
- SR-56 I-5 to I-15 Project Study Report,
- Carroll Canyon Mixed Use,
- The Glen at Scripps Ranch, and
- Aurora San Diego Hospital Amendment.

Projects that could overlap with the construction schedule of the Distribution System Modifications will increase the potential for adverse cumulative impacts to occur from construction equipment, vehicles, materials, staging areas, and personnel. However, as discussed in Section 3.1 Aesthetics, adverse visual impacts during construction will be short-term and

temporary, and no new permanent aboveground structures will be installed in areas considered scenic vistas. Temporary impacts to aesthetics during construction could be potentially cumulative if construction occurs within a viewshed of another project being constructed concurrently; however, because the Distribution System Modifications are spaced over multiple locations, construction impacts at any given location will be temporary and limited in duration, and construction equipment will not remain at each distribution system modification area for the entire two to three months of construction. Rather, equipment will generally be staged for only a few weeks at each location. Further, as shown in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications, the planned and proposed projects identified that are within 0.5 mile of the Distribution System Modifications are not concentrated within the same viewshed of one component of the Distribution System Modifications. Therefore, cumulative impacts to aesthetic resources will remain less than significant during construction of the Distribution System Modifications in conjunction with other planned and proposed projects.

Permanent cumulative visual impacts could occur as a result of aboveground Distribution System Modifications components being located near other proposed developments in the area. The only aboveground features associated with the Distribution System Modifications are the Electronic Pressure Monitoring Systems, which will be installed on a pole measuring six to 10 feet tall and located adjacent to the new regulator stations. Of the planned and proposed projects identified in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications, 15 are located within 0.5 mile of the Distribution System Modifications. However, only the Glen at Scripps Ranch project is located within 0.5 mile of the permanent aboveground components of the Distribution System Modifications. The Glen at Scripps Ranch is located approximately 0.43 mile east of Regulator Station C, and would involve the development of 450 assisted living units and 60 skilled nursing beds on an approximately 53-acre site. Due to the small scale of the EPM facility and the fact that it will be relatively unnoticeable, no cumulative impact will result when it is combined with The Glen at Scripps Ranch development.

The remaining aboveground structures associated with the Distribution System Modifications are not within the same viewshed as other planned and proposed projects, will be installed underground, or will involve the removal of existing regulator stations. Therefore, cumulative impacts to aesthetic resources will remain less than significant.

Agricultural Resources

As discussed in the PEA, cumulative impacts to agricultural resources could result from the loss of farmland or the disruption of agricultural practices. As discussed in Section 3.2 Agricultural and Forestry Resources, the Distribution System Modifications do not cross any Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, land under a Williamson Act contract, or forested land. Though portions of the Distribution System Modifications will be located on land designated as Grazing Land by the Farmland Mapping and Monitoring Program (FMMP) database, the Distribution System Modifications will not result in the conversion of Grazing Land to a use that precludes livestock grazing, as described in Section 3.2 Agricultural and Forestry Resources. Though the Distribution System Modifications cross portions of land zoned for agricultural use, these areas are already in use as transportation and

utility corridors and are not currently used for agricultural purposes. Thus, the Distribution System Modifications will not result in the conversion of agricultural or forested land to non-agriculture or non-forestry uses, so they will not continue to a cumulative impact to this resource. Therefore, cumulative impacts to agricultural resources will remain less than significant.

Air Quality

As described in PEA Section 4.3 Air Quality, the Proposed Project is anticipated to have temporary significant impacts during construction in regard to air quality plan consistency, air quality standards from construction equipment and worker vehicle exhaust, and criteria pollutant increases. These impacts will also occur during the Distribution System Modifications. To address potential impacts from the Proposed Project and its Distribution System Modifications, the Applicants will implement Applicants-proposed measures (APMs) during construction to reduce emissions and dust during construction, as discussed in PEA Section 4.3 Air Quality. As described in PEA Section 4.3 Air Quality, the implementation of these APMs will not reduce inhalable particulate matter (PM), fine PM, carbon monoxide (CO), and oxides of nitrogen (NO_x) emissions below applicable San Diego County Air Pollution Control District (SDAPCD) thresholds. While the Distribution System Modifications will not trigger a new exceedance, the Distribution System Modifications emissions will continue to exceed SDAPCD thresholds for CO, NO_x, and VOCs, as shown in Section 3.3 Air Quality. Therefore, the Distribution System Modifications will potentially temporarily conflict with or obstruct implementation of applicable air quality plans and violate air quality standards and/or pollutant criteria during construction.

The construction schedule for the Distribution System Modifications could overlap with the construction schedules of the following three proposed projects with anticipated significant air quality impacts listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications:

- Watermark/Medimpact,
- Carroll Canyon Mixed Use,[3] and
- Heritage Bluffs II.[4]

All of these projects being constructed within one mile of one another during the same timeframe will result in increased air pollutant emissions, resulting in a cumulative impact to air quality. These projects, as well as other projects within the Distribution System Modifications area, will be required to comply with local ordinances and regulations concerning air quality, including dust control, during construction activities. However, given the potential overlap in construction schedules for these projects and the Distribution System Modifications, any potential impacts will remain a cumulatively considerable, but temporary impact to air quality.

As discussed in Section 3.3 Air Quality and PEA Section 4.3 Air Quality, long-term operation of the Proposed Project will not include any permanent or stationary sources of pollution, and will

[3] An Environmental Impact Report (EIR) for this project has not been prepared yet; however, the Notice of Preparation for the project states that the project could potentially result in significant environmental impacts to air quality.

[4] An EIR for this project has not been prepared yet; however, the Notice of Preparation for the project states that the project could potentially result in significant environmental impacts to air quality.

not induce population growth or area employment resulting in significantly increased operational vehicle trips. Therefore, the Distribution System Modifications will not contribute to cumulative impacts to air quality, and impacts will remain less than significant.

Biological Resources

As discussed in 3.4 Biological Resources, the Distribution System Modifications have the potential to temporarily and permanently affect sensitive species, sensitive natural communities, jurisdictional waters, and native wildlife movements. The following 19 planned and proposed projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications have construction timelines that are unknown and could overlap with the Distribution System Modifications:

- I-15 Bikeway – Poway Road to Carmel Mountain Road,
- Bear Valley Parkway North,
- I-15 Bikeway – Murphy Canyon Road to Affinity Court,
- Trench and Conduit Installation (Willow Creek Road),
- I-15 Bikeway – Camino Del Norte to Aguamiel Road,
- Silvergate Care Facility PDP,
- SR-56 Bikeway – Azuaga Street to Rancho Penasquitos Boulevard,
- SR-56 I-5 to I-15 Project Study Report,
- Carroll Canyon Mixed Use,
- The Glen at Scripps Ranch,
- Aurora San Diego Hospital Amendment,
- I-15 Bikeway – Carmel Mountain Road to Poway Road,
- Use and Occupancy Permit – SDCWA,
- Mohnike Adobe and Barn Restoration,
- Watermark/Medimpact,
- Pacific Village,
- I-15 Bikeway – Rancho Bernardo Community Park to Lake Hodges,
- MC Addition at Remington Club, and
- Heritage Bluffs II.

Only three of these 19 planned and proposed projects with potentially overlapping construction schedules with the Distribution System Modifications have known or anticipated potential impacts to biological resources:

- Carroll Canyon Mixed Use
- The Glen at Scripps Ranch, and
- Heritage Bluffs II.

The remaining planned and proposed projects or meet the statutory exemption criteria set forth in the CEQA Guidelines and have no impacts to biological resources or are in the preliminary engineering/design phase, and therefore, impacts to biological resources are unknown at this time. However, a majority of the projects that have not gone through the environmental review

process yet are unlikely to affect biological resources because a majority of the projects will be within existing transportation corridors or on previously disturbed and developed land. .

Cumulative impacts to biological resources could occur as a result of increased ground-disturbing activities by multiple projects that could disrupt normal animal breeding, foraging, and migration behavior, as well as the potential removal of suitable habitat for multiple special-status plant and animal species, including species that are protected under the federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA). Most of the Distribution System Modifications will be constructed in existing roadways or developed areas that do not provide habitat for species; however, the removal of Regulator Station 1248 and Regulator Station 982 offer habitat for sensitive biological resources that will be impacted by construction activities.

Other planned and proposed projects (e.g., Carroll Canyon Mixed Use, The Glen at Scripps Ranch, and Heritage Bluffs II) may also have impacts to special-status species and their habitat. While the Distribution System Modifications and other planned and proposed projects may have impacts to sensitive species, all projects within the cumulative scenario will be subject to the same permitting requirements under the FESA and CESA, which are intended to minimize and mitigate for impacts to species, both at the project level and in a regional context. Therefore, cumulative impacts to biological resources—including sensitive natural communities, sensitive plant and wildlife species, and native wildlife movement—are expected to be less than significant after the required avoidance, minimization, and compensatory mitigation measures are applied.

The Distribution System Modifications will not result in any new impacts to potentially jurisdictional waters; therefore, they will not contribute to a cumulative impact to water resources. As a result, within implementation of APMs, cumulative impacts to biological resources will remain less than significant.

As discussed in the PEA, operation and maintenance of the Distribution System Modifications after construction will consist of periodic patrols, inspections, and occasional repairs. Most of these activities will be conducted on existing roadways, which will not impact sensitive resources. Where these activities may impact sensitive species, the Applicants will seek take coverage for the Proposed Project through a Section 7 consultation with the USFWS and a Section 2081 ITP from the CDFW, which will ensure that potential impacts to biological resources are avoided or minimized to the extent possible. Further, where the areas of disturbance will occur in sensitive habitat, they will be small and infrequent. The other planned and proposed projects could also adversely affect sensitive biological resources due to increased human activity in the vicinity of the newly constructed developments. This could further disrupt breeding, foraging, or migration behaviors. However, most of these activities are anticipated to occur in areas that are developed and no longer suitable habitat for sensitive species. As a result, the cumulative impact to biological resources will remain less than significant.

Cultural, Tribal, and Paleontological Resources

Cumulative impacts to cultural resources could occur as a result of increased ground-disturbing activities by multiple projects within the study area. As discussed in Section 3.5 Cultural, Tribal,

and Paleontological Resources, no previously historic addresses, structures, or resources were identified in the records search for the Distribution System Modifications. However, excavation associated with construction of the Distribution System Modifications has the potential to uncover and potentially damage or destroy unknown resources, similar to the excavation of the rest of the Proposed Project. Portions of the Distribution System Modifications and the following planned and proposed projects will occur within areas that have not been previously disturbed or developed, or where potential impacts to historic resources were identified:

- The Glen at Scripps Ranch,
- Heritage Bluffs II, and
- Sycamore-Peñasquitos 230-kV Transmission Line Project.

The small scale of the Distribution System Modifications and the fact that they are predominantly located in disturbed areas make it unlikely that they will contribute to a cumulative effect. While there is potential for cumulative impacts to cultural resources during construction of these projects and other projects that may occur within areas that have not been previously disturbed and the Distribution System Modifications, all of the project applicants will be required to implement mitigation measures to reduce potential impacts. As a result, cumulative impacts to cultural resources will remain less than significant.

The distribution system modification areas are underlain by geologic rock units/formations with moderate to high potential for containing paleontological resources, specifically Regulator Station A and portions of its connection pipeline, portions of the Mira Mesa pipeline extension, the Line 49-31B replacement, and the pre-lay segment replacement. As such, fossils may be encountered during excavation activities for the Distribution System Modifications, and construction has the potential to impact paleontological resources. It has also been determined that the following planned and proposed projects are underlain by geologic rock units/formations with moderate paleontological potential:

- Carroll Canyon Mixed Use,
- The Glen at Scripps Ranch, and
- Sycamore-Peñasquitos 230-kV Transmission Line Project.

Even though areas of the Distribution System Modifications are underlain by geologic rock units/formations with moderate to high potential for containing paleontological resources, the small size of the Distribution System Modifications, their potential to increase the cumulative impact to paleontological resources is limited. Further, the Applicants will implement the APMs identified in PEA Section 4.5.4 Applicants-Proposed Measures to minimize potential for the direct or indirect destruction of paleontological resources or unique geologic features. While there is potential for cumulative impacts to paleontological resources during construction of these projects and other projects that may occur within areas that have not been previously disturbed and the Distribution System Modifications, all of the project applicants will be required to implement mitigation measures to reduce potential impacts. As a result, cumulative impacts to paleontological resources will remain less than significant.

As discussed in Section 3.5 Cultural, Tribal, and Paleontological Resources, operation and maintenance of the Distribution System Modifications will occur in the same manner as the

activities that are currently conducted for existing natural gas facilities in the vicinity. The Applicants have developed standard internal programs and practices to avoid impacts to cultural resources, and they will be implemented during operation and maintenance of the Distribution System Modifications. In addition, operation and maintenance activities are not anticipated to require ground disturbance within previously undisturbed areas. As a result, it is not anticipated that cultural and paleontological resources will be encountered during such activities, and there will be no cumulative impact during operation and maintenance of the Proposed Project in conjunction with the operation and maintenance of other planned and proposed projects.

Geology, Soils, and Seismicity

As discussed in the PEA, the potential cumulative impacts that may occur as a result of the Distribution System Modifications—in conjunction with other planned and proposed projects—include threats to human safety and structural integrity, soil erosion or topsoil loss, geologic unit instability, or construction on expansive soils. All of the projects—and particularly the following—could potentially impact geology and soils:

- Carroll Canyon Mixed Use,
- Heritage Bluffs II,
- Sycamore-Peñasquitos 230-kV Transmission Line Project,
- MC Addition at Remington Club,
- Silvergate Care Facility PDP, and
- California High-Speed Train Project from Los Angeles to San Diego.

However, the potential for soil erosion and sedimentation will be minimized through the implementation of Storm Water Pollution Prevention Plans (SWPPPs) and BMPs, which are required for all projects that disturb one or more acres of soil. All of the projects will be designed to meet current building codes and safety standards, and will be required to adhere to regulations that limit developments on steep slopes and in landslide areas, thereby ensuring that the potential for long-term cumulative impacts are less than significant. As a result, the cumulative impacts to geology, soils, and seismicity will remain less than significant.

Greenhouse Gas Emissions

Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications and listed previously in the Biological Resources section have construction timelines that are unknown and could occur simultaneously. In addition, proposed operation and maintenance activities associated with other planned and proposed projects may potentially contribute to GHG accumulation by emitting carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHG analyses and thresholds are cumulative by nature, so if a project is less than significant under applicable thresholds of significance, the project does not contribute to cumulatively significant GHG impacts. As such, cumulative GHG impacts will remain less than significant.

Hazards and Hazardous Materials

Cumulative impacts to hazards and/or hazardous materials can result from the construction of concurrent projects and the Distribution System Modifications having an increased effect on public or worker safety, including exposure to hazardous materials, increased fire potential, or physical hazards. The projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications could involve the storage, use, transport, and potential for accidental release of hazardous materials similar to those described for the Distribution System Modifications. Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications and identified previously in the Biological Resources section have construction timelines that are unknown and could occur simultaneously. As a result, several of these projects have the potential to result in a cumulative impact related to overall hazards or hazardous materials when combined with the Distribution System Modifications.

Similar to the discussion in the PEA, because each of these projects requires construction equipment, these projects could potentially have a temporary impact from accidental releases of diesel and gasoline fuel, hydraulic fluids, and other hazardous liquids. While this potential hazard will exist during construction, a spill will be very unlikely to occur in the same immediate vicinity during a similar timeframe. Large releases of hazardous materials from multiple projects are highly unlikely with adherence to federal and state regulations. Small releases will be contained, cleaned up, and disposed of in accordance with applicable laws. As such, the cumulative impacts related to hazardous materials during construction are anticipated to remain less than significant.

As discussed in Section 3.8 Hazards and Hazardous Materials, the Distribution System Modifications are located within approximately 0.17 acre of the California Department of Forestry and Fire Protection (CAL FIRE) Fire Resource and Assessment Program's (FRAP's) Extreme Threat to People class, and approximately 14.24 acres are located within the Very High Threat to People Class. Construction or operation and maintenance activities could result in a fire due to the increased presence of vehicles, equipment, and human activity in areas of elevated fire hazard severity. Cumulative impacts regarding wildland fire risk could result from other planned and proposed projects being located within high fire hazard areas and performing construction or maintenance activities concurrently. Of the planned and proposed projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications, 15 of the projects have a construction timeline that may overlap with construction of the Distribution System Modifications and are also located within the CAL FIRE FRAP's Extreme Threat to People and Very High Threat to People classes. The Applicants will implement BMPs identified in the PEA, such as assessing work areas for wildland fire risk, reducing the number of hazards inside and around the perimeter of each work area, and implementing SDG&E's existing Operations and Maintenance Wildland Fire Prevention Plan. It is assumed that the other planned and proposed projects categorized within the Extreme Threat to People and Very High Threat to People classes will implement similar measures to reduce the risk of wildland fire hazards. Therefore, cumulative impacts related to exposing people or structures to a risk of loss, injury, or death related to wildland fires will remain less than significant.

As discussed in Chapter 2 – Project Description Supplement, operation and maintenance activities will be conducted in accordance with the Applicants' operation and maintenance procedures, and the Applicants' existing staff will operate and maintain the distribution pipelines and regulator stations; perform routine maintenance of the pipeline, check valves, and regulator stations; and respond to emergency situations. These operation and maintenance procedures also include emergency planning, on-call response, and incident reporting; and thus provide for prompt and effective responses to significant, irregular conditions detected along the pipeline. The planned and proposed projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications are mostly commercial, residential, infrastructure, and capital improvement projects; and they will not likely involve the storage, use, transport of large quantities of hazardous materials following the completion of construction. Further, the Distribution System Modifications and the planned and proposed projects will have to comply with the federal and state regulations to ensure hazardous materials are transported, handled, and disposed of in a safe manner. As a result, the cumulative impact related to hazardous materials will remain less than significant.

The Distribution System Modifications will have no impact to public or private airstrips; therefore, the Distribution System Modifications will not contribute to a cumulative impact to public or private airstrip hazards.

Hydrology and Water Quality

As discussed in the PEA, a cumulative impact could result from projects involving a significant amount of grading, which could alter natural drainage patterns, contribute to increases in runoff, or result in a degradation of water quality. Cumulative impacts could also result from multiple projects altering water courses, depleting groundwater supplies, creating or contributing to storm water runoff, substantially degrading water quality, or exposing people or structures to a significant risk of flood exposure. Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications have construction timelines that are unknown and could occur simultaneously, as identified previously in the Biological Resources section. Other planned and proposed projects are expected to affect hydrology and water quality, including Carroll Canyon Mixed Use project and the Sycamore-Peñasquitos 230-kV Transmission Line Project.

As discussed in the PEA, while minor alterations to drainage patterns could occur during construction activities, these impacts will be temporary and the original contours will be returned to pre-construction conditions to maintain the existing drainage patterns once construction is complete. There will be no impacts to groundwater resources because the Distribution System Modifications will not rely on groundwater for construction or operation. The Distribution System Modifications are not expected to result in significant increases in storm water runoff because most of the Distribution System Modifications will be located underground; the new aboveground facilities have minor, impervious surfaces and are discontinuous; and the Applicants will implement the BMPs in SDG&E's Water Quality Construction BMPs Manual to reduce or eliminate post-construction impacts. Further, no additional water will be required to construct the Distribution System Modifications. Other planned projects (e.g., the Carroll Canyon Mixed Use project and the Sycamore-Peñasquitos 230-kV Transmission Line Project) will also have the potential to impact surface water and drainage features during construction;

however, under Section 402 of the Clean Water Act, all projects disturbing more than one acre will be required to obtain a General Construction Permit, which will require the implementation of a SWPPP and BMPs to avoid erosion and water quality degradation. With the implementation of SWPPPs and BMPs, cumulative impacts to water resources will remain less than significant.

As discussed in Chapter 2 – Project Description Supplement, operation and maintenance activities will be conducted in accordance with the Applicants' operation and maintenance procedures, and the Applicants' existing staff will operate and maintain the distribution pipelines and regulator stations; perform routine maintenance of the pipeline, check valves, and regulator stations; and respond to emergency situations. As discussed in the PEA, if an unanticipated repair is necessary and requires excavation or grading, the Applicants will implement the BMPs in SDG&E's Water Quality Construction BMPs Manual to reduce or eliminate pollutants in runoff from disturbance areas. Therefore, the Distribution System Modifications are not anticipated to contribute to a cumulative impact to hydrology or water quality.

Land Use and Planning

As discussed in the PEA, cumulative impacts to land use and planning could occur as a result of the Distribution System Modifications in connection with other planned and proposed projects conflicting with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Distribution System Modifications. The Distribution System Modifications will not conflict with any applicable Habitat Conservation Plan, NCCP, or applicable local land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. In addition, the Distribution System Modifications will not create new physical barriers or physically divide an established community. As a result, the Distribution System Modifications will not contribute to a cumulative impact to land use and planning and impacts will remain less than significant.

Mineral Resources

Cumulative impacts to mineral resources that could occur as a result of the Distribution System Modifications in connection with other planned and future projects include loss of regionally or state-valued mineral resources. None of the projects that have gone through environmental review and are listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications are anticipated to significantly affect the exploration or extraction of mineral resources; however, some planned and proposed projects that had not gone through environmental review at the time of this analysis are located within areas designated as Mineral Resource Zone (MRZs), such as Pacific Village, MC Addition at Remington Club, and Silvergate Care Facility. As discussed in Section 3.11 Minerals, the Distribution System Modifications are not located within or directly adjacent to any current or proposed extractive operations. None of the mining operations identified within 0.5 mile of the Distribution System Modifications will be affected by construction due to the location and distance from construction activities. Though portions of the Distribution System Modifications cross areas designated as MRZ-2, the modifications will be constructed within and adjacent to existing roads, road shoulders, and/or SDG&E's existing ROW[5], which already preclude future extraction of

[5] For the purposes of this PEA Supplement, ROW includes SDG&E franchise rights and easement rights.

aggregate resources. In addition, the land surrounding the Distribution System Modifications is excluded from mining due to existing land uses, which include transportation and utility corridors and residential and commercial uses. Operation and maintenance activities will occur within SDG&E's ROW and will not involve the extraction of any known regionally or state-valued mineral resources. Therefore, construction and operation of the Distribution System Modifications will not contribute to a cumulative impact to mineral resources and impacts will remain less than significant.

Noise

Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications and listed in the Biological Resources section have construction timelines that are unknown and could occur simultaneously. Other projects (e.g., Carroll Canyon Mixed Use and Heritage Bluffs II) will also generate noise impacts during construction, and a temporary cumulative increase in noise could result when construction of these and other projects occur simultaneously with construction of the Distribution System Modifications. However, the Carroll Canyon Mixed Use and Heritage Bluffs II projects are more than five miles apart from one another, and Heritage Bluffs II is approximately one mile from the Distribution System Modifications, so their potential for a cumulative impact is very low. Additionally, and as discussed previously, because the Distribution System Modifications are spaced over multiple locations, construction impacts at any given location will be temporary and limited in duration, and construction equipment will not remain at each distribution system modification for the entire two to three months of construction. Rather, equipment will generally be staged for only a few weeks at each location.

Therefore, the Distribution System Modifications will not cause a substantial increase in the cumulative noise impacts discussed in the PEA. However, because construction noise may overlap with other planned and proposed projects in the vicinity of the Distribution System Modifications, the cumulative impacts to construction noise will remain potentially significant during construction.

As discussed in Section 3.12 Noise, operation and maintenance will not cause an increase in noise levels beyond the levels provided in the PEA, because all of the regulator stations will be below ground and will not emit noise. Therefore, no additional or increased impacts to noise levels are anticipated to result from the Distribution System Modifications. As a result, the distribution systems modifications' contribution to a significant cumulative noise impact will be minimal, and the cumulative impact will remain less than significant.

Population and Housing

Multiple residential developments, such as Heritage Bluffs II and Pacific Village, are included in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications. However, the Distribution System Modifications will be minor and temporary in nature, and will not facilitate regional growth. As discussed in Section 3.13 Population and Housing, construction of the Distribution System Modifications will not require additional personnel from the construction workforce identified in the PEA. Similar to the PEA, no planned and proposed residential projects are anticipated to be completed before construction of

the Distribution System Modifications; therefore, there will not be a cumulative population increase or an increased demand on housing needs during construction of the Distribution System Modifications. As a result, cumulative impacts to population and housing during construction will remain less than significant.

The Distribution System Modifications will have no impacts to population growth during operation and maintenance because no new employees will be required. Therefore, no cumulative impact to population and housing will occur from operation and maintenance of the Distribution System Modifications.

Public Services

Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications have construction timelines that are unknown and could occur simultaneously, and are also listed in the Biological Resources section. As discussed in the PEA, should there be multiple emergencies at several construction sites, cumulative impacts to local public services could occur. However, the probability of a single emergency incident is low, and the probability of simultaneous emergencies at multiple construction sites will be even lower. While the simultaneous construction of multiple projects in proximity to these public facilities could adversely affect the performance of the public facilities, none of the planned and proposed projects will be within 0.5 mile of Palomar Hospital, which is discussed in Section 3.14 Public Services. While the planned and proposed projects will be located within 0.5 mile of the schools discussed in Section 3.14 Public Services, the Applicants will implement APM-PS-01, which requires the Applicants to coordinate with appropriate schools (or the appropriate school districts) in the Distribution System Modifications area to reduce potential impacts. Therefore, cumulative impacts to public services during construction will remain less than significant.

Cumulative impacts to public services (e.g., fire and police protection, hospitals, schools, parks, and other public facilities) could result from lane closures and increased traffic in local roadways where these facilities are located. The impacts that could result from transportation and traffic during construction of the Distribution System Modifications are discussed further in the Transportation and Traffic section.

As discussed in the PEA, operation and maintenance of the Distribution System Modifications will be conducted by the Applicants' existing staff members, and no new commercial or residential development will be required or caused by the Distribution System Modifications; therefore, no additional public services or facilities will be needed as a result of operation and maintenance of the Distribution System Modifications. Therefore, cumulative impacts to public services will remain less than significant.

Recreation

The Distribution System Modifications are located within or adjacent to the Carmel Highland Golf Course and Los Peñasquitos Canyon Preserve; however, the Carmel Highland Golf Course is permanently closed. Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications have construction timelines that are unknown and could occur

simultaneously, and are also listed in the Biological Resources section. None of the planned and proposed projects with potentially overlapping schedules that have gone through environmental review are expected to affect recreation. Multiple planned and proposed projects involve the development of bikeways, which will be beneficial for recreation users. Additionally remaining projects are either in the preliminary engineering/design phase, and therefore, impacts to recreation resources are unknown at this time; however, they are unlikely to affect recreational resources because a majority of the projects will be within existing transportation corridors or on previously disturbed and developed land. Therefore, the Proposed Project's cumulative impacts to recreation will remain less than significant.

Operation and maintenance of the Distribution System Modifications will have no additional impacts to recreational resources. Therefore, the Distribution System Modifications will not contribute to a cumulative impact to recreation during operation and maintenance.

Transportation and Traffic

Construction of the Distribution System Modifications and 19 of the projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications have construction timelines that are unknown and could occur simultaneously, and are also listed in the Biological Resources section. Therefore this analysis conservatively assumes that all these projects will be constructed at the same time. Traffic could be increased in the surrounding area during concurrent construction of these projects. Because lane closures may be required during construction, the Distribution System Modifications will have a potentially significant impact to level of service (LOS) of some of the roadway segments crossed during construction, despite the incorporation of APMs. Additionally, the following planned and proposed projects listed in Table 3.18-1: Planned and Proposed Projects within One Mile of the Distribution System Modifications may potentially have an impact on LOS and be constructed at the same timeframe as the Distribution System Modifications:

- The Glen at Scripps Ranch,
- Watermark/Medimpact, and
- Carroll Canyon Mixed Use.[6]

With existing local roadway traffic conditions, the simultaneous construction of all of these projects occurring in the same area would result in a cumulative impact to transportation and traffic. Further, as discussed in the Public Services section, temporary slowdowns related to traffic congestion have the potential to cause temporary reductions in response times of emergency services. In addition, the ability to reach schools and other public facilities could be adversely affected by the cumulative increase in traffic. However, because the Distribution System Modifications are spaced over multiple locations, construction impacts at any given location will be temporary and limited in duration, and construction equipment will not remain at each distribution system modification for the entire two to three months of construction. Rather, equipment will generally be staged for only a few weeks at each location. Additionally, the Glen at Scripps Ranch, Watermark/Medimpact, and Carroll Canyon Mixed Use projects are each

[6] An EIR for this project has not been prepared yet; however, the Notice of Preparation for the project states that it could potentially result in significant environmental impacts to transportation/circulation/parking.

located within one mile of different components of the Distribution System Modifications, and are unlikely to cause temporary slowdowns and traffic congestion in the same roadways. Therefore, cumulative impacts to transportation and traffic will remain temporarily significant during construction of the Proposed Project in conjunction with other planned and proposed projects.

Permanent cumulative impacts are not anticipated as a result of the Distribution System Modifications in combination with other planned and proposed projects. As discussed in Section 3.16 Transportation and Traffic, operation and maintenance activities for the new facilities will be completed by the Applicants' existing staff and will be similar to the current operation and maintenance activities conducted at existing natural gas facilities in the area. In contrast, the Distribution System Modifications will result in less frequent maintenance visits to the locations where existing regulator stations will be removed. Operation and maintenance visits at the regulator station removal locations will be limited to those required for the existing distribution pipelines and other existing, co-located facilities that are not required to be removed. Additionally, operation and maintenance activities will be infrequent and will be conducted in accordance with all applicable traffic plans, ordinances, and policies; and impacts will be less than significant. Therefore, cumulative impacts to transportation and traffic during operation and maintenance will remain less than significant.

Utilities and Service Systems

No additional water beyond that described in the PEA for the Proposed Project will be required for the Distribution System Modifications. As a result, the distribution modifications will not contribute to cumulative impacts to utility service.

Operation and maintenance activities will not require the use of water unless a repair or testing is necessary, which is expected to occur infrequently. Utilities (i.e., water, sewer, drainage facilities, and landfills) will be needed in greater quantities by the other projects, particularly the Glen at Scripps Ranch, Carroll Canyon Mixed Use, and Pacific Village. Normal operation and maintenance of the Distribution System Modifications will not require a water supply or produce wastewater that results in the need for any new water or wastewater treatment facilities, and the expansion of any existing facilities will not be required; therefore, the Distribution System Modifications will not contribute impacts that will be cumulatively considerable. Therefore, the cumulative impacts to utilities and service systems will remain less than significant.

3.18.5 Conclusion

While the Distribution System Modifications will contribute to certain temporary cumulative impacts with the level of development activity in its vicinity (e.g., air quality, noise, and transportation and traffic), its contribution to these impacts is anticipated to be minimal and will not change the impact conclusions in the PEA.

3.18.6 References

Bose, Sheila. City of San Diego. Personal communication with D. Althaus, Insignia. March 16, 2016. 619-533-4698.

Gargas, Glenn. City of San Diego. Development Project Manager. Personal communication with D. Althaus, Insignia. March 15, 2016. 619-446-5142.

CPUC. 2016. San Diego Gas & Electric Sycamore-Peñasquitos 230-kV Transmission Line Project Final Environmental Impact Report. Online. http://www.cpuc.ca.gov/Environment/info/panoramaenv/Sycamore_Penasquitos/FEIR.html. Site visited March 16, 2016.

City of San Diego. 2013. The Watermark Final Environmental Impact Report (SCH No. 2010091079).

City of San Diego. 2015a. Casa De Las Campanas Negative Declaration.

City of San Diego. 2015b. The Glen at Scripps Ranch Final Environmental Impact Report (SCH No. 2013071013). Online. http://www.scrippsranch.org/images/stories/Documents/SRPG/GLENEIR/Final_EIR_Glen%20at%20Scripps%20Ranch_103015-web.pdf. Site visited March 15, 2016.

City of San Diego. 2015c. Notice of Application: MC Addition at Remington Club. Online. http://docs.sandiego.gov/citybulletin_publicnotices/LandUseAndDevelopment/PN1300%20PTS%20No.%20450210%20NA%2012-1-15.pdf. Site visited March 15, 2016.

City of San Diego. 2015d. Notice of Application: Silvergate Care Facility PDP. Online. http://docs.sandiego.gov/citybulletin_publicnotices/LandUseAndDevelopment/PN1300%20%23425893%20Date%207-13-15.pdf. Site visited March 16, 2016.

City of San Diego. 2015e. Notice of Application: Watermark/Medimpact – R/LUA. Online. http://docs.sandiego.gov/citybulletin_publicnotices/LandUseAndDevelopment/PN1300%20PTS%20No.%20443731%20-%20NA%2010-27-15.pdf. Site visited March 16, 2016.

City of San Diego. 2015f. Notice of Right to Appeal Environmental Determination: Miramar PL Segment Replacement. Online. http://docs.sandiego.gov/citybulletin_publicnotices/CEQA_appeal/NORA%2004-30-2015%20Miramar%20PL%20Segment%20Replacement.pdf. Site visited March 16, 2016.

City of San Diego. 2015g. Notice of Right to Appeal Environmental Determination: Use and Occupancy Permit – San Diego County Water Authority. Online. http://docs.sandiego.gov/citybulletin_publicnotices/CEQA_appeal/NORA%2004-03-2015%20UO%20SDCWA.pdf. Site visited March 16, 2016.

City of San Diego. 2015h. Notice of Preparation of a Draft Environmental Impact Report: Carroll Canyon Mixed Use. Online. http://docs.sandiego.gov/citybulletin_publicnotices/CEQA/PN1300%20%23240716%20NOP%20Date%208-14-15.pdf. Site visited March 16, 2016.

City of San Diego. 2015i. Public Notice of the Preparation of a Subsequent Environmental Impact Report: Heritage Bluffs II. Online.

http://docs.sandiego.gov/citybulletin_publicnotices/CEQA/PN1300%20%23319435%20NOP%20EIR%20Date%202-11-15.pdf. Site visited March 16, 2016.

City of San Diego. 2015j. Notice of Right to Appeal Environmental Determination: Callado Rd Green St Infiltration BMP. Online. http://docs.sandiego.gov/citybulletin_publicnotices/CEQA_appeal/NORA%2010-01-2015%20Callado%20Rd%20Green%20St%20Infiltration%20BMP.pdf. Site visited March 15, 2016.

City of San Diego. 2016a. CIP Project Information Detail: Callado Rd Green St Infiltration BMP. Online. http://cipapp.sandiego.gov/CIPDetail.aspx?ID=B13198. Site visited March 16, 2016.

City of San Diego. 2016b. CIP Project Information Detail: Citywide Manhole Improvements. Online. http://cipapp.sandiego.gov/CIPDetail.aspx?ID=B13177. Site visited March 16, 2016.

City of San Diego. 2016c. Miramar PL Segment Replacement. Online. http://cipapp.sandiego.gov/CIPDetail.aspx?ID=B15050. Site visited March 16, 2016.

City of San Diego. 2016d. CIP Project Information Detail: Mohnike Adobe and Barn Restoration. Online. http://cipapp.sandiego.gov/CIPDetail.aspx?ID=S13008. Site visited March 16, 2016.

City of San Diego. 2016e. Notice of Application: Pacific Village. Online. http://docs.sandiego.gov/citybulletin_publicnotices/LandUseAndDevelopment/PN1300%20PTS%20%20No.%20470158%20NA%202-24-16.pdf. Site visited March 15, 2016.

City of San Diego. 2016f. Notice of Right to Appeal Environmental Determination: Trench and Conduit Installation (Willow Creek Road). Online. http://docs.sandiego.gov/citybulletin_publicnotices/CEQA_appeal/NORA%2001-28-2016%20TrenchConduit%20WillowCreekRd.pdf. Site visited March 15, 2016.

City of San Diego. 2016g. Office of the City Clerk: City Bulletin of Public Notices. Online. https://www.sandiego.gov//city-clerk/officialdocs/notices/noticesadvanced. Site visited March 9, 2016.

City of San Diego. 2016h. Open Development Services Department: Approval #1410541 – Planned Development Permit [Aurora San Diego Hospital Amendment]. Online. http://opendsd.sandiego.gov/web/Approvals/Details/1410541. Site visited March 16, 2016.

Fisher, John. City of San Diego. Development Project Manager. Personal communication with D. Althaus, Insignia. March 15, 2016. 619-446-5231.

Google. 2015. Google Earth Pro Version 7.1.5.1557 Software. Program used March 15, 2016.

Insignia. PEA for the SDG&E and SoCalGas Pipeline Safety and Reliability Project. September 30, 2015.

Mezo, Renee. City of San Diego. Development Project Manager. Personal communication with D. Althaus, Insignia. March 15, 2016. 619-446-5001.

SANDAG. 2015. San Diego Forward: The Regional Plan. Online. http://www.sdforward.com/pdfs/RP_final/The%20Plan%20-%20combined.pdf. Site visited March 16, 2016.

Tirandazi, Firouzeh. City of San Diego. Project Manager. Personal communication with D. Althaus, Insignia. March 15, 2016. 619-446-5325.

Tucker, Joe. Applicant: Casa De Las Campanas. Personal communication with D. Althaus, Insignia. March 15, 2016. 503-892-5344.

APPENDIX A: PEA CORRECTIONS AND MODIFICATIONS

San Diego Gas & Electric Company (SDG&E) and Southern California Gas Company (SoCalGas)
A.15-09-013 Proposed Pipeline Safety & Reliability Project (Proposed Project)
Proponent's Environmental Assessment (PEA) Corrections and Modifications

PEA Section	PEA Page Number Associated with the Change	Correction/Modifications	Notes
1.4 PEA Summary	1-4	**1.4.0 California Department of Transportation** The Applicants met with representatives of the California Department of Transportation (Caltrans) several times to receive preliminary input on the potential for parallel encroachment of within Caltrans facilities as well as specific crossings of Interstate (I-) 15. The meetings took place in October 2014, November 2014, February 2015, and ~~June~~ July 2015. As a result of those discussions, the Applicants did not pursue the Infrastructure Corridor Alternative, and the crossing of I-15 was rerouted to a different location. In addition, the Applicants obtained an encroachment permit to conduct biological and cultural surveys where the survey corridor encroached on Caltrans property. The encroachment permit was issued by Caltrans on March 26, 2015, and is valid through September 30, 2015. Additional meetings with Caltrans are anticipated.	The red text indicates where a change was made.
1.8 PEA Summary	1-42	Email invitations for the open houses were sent to local elected officials and local government staff who had been previously briefed on the Proposed Project between January and September 2015. In addition, public notices were mailed to residences within 300 feet of the Proposed Project and residences within 100 feet of each of the Proposed Project alternatives, totaling over ~~23,000~~ 22,000 invitations.	The red text indicates where a change was made.
3.7 Construction Schedule and Proposed Project Cost	3-67	The Applicants previously provided corrections to the Estimated Construction Costs; however, those costs have been further updated to include the Distribution System Modifications. The most current Estimated Construction Costs are provided in Chapter 2 – Project Description of the PEA Supplement. The Applicants anticipate that costs will be litigated in the regulatory proceeding.	The red text indicates where a change was made.
4.13 Population and Housing	4.13-12	**City of San Diego** In 2013, the City of San Diego had an estimated population of 1,355,896 residents, or approximately 42 percent of the 3,211,252 total population of San Diego County. The Proposed Project will be constructed in the following four City of San Diego designated community planning areas: Rancho Bernardo, San Pasqual Valley, Scripps Miramar Ranch, and Rancho Encantada. In 2013, the estimated total population of these community planning areas was ~~93,082~~ 62,345, representing approximately ~~seven~~ five percent of the total population of the City of San Diego. As shown in Table 4.13-1: Population Totals and Trends, the City of San Diego is anticipated to grow by approximately ~~15.7~~ 18 percent by 2020.	The red text indicates where a change was made.
4.18 Cumulative Analysis	4.18-21	The Proposed Project will not result in any permanent impacts to potentially jurisdictional waters. Construction of the Proposed Project will result in direct temporary impacts to approximately ~~6.2~~ 2.7 acres of wetlands, and approximately ~~1.0~~ 0.82 acre of drainages that are potentially under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and/or California Department of Fish and Wildlife (CDFW).	The red text indicates where a change was made.
Chapter 5 – Discussion of Significant Impacts and Alternatives	5-8	Further, acquiring the additional ROW would affect ~~11~~ 10 public and governmental agencies, including local municipal agencies, municipalities, and state agencies. Approximately 24 commercial buildings, seven apartment buildings, and possibly two commercial pools may require total acquisitions for the additional ROW needed. Ranch and ranchette properties along the existing route would also be affected. The total ~~severance damage~~ partial acquisition cost is estimated to run as high as $8.625~~ 87 9.375~~ million and total costs for ROW acquisition are estimated to be over $106,000,000.~~range from $92 million to $93 million~~.	The red text indicates where a change was made.
Chapter 5 – Discussion of Significant Impacts and Alternatives	5-34	The additional ROW would cross through ~~11~~ 12 public and governmental agencies, including state agencies, regional agencies, municipalities, and local municipal agencies. Approximately 40 residences and ~~260~~ 10 businesses may require full acquisitions due to structural impacts and/or proximity to the ROW. Further, there would be impacts to existing ranch and ranchette properties along the existing route. ~~Severance damage~~ Partial acquisition could cost ~~from~~ approximately $1.82 ~~230~~ million~~ to $40 million~~, and the total cost for ROW acquisition would ~~range~~ be ~~from~~ over $343 million ~~to over $46 million~~. Calculations for acquisitions through eminent domain were not evaluated, but could result in substantial legal fees, further increasing the actual cost of the additional ROW required.	The red text indicates where a change was made.
Chapter 5 – Discussion of Significant Impacts and Alternatives	5-36	The No Project Alternative would require ~~42~~ 32 bypasses to be constructed to maintain service to customers during the testing.	The red text indicates where a change was made.
Chapter 3 – Project Description	3-21	Table 3-1 has been updated to include MP 2.3 with a footnote clarifying the type of crossing. The revised table is provided as Exhibit J: Response to 1.3-10 of the November 30, 2015 Application Completeness Response.	Not Applicable (N/A)
4.3 Air Resources	4.3-4, Table 4.3-1	A revised version of Table 4.3-1: State and Federal Ambient Air Quality Standards that has been prepared to include the latest standards is provided as Exhibit M: Response to 1.4.3-1 of the November 30, 2015 Application Completeness Response. The revisions are shown in underline and strikeout text.	N/A

PEA Section	PEA Page Number Associated with the Change	Correction/Modifications	Notes
4.3 Air Resources	Note 2, p. 4.3-14	As discussed in the footnote on page 4.3-14 of the PEA, the air quality analysis did not include air quality impacts associated with purging of the pre-lay pipeline segment or with the temporary portable natural gas system needed. However, the Applicants' response to Deficiency Letter 01 stated, *"The temporary portable natural gas system will be composed of a 400,000 btu heater, water tank, and heat exchanger. The heater will operate on natural gas and is used to heat the water. The water is then piped to the heat exchanger which will vaporize or de-gasify the liquefied natural gas (LNG). An ambient vaporizer will also be onsite, but will only operate if a backup to the primary system is required. This system will operate for 24 hours per day, 7 days per week, for approximately 2 months. LNG will be delivered to the site by tanker trucks. Approximately 60 truck trips will be required to supply LNG to the temporary natural gas system."*. Exhibit N: Response to 1.4.3-3 was also provided to depict the criteria air pollutant emissions associated with the temporary portable natural gas system will be less than 1 percent of the anticipated construction emissions.	The construction methodology for this component may change and the temporary gas supply may not be necessary.
4.3 Air Resources	4.3-16	• APM-AIR-06: Rock aprons or rattle plates will be installed, as needed, at the intersection of dirt access roads and paved public roadways to clean the tires of equipment prior to leaving the site. • APM-AIR-07: All public streets will be swept or cleaned with mechanical sweepers if visible soil is carried onto them by construction activities or vehicles. Cleaning will occur at the end of each workday or as soon as possible if the track out extends for a cumulative distance of greater than 50 feet in either direction. • APM-AIR-08: Exposed stockpiles (e.g., spoil, sand, etc.) will be covered and/or watered or stabilized with non-toxic soil binders as needed to control fugitive dust. • APM-AIR-09: Soil or other bulk material will be stabilized prior to handling or at the point of transfer with the application of sufficient water, chemical stabilizers, or by sheltering from the wind. During soil or bulk material movement or transfer, drop heights will be minimized to the extent feasible while maintaining safe operating conditions to reduce fugitive dust. • APM-AIR-10: During high-wind episodes (where wind speeds are deemed to be in excess of 25 miles per hour [mph]), water application will be increased as a contingency measure. If the further application of water is unable to control dust plumes, clearing and earthmoving activities will be halted until the dust plumes can be controlled or wind speeds drop below 25 mph.	Additional APMs (indicated by red text) were added to further mitigate impacts to air quality per E&E's request.
4.7 Greenhouse Gas Emissions	4.7-8, 4.7-9, Attachment 4.3-A	The methodology, assumptions, and calculations for the cold tie-in and blowdown GHG emissions were presented in Exhibit T: Response to 1.4.7-1 and 1.4.7-2 of the November 30, 2015 Application Completeness Response. Exhibit T: Response to 1.4.7-1 and 1.4.7-2 of the November 30, 2015 Application Completeness Response also includes updated versions of Table 4.7-3: Estimated Greenhouse Gas Construction Emissions and Table 4.7 4: Estimated Greenhouse Gas Operation and Maintenance Plus Construction Emissions. The revisions are shown in underline and strikeout text.	N/A
Chapter 5 – Discussion of Significant Impacts and Alternatives, Community Road Segment Alternative	5-48	A revised Figure 5-2: Proposed Project Route Segment Alternatives is provided as Exhibit EE: Response to 1.5-20 of the November 30, 2015 Application Completeness Response.	N/A
Chapter 5 – Discussion of Significant Impacts and Alternatives, Energy Conservation (California Environmental Quality Act [CEQA] Appendix F, Section 15126.4, Section 21100[b][3])	Ch. 5	A discussion of significant irreversible environmental changes is provided in Exhibit FF: Response to 1.5-22 of the November 30, 2015 Application Completeness Response to be added in Chapter 5.	N/A
Chapter 3 – Project Description, 3.7 Construction Schedule and Proposed Project Cost	3-66	Construction is scheduled to begin in the ~~first~~ third quarter of ~~2018~~ 2019 and is expected to take ~~12~~ 15 to ~~18~~ 21 months to complete.	These modifications do not change the conclusions of the PEA.

PEA Section	PEA Page Number Associated with the Change	Correction/Modifications	Notes
Chapter 5 – Discussion of Significant Impacts and Alternatives, No Project Alternative	5-35 and 5-36	Line 1600 is an approximately 49.7-mile, 16-inch-diameter, high-pressure natural gas transmission pipeline that begins at the Rainbow Metering Station south of the City of Temecula and terminates at Mission Station in the City of San Diego. Of the 49.7 miles, 45 miles would be hydrostatically tested. Line 1600 is one of two sources of natural gas serving the San Diego area, and the other is the 30-inch-diameter Line 3010. The No Project Alternative would involve the hydrostatic testing of Line 1600, which is approximately 50 miles long. Line 1600 supplies approximately 10 percent of the market demand for natural gas in San Diego County. In addition to supplying the service territory, approximately 175,000 distribution customers and three large customers are supplied by Line 1600.[1] … It is anticipated that the pipeline would be tested in ~~24~~ 19 segments; each test segment would take four to six weeks to conduct.[2] Therefore, the total testing would take ~~18 months~~ two to ~~two~~ three years to complete~~, including time for permitting and procurement~~.	These modifications do not change the conclusions of the PEA.
4.8 Hazards and Hazardous Materials, Attachment 4.8-B: Safety Study	Section 5.1.3 Pipeline Safety Improvement Act of 2002 (49 CFR Part 192, Subpart O), Page 9, second paragraph	The proposed 36-in (~~inner diameter of 34.75 in~~ nominal diameter) natural gas transmission pipeline is located within Class 1, 2 and 3 areas. As a result, using the first HCA definition, the portions of the line within Class 3 areas will be within an HCA. The impact radii are approximately 703 ~~is 678~~ ft for the 36-in line with an 800 psig MAOP.	These modifications do not change the conclusions of the PEA.
4.8 Hazards and Hazardous Materials, Attachment 4.8-B: Safety Study	Section 5.1.3 Pipeline Safety Improvement Act of 2002 (49 CFR Part 192, Subpart O), Page 9, fourth paragraph	The state requirements for designing, constructing, testing, operating, and maintaining gas piping systems are stated in CPUC General Order Number 112-F (which supersedes General Order 112-E). These rules incorporate the federal regulations by reference and contain~~, but for natural gas pipelines, they do not impose any additional safety~~ requirements beyond the federal requirements. State of California regulations provide specific safety requirements that are more stringent than the federal rules. Specifically, Section 143 of the new order increases leakage surveys of transmission pipelines, adds detailed specification of leak classification and action criteria, adds operator qualifications, requires removal of encroachments, and requires use of Compatible Emergency Response Standard. ~~Areas covered include: (a) exemptions, (b) hazardous pipeline safety technical standards, (c) intrastate pipeline operators, (d) leak detection and cathodic protection, (e) periodic hydrostatic testing, (f) hydrostatic test results, (g) maps, records procedures, inspections, (h) contingency plans, (i) notification of break, explosion or fire, (j) local enforcement, and (k) regulations for enforcement proceedings.~~	These modifications do not change the conclusions of the PEA.
4.8 Hazards and Hazardous Materials, Attachment 4.8-B: Safety Study	Section 9.0 Proposed Project Design Features, page 41, first paragraph	The pipeline will be designed, constructed, operated, and maintained in accordance with USDOT regulations CFR Title 49, Part 192, and CPUC standards embodied under ~~G.O. 112-E~~ G.O. 112-F.	These modifications do not change the conclusions of the PEA.

[1] After Application 15-09-013 was filed, a more detailed study and cost estimate of the No Project Alternative (Hydrotest) was prepared in response to the Ruling. *See*, Prepared Direct Testimony of Neil Navin, Attachment B, Line 1600 Hydrotest Study and Cost Estimate. The detailed study and cost estimate resulted in this clarifying correction to the scope of the No Project Alternatives, but do not alter the PEA analysis or conclusions.

[2] The detailed study and cost estimate for the No Project Alternative clarify that hydrostatic testing activities would occur during the "shoulder months" (between April 1 and June 1 and between October 1 and December 15, when there is less demand for natural gas) over the course of three years. This change in assumptions does not alter the PEA analysis or conclusions. *See*, Prepared Direct Testimony of Neil Navin, Attachment B, Line 1600 Hydrotest Study and Cost Estimate,