

VISUAL RESOURCES TECHNICAL STUDY
FOR THE SoCalGas NORTH-SOUTH PROJECT
RIVERSIDE AND SAN BERNARDINO COUNTIES, CALIFORNIA

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ACRONYMS

APM	Applicants' Proposed Measure
Caltrans	California Department of Transportation
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CPUC	California Public Utilities Commission
I	Interstate (freeway)
ISA	Inherent Scenic Attractiveness
KOP	Key Observation Point
LMP	Land Management Plan
LORS	Laws, ordinances, regulations and statutes
MLV	Main Line Valve
MP	Mile Post
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NPS	National Park Service
OPR	California Governor's Office of Planning and Research
PCT	Pacific Crest Trail
PDCC	Potential Development and Construction Corridor
PRC	Public Resources Code
ROW	Rights-of-Way
SBNF	San Bernardino National Forest
SCADA	Supervisory Control and Data Acquisition
SIO	Scenic Integrity Objective
SMS	Scenery Management System
SoCalGas	Southern California Gas Company
SR	State Route (highway)
USFS	United States Forest Service
USGS	United States Geological Survey

EXECUTIVE SUMMARY

AECOM prepared this Visual Resources Technical Study for the Southern California Gas Company (“SoCalGas”) and San Diego Gas & Electric Company (SDG&E) proposed North-South Project (“Proposed Project”), pursuant to the California Environmental Quality Act (“CEQA”) and the National Environmental Policy Act (“NEPA”). The primary components of the Proposed Project include constructing a 36-inch-diameter underground natural gas transmission pipeline along a 65-mile-long alignment between Adelanto and Moreno Valley, constructing sixteen enclosed above-ground Main Line Valves (“MLVs”) at 5-mile intervals along the pipeline alignment, and upgrading the Adelanto Compressor Station, located in San Bernardino and Riverside Counties, California. The pipeline would be largely located within existing SoCalGas rights-of-way (“ROW”) or public ROW. The 65-mile alignment also includes an approximately 13-mile portion within the San Bernardino National Forest (“SBNF”). The United States Department of Agriculture, United States Forest Service (“USFS”) has primary federal jurisdiction over the Proposed Project for land within the forest, guided by the SBNF Land Management Plan (“LMP”).

The study is based on a review of available information and field investigations conducted from April to June 2015 to characterize the existing visual setting along the proposed alignment, assess the potential impact to scenic resources and scenic integrity from the Proposed Project, and identify design efforts that would need to be undertaken to minimize and reduce potential impacts to scenic resources and scenic integrity to an acceptable level. The review included the “Proponent’s Environmental Assessment, North-South Project” dated 6 June 2014 prepared by SoCalGas and SDG&E (“Applicants”) and federal, State, county, and city aesthetics and visual resources regulations relating to the various jurisdictions through which the Proposed Project pipeline is located.

Site photographs were taken from sixteen Key Observation Points (“KOPs”) as representative views that are available to the general project, and visual simulations were prepared using site photographs and digital modeling for views from KOP locations to illustrate the potential visual effects of the Proposed Project on viewers at these locations. A viewshed analysis was conducted within 15 miles (agency background distance zone) of the Proposed Project to indicate the locations in the landscape from which Proposed Project facilities would be seen by the public and to determine the validity of KOPs. Existing scenic integrity levels were determined within the SBNF, based on the experience and related professional judgment of the Proposed Project consultant, after observation during multiple sites visits along the alignment and review of aerial imagery and site photographs. After a review of the regulatory framework and Proposed Project components, multiple site visits to coordinate with USFS and take photographs from KOP locations, and preparation of visual simulations, the evaluation of the potential impacts of the Proposed Project was conducted using CEQA thresholds and USFS LMP management standards to determine project impacts and consistency with the applicable SBNF Scenic Integrity Objective (“SIO”).

Evaluation of scenic vistas indicated that there are no federal, county, or city designated scenic vistas within the Proposed Project area. There are four State (Caltrans) designated vista points within a 15-mile radius of the Proposed Project. The Proposed Project would not be visible from three of these points due to intervening topography, vegetation, and existing structures in the foreground. The construction of the Proposed Project would potentially be visible in the middleground and background from the Donald S. Wieman Vista Point, located approximately 4.5 miles northeast of the Proposed Project, but it would not be expected to adversely affect the vista because the portion of the alignment within the viewshed from this vista point would follow existing roads and predominantly be located within urban areas. Operation would not be expected to impact scenic vistas because the pipeline would be underground and the MLVs would blend in with the existing structures within the viewshed from Donald S. Wieman Vista Point.

Therefore, there would be a less than significant impact in relation to substantial adverse effects on a scenic vista.

Evaluation of scenic resources within a State scenic highway indicated that the construction and operation of the Proposed Project would not affect scenic resources within any Officially Designated State scenic highway corridors because the Proposed Project area is not located within any Officially Designated State scenic highway corridors. However, construction activities would potentially require the removal of trees and rock outcroppings in the Proposed ROW, within one-half mile of State Route (“SR”) 138, an eligible State scenic highway. Operation would not be expected to impact scenic resources within designated or eligible State scenic highways. Implementation of Applicants’ Proposed Measures (“APM”) AES-1 and APM-AES-2 is recommended to reduce temporary impacts from construction of the Proposed Project to below the level of significance.

Evaluation of visual character or quality indicated that the Proposed Project would be consistent with the visible existing utility infrastructure within the Proposed Project area (existing pipelines, electrical transmission lines, and underground cables). The Proposed Project landscape is characterized by a mix of land uses along the 65-mile alignment, including residential landscapes, forest lands, open space public lands, desert landscape, and utility infrastructure. Outside of the SBNF, Segment 1 retains more natural areas with only scattered residential development. Segments 3 is an urbanized area, and the Proposed Project would be located primarily with existing road ROWs. Segment 4 includes Reche Canyon. Operation of the Proposed Project would include periodic inspections, maintenance, and repair work that would not result in additional changes to the visual character or quality of the site and its surroundings.

Evaluation of sources of light and glare during construction and operations indicated that although temporary lighting would be used for nighttime construction, the lighting would be directed toward the construction activities and installed in accordance with the applicable provisions of the San Bernardino County Night Sky Protection Ordinance and the Riverside County Ordinance No. 655 Regulating Light Pollution (San Bernardino County 2007; Riverside County 1998). Standalone portable light towers/poles may be used to provide illumination at night at the staging yards and/or compressor and limiting sites for safety and security purposes. These lights would be oriented to minimize their effect on any nearby sensitive receptors. Therefore, less than significant impacts in regard to new sources of light or glare are anticipated from construction of the Proposed Project. Similarly, operation impacts are anticipated to be less than significant as permanent nighttime lighting would also be installed in accordance with the applicable provisions of the San Bernardino County Night Sky Protection Ordinance and the Riverside County Ordinance No. 655 Regulating Light Pollution (San Bernardino County 2007; Riverside County 1998).

Effects on scenery within SBNF would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels, but within 3 years of construction would return to a Moderate SIO. APM-AES-1 would reduce the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

It is feasible to reduce aesthetics impacts to below the level of significance with the implementation of recommendations, as specified by APM-AES-1 and APM-AES-2.

1.0 INTRODUCTION

This report characterizes the visual resources in the proposed alignment of the Proposed Project corridor to determine how the Proposed Project could affect the aesthetic character of the landscape, and measures that can be undertaken to remediate the temporary effects on the visual character of the area, caused by grubbing and grading required to install the pipeline. The Proposed Project is located in San Bernardino and Riverside Counties, California, and an approximately 13-mile portion within the SBNF. The pipeline would be largely located within existing SoCalGas ROW or public ROW; however, Proposed Project construction would require temporary access roads, staging areas, and work areas that may extend beyond the existing ROW. This larger area, which includes temporary work space, is known as the Pipeline Design and Construction Corridor (“PDCC”). The California Public Utilities Commission (“CPUC”) has primary State jurisdiction over the Proposed Project by virtue of its discretionary approval authority over construction, operation, and maintenance of public utility facilities. Because local governments generally do not have discretionary authority over CPUC jurisdictional projects, such projects are generally exempt from local land use and zoning regulations and non-discretionary permitting. However, as part of the CEQA impact analysis, this report considered local and State land use plans and policies. The SBNF has primary jurisdiction for land within the forest. Construction and operation of the approximately 13-mile portion within the SBNF requires issuance of a Right-of-Way permit by the USFS, thus triggering environmental analysis pursuant to NEPA. This report considered the federal land use plans and policies relative to federal land.

Visual resources are generally defined as the natural and built features of the landscape that are visible and that contribute to the public’s experience and appreciation of the environment. The USFS further defines scenic resources as “attributes, characteristics, and features of landscapes that provide varying responses from, and varying degrees of benefits to, humans” (USFS 1995). Landforms, water, and vegetation patterns are among the natural landscape features that define an area’s visual character, whereas buildings, roads, and other structures reflect human modifications to the landscape. These natural and built landscape features are considered visual resources that contribute to the public’s experience and appreciation of the environment. This section analyzes whether construction and operation of the Proposed Project would alter the perceived visual character and scenic integrity of the environment and cause visual impacts.

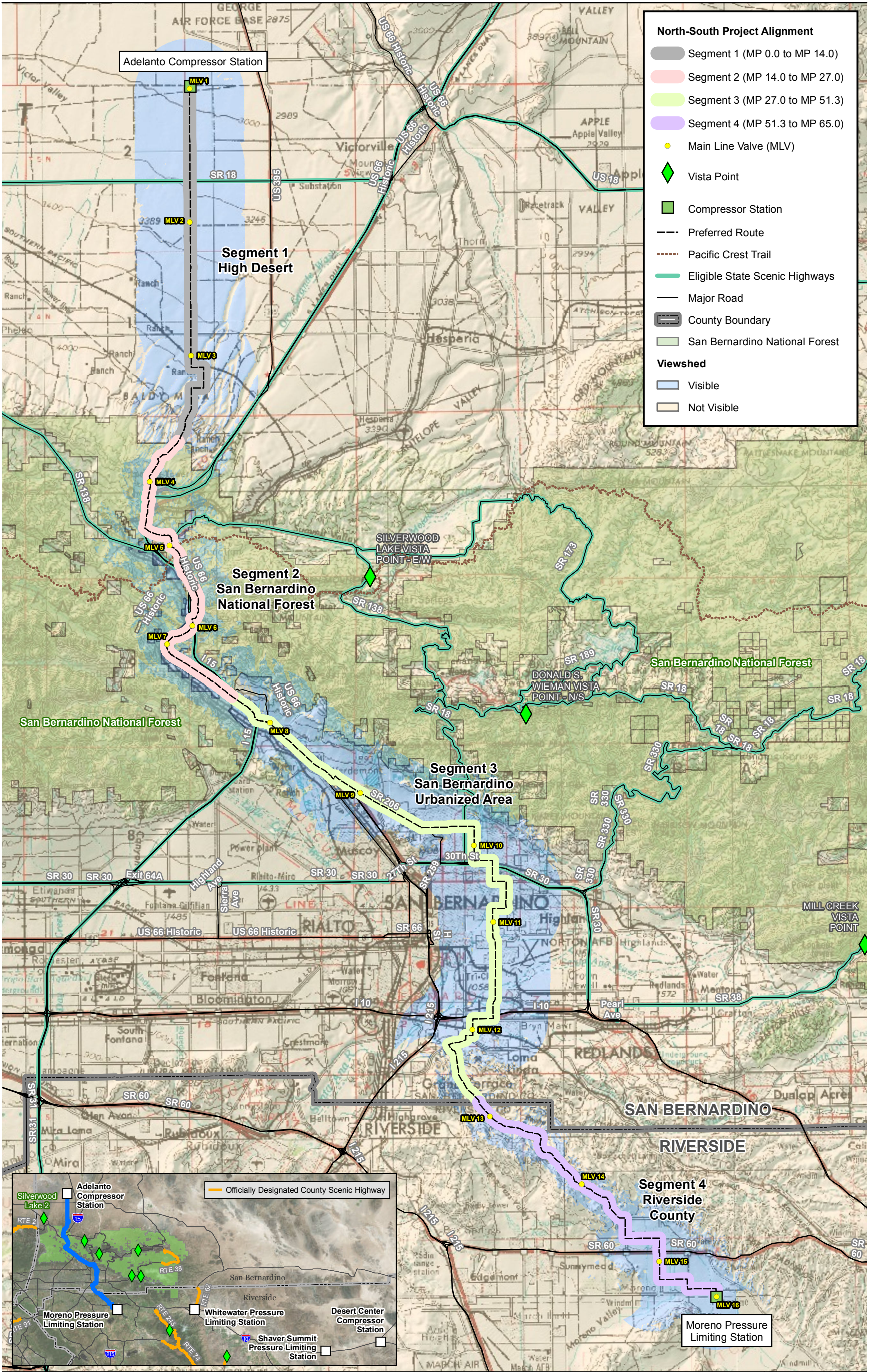
2.0 PROJECT DESCRIPTION

The primary components of the Proposed Project include the construction and installation of an underground 36-inch-diameter natural gas transmission pipeline and the upgrade of the Adelanto Compressor Station. Landscaping would be provided to screen the perimeter of the Adelanto Compressor Station, using plant species that would be noninvasive and drought tolerant. The compressor station would be fenced with a masonry block wall that would be up to 8 feet in height. New light fixtures may be required to facilitate occasional (and/or emergency) nighttime operation and maintenance needs within the existing property boundary. The Proposed Project also includes installation of pressure-limiting equipment at the Moreno, Whitewater, and Shaver Summit Pressure Limiting Stations and upgrades to the existing pressure-limiting equipment at the Desert Center Compressor Station. At Moreno Pressure Limiting Station, the chain-link fence surrounding the existing equipment would be extended by approximately 150 feet to the north and by approximately 100 feet to the east.

The approximately 65-mile-long pipeline alignment begins at the Adelanto Compressor Station in the City of Adelanto and proceeds in a southerly direction through unincorporated San Bernardino County and the City of Victorville. The alignment then runs along Interstate (“I”) 15 through the Cajon Pass and the SBNF and terminates at the Moreno Pressure Limiting Station in the City of Moreno Valley. The pipeline, which would be located underground at a minimum depth of 42 inches below grade, would be primarily constructed and installed within existing public and private ROW. The pipeline is intended to parallel the existing underground CALNEV pipeline where feasible and would parallel portions of three existing, predominantly underground SoCalGas-operated pipeline facilities within the utility corridor (1185, 4000, and 4002). Warning signs would be installed directly above the underground pipeline or at an offset where the pipeline would be under a road, oriented perpendicular to the pipeline. Spacing of the warning signs would be at line of sight intervals, and crossings of roadways, highways, canals, streams and rivers and all angle points along the alignment.

A series of MLVs would be installed in the new pipeline at intervals of 5 miles along the pipeline in order to isolate pipeline segments for maintenance or in response to an emergency. Sixteen MLV stations would be installed along the 65-mile pipeline alignment. The MLVs would reside above ground. The MLVs would be 36 inches in diameter and full-opening in design to allow for the passage of internal inspection devices. Each MLV location would have a blowdown valve installed on each side of the MLV to allow for depressurization of either of the adjoining pipe segments, and a blowdown line would be installed between each blowdown valve and blowdown stack. One blowdown stack would be located at each MLV location. The blowdown stacks would be 12 inches in diameter and would extend 5 to 7 feet above grade. Supervisory control and data acquisition (“SCADA”) equipment would be installed at each block valve location requiring installation of communications equipment (powered by solar or existing commercial power), above-grade radio antenna up to 40 feet in height, and equipment housing. Each block valve location would require an approximately 50-foot-wide by 75-foot-long area and would have security fencing installed around the perimeter and gravel installed within the fenced area. The security fencing would be up to 8 feet in height with three strand barb wire around it and would consist of chain-link fencing in the more rural locations and masonry block wall or use of an underground vault in the more urban/residential locations where open space is not available for an above grade MLV. Landscaping would be provided where needed to screen the perimeter of the security fencing (see APM-AES-2). Plant species would be noninvasive and drought tolerant. Within the SBNF, the plant species would be native/endemic to the local vegetative surroundings of Cajon Pass. No light fixtures are anticipated at the block valve locations.

The Proposed Project is depicted on the U.S. Geological Survey's (“USGS”) Adelanto, Baldy Mesa, Cajon, Devore, San Bernardino North, San Bernardino South, Redlands, Sunnymead, and El Casco 7.5-minute quadrangle maps (**Exhibit 1a, Project Study Area**). The Whitewater Pressure Limiting Station,



Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.

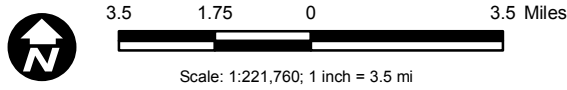
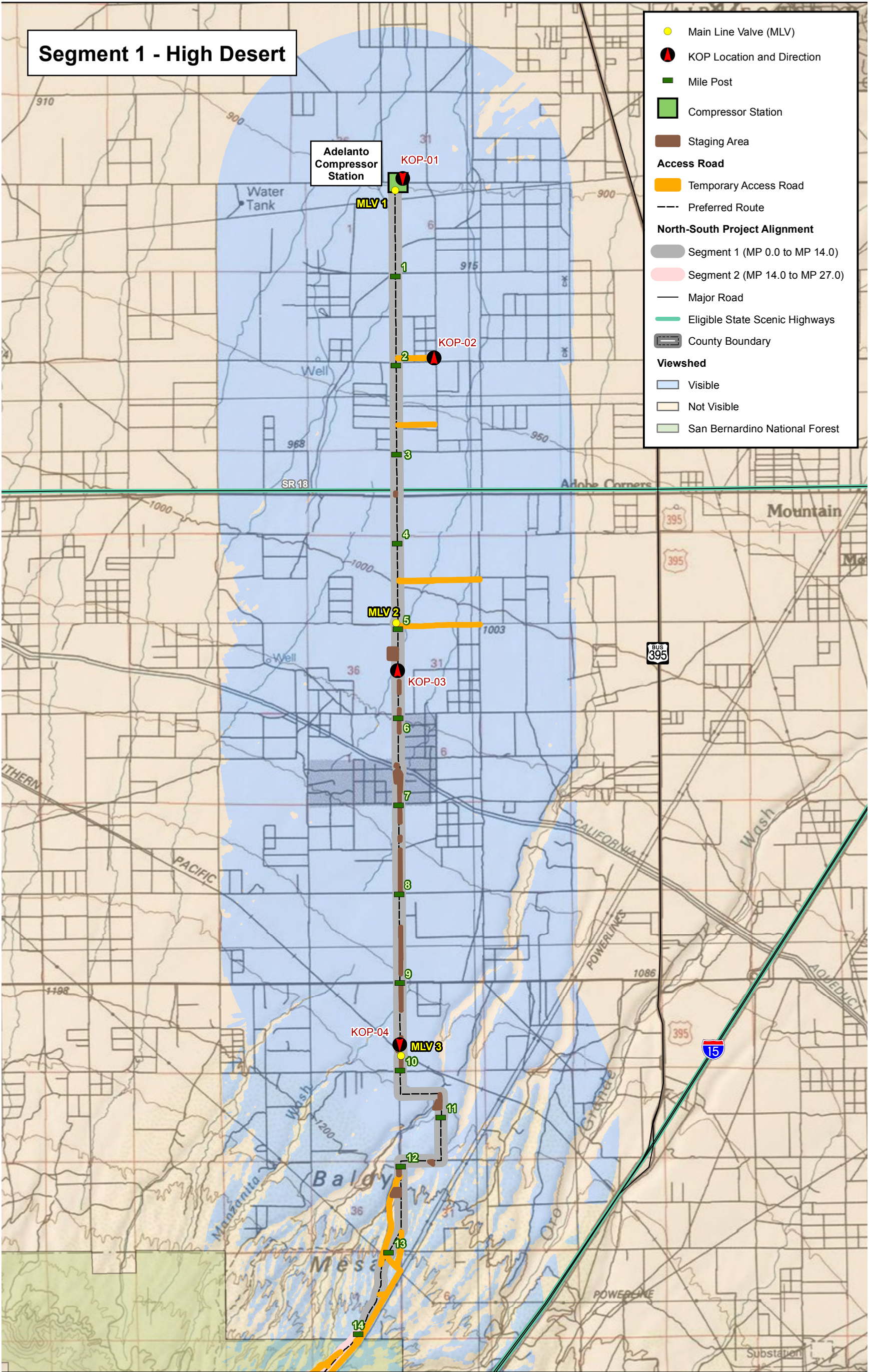


Exhibit 1A
Project Study Area
North-South Project

Segment 1 - High Desert



- Main Line Valve (MLV)
- KOP Location and Direction
- Mile Post
- Compressor Station
- Staging Area
- Access Road
 - Temporary Access Road
 - Preferred Route
- North-South Project Alignment
 - Segment 1 (MP 0.0 to MP 14.0)
 - Segment 2 (MP 14.0 to MP 27.0)
 - Major Road
 - Eligible State Scenic Highways
 - County Boundary
- Viewshed
 - Visible
 - Not Visible
 - San Bernardino National Forest

Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.

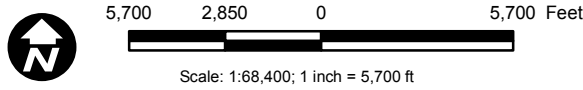
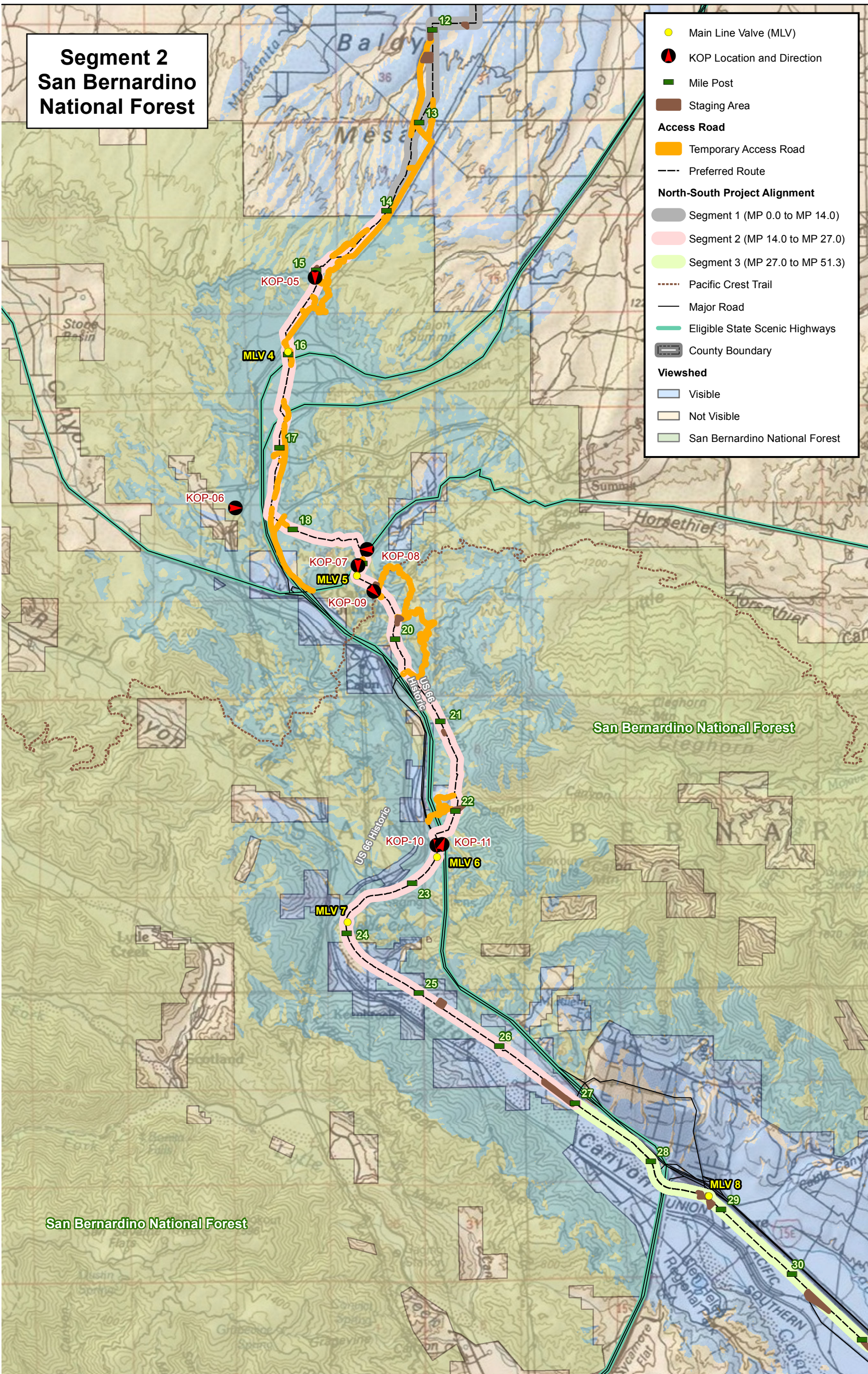
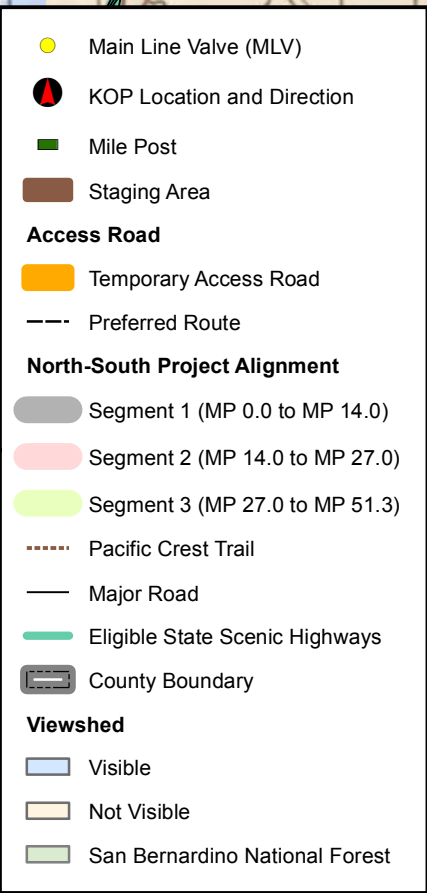


Exhibit 1B
Project Study Area - Segment 1
North-South Project

**Segment 2
San Bernardino
National Forest**



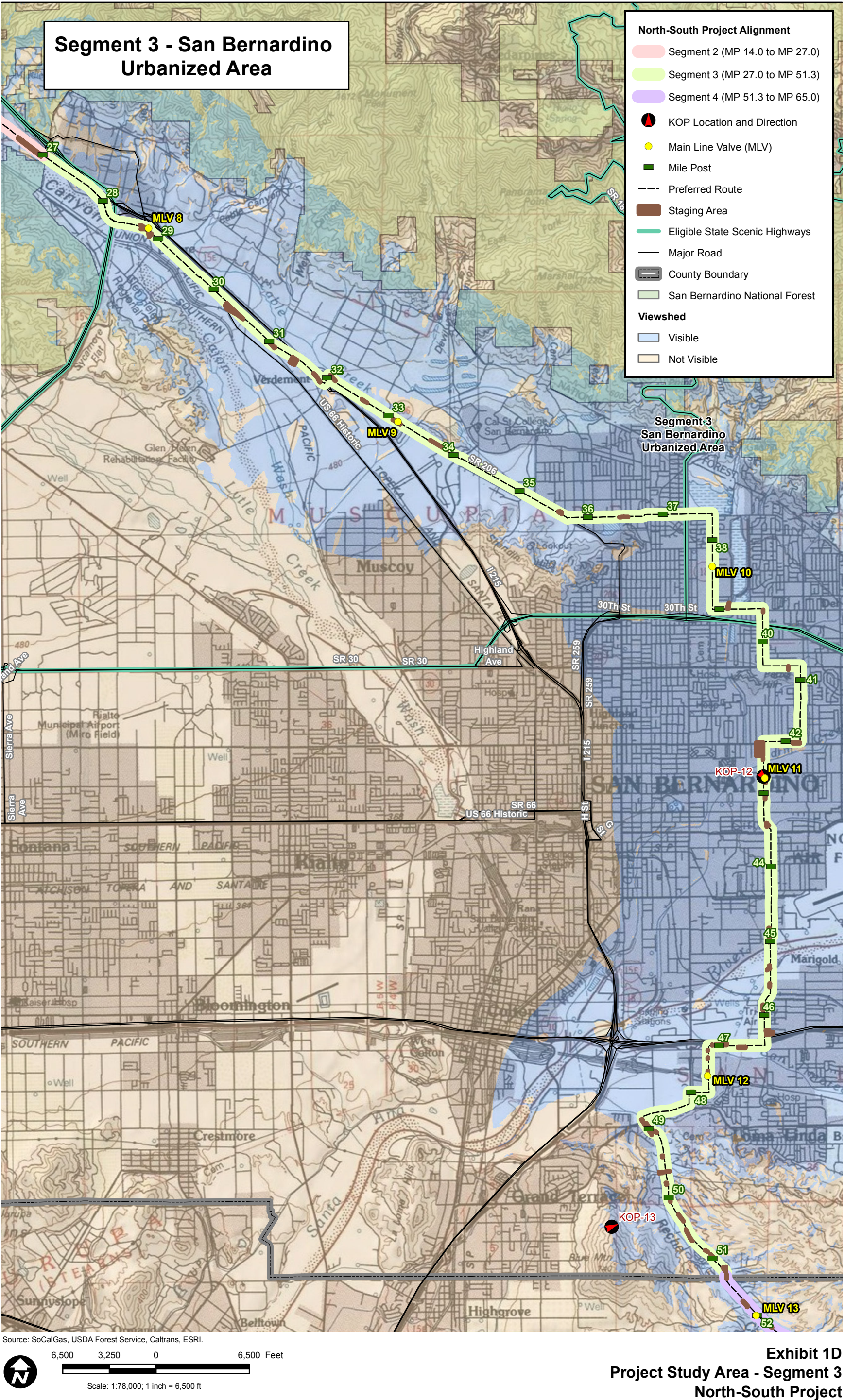
Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.

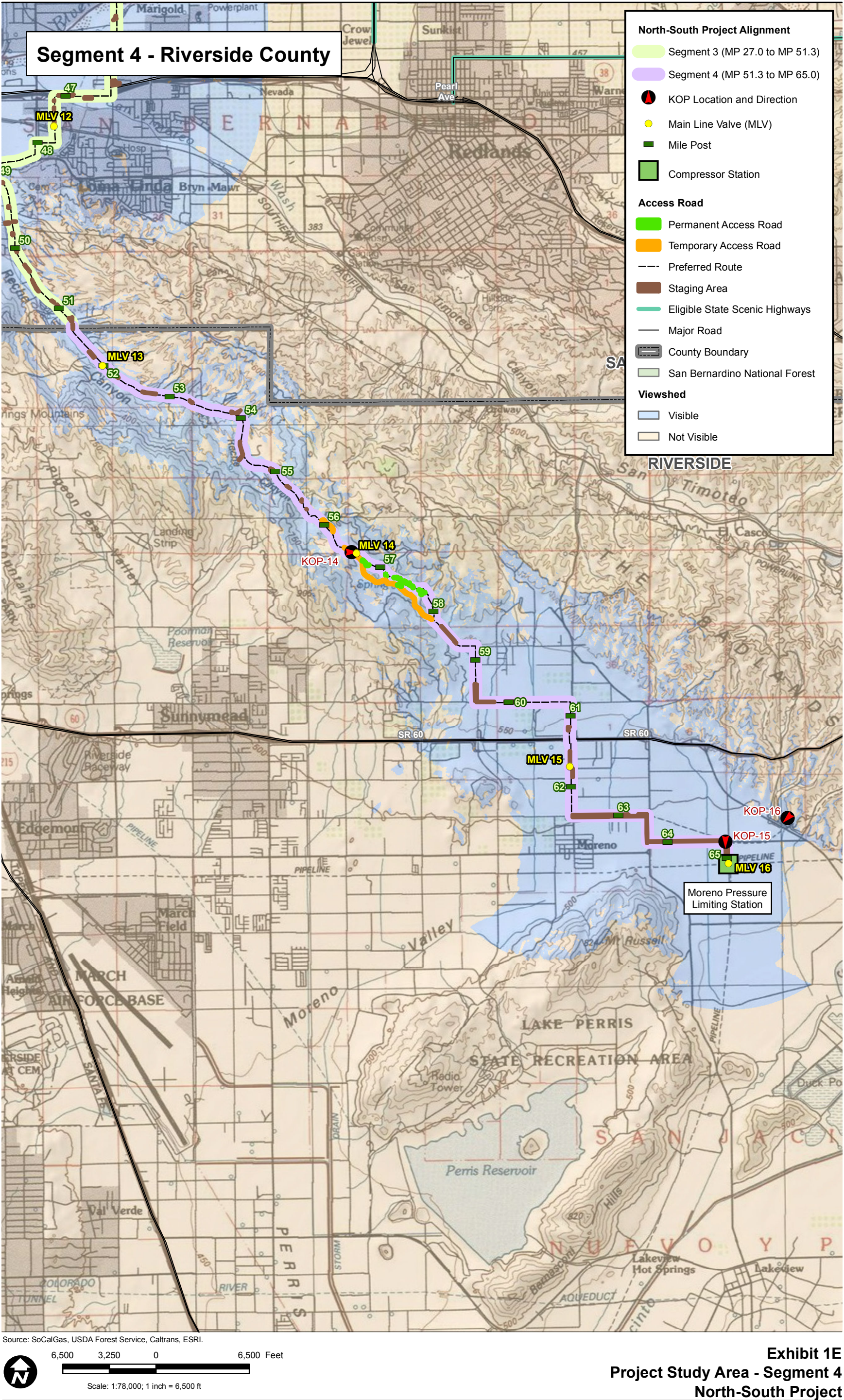


1 0.5 0 1 Miles

Scale: 1:63,360; 1 inch = 1 mi

Exhibit 1C
Project Study Area - Segment 2
North-South Project





Shaver Summit Pressure Limiting Station, and Desert Center Compressor Station are depicted on the USGS' Desert Hot Springs, Cottonwood Spring, and Desert Center 7.5-minute quadrangle maps, respectively.

2.1 Construction Scenario

A thorough review of the construction scenario was undertaken to ensure an accurate characterization of the magnitude and duration of temporary disruption of the visual character of the area during construction; as well as identifying opportunities to optimize the effectiveness of the proposed salvage and restoration of native plant communities. The pipeline construction would function like a "moving assembly line." Construction of the pipeline would occur in 2,000-foot to 1-mile segments. Work hours would occur after dark in locations where permitted by local noise ordinances. As one crew completes its work, the next crew would move into position to complete its piece of the construction process. The work area may be up to 15 miles in length in the open land area and up to 1 mile in length in the urban areas, with the front area crew clearing the downstream ROW or saw cutting pavement in urban areas and the back area crew restoring the street and or re-establishing contours in open land areas within the ROW. When compaction of the trench for each segment of the pipeline has been completed, the pipeline ROW would be restored to its original condition to the extent possible (see APM-AES-1). The ROW would be cleared of all construction-related materials and equipment. In areas where the pipeline was installed across nonpaved surfaces, the ground surface would be returned to the surrounding condition, and topsoil removed during grading of the ROW would be spread across the work area. Vegetation restoration would be coordinated once the ROW has been restored considering seasonal timing. In areas where the pipeline would be installed across pavement, the ground surface would be repaved in accordance with SoCalGas standard plans and specifications for restoration of paved surface, in a manner that achieves city and county adopted standards for paving.

Construction would require the temporary use of staging areas and the temporary widening of access roads within the pipeline ROW. An approximately 200-foot by 200-foot construction work area would be required at each of the pressure limiting stations for parking, laydown, and staging. Existing access roads would provide access to the pressure limiting stations. Within undeveloped areas, existing access roads would be used to the extent possible. The existing dirt access roads from the paved roadway accessing the pipeline ROW may require additional grading to allow for construction equipment and pipe access. Existing access roads along the Adelanto to Moreno pipeline routes vary from 8 feet wide to 15 feet wide. Grading of these roads may be required to properly level the road. Additionally, roads would be widened as necessary at sharp turns to accommodate construction equipment and materials. The approximate final width of graded access roads would be 15 to 30 feet. Soil removed during grading would be stockpiled adjacent to the access road, and access roads would be restored to the extent possible following construction. The proposed pipeline route generally follows closely along existing access roads within the SoCalGas pipeline ROW and other utility corridors. These access roads, where possible, would be used as part of the graded work area of the construction ROW. Upon completion of construction, the existing access roads would then be restored to as near their original condition as feasible.

In the SBNF, existing access roads would need to be graded to allow construction equipment to reach the pipeline ROW. Vegetation would be brushed (cut off at root line) up to 100 feet wide along the access roads or as necessary for an up to 1-mile segment of the alignment at a time, and the ROW would then be graded to the extent necessary to provide a level platform for construction equipment. Temporary cuts may need to be made on a few ridgelines along the alignment; temporary cuts will be restored as close to the original contours as possible. After installation of each small segment of the pipeline is complete, restoration would start immediately, involving both the contours of affected ridgelines and restoration of the ROW. Within the SBNF administrative boundary, construction would occur between February and June. Revegetation would occur in the fall.

Construction of the Proposed Project, including mobilization and demobilization is anticipated to take 18 to 24 months. Restoration efforts may take up to 7 to 8 years.

3.0 APPLICABLE REGULATIONS, PLANS, AND POLICIES

The Proposed Project would be located within the Cities of Adelanto, Colton, Highland, Loma Linda, Moreno Valley, San Bernardino, and Victorville; in unincorporated Riverside County and San Bernardino County; and in the USFS SBNF. Approximately 15.7 percent (approximately 10.2 miles) of the proposed pipeline alignment is located on SBNF public land, between mileposts (MP) 14.0 and 25.8; approximately 20 percent (approximately 13.0 miles) of the Proposed Project corridor is within the extent of the SBNF administrative boundary, from MP 14.0 to 27.0.

To facilitate the evaluation of the Proposed Project, the discussion of the pipeline alignment is broken into four segments (see Exhibit 1a, *Project Study Area – Segment 1*; Exhibit 1c, *Project Study Area – Segment 2*; Exhibit 1d, *Project Study Area – Segment 3*; Exhibit 1e, *Project Study Area – Segment 4*; and Table 1, *Project Corridor Jurisdictions*). The segments are based on existing land use characteristics or jurisdiction. Segment 1 encompasses the portion of the alignment that traverses the high desert area in San Bernardino County, Segment 2 traverses the SBNF, Segment 3 is located within the metropolitan San Bernardino area, and Segment 4 is the portion of the alignment in Riverside County.

**TABLE 1
PROJECT CORRIDOR JURISDICTIONS**

Segment	Affected Jurisdiction	Length (miles) ¹
Segment 1: High Desert	City of Adelanto	2.2
	City of Victorville	2.0
	Unincorporated San Bernardino County	9.8
Subtotal – Segment 1		14.0
Segment 2: SBNF²	SBNF	10.2
	Unincorporated San Bernardino County ³	2.8
Subtotal – Segment 2		13.0
Segment 3: San Bernardino Urbanized Area	City of San Bernardino	14.7
	City of Highland ⁴	0.0
	City of Loma Linda	0.8
	City of Colton	2.2
	Unincorporated San Bernardino County	6.6
Subtotal – Segment 3		24.3
Segment 4: Riverside County	City of Moreno Valley	6.8
	Unincorporated Riverside County	6.9
Subtotal – Segment 4		13.7
TOTAL		65.0
¹ Miles are approximate and rounded to the nearest tenth of a mile. ² Segment 2 covers the 13.0-mile portion of the Proposed Project located within the administrative boundary of the SBNF, which includes unincorporated territory of San Bernardino County. ³ Within unincorporated San Bernardino County, the limits of the SBNF extend approximately 13 miles; however, due to private holdings within the SBNF, only about 10.2 miles are under the jurisdiction of the U.S. Forest Service. ⁴ The Proposed Project is within the city of Highland for approximately 0.04 mile, which, when rounded to the nearest tenth of a mile, is less than 0.1 mile.		

3.1 Federal Regulatory Setting

The National Environmental Policy Act (“NEPA”; United States Congress 1967) and National Forest Management Act (“NFMA”; United States Congress 1976) establish federal policies that require consideration of impacts of federal actions on the human environment, aesthetics, and the quality of the surroundings, including scenic values.

NFMA Part 219.21(f) requires: “The visual resource shall be inventoried and evaluated as an integrated part of evaluating alternatives in the forest planning process, addressing both the landscape’s visual attractiveness and the public’s visual expectation. Management prescriptions for definitive land areas of the forest shall include visual quality objectives”.

USFS is responsible for the management of non-recreation special uses, such as sanitary systems, research activities, photography, power generation, oil & gas pipelines, electric transmission lines, media towers, telephone lines, water lines, and roads; this management focuses on the permitting and monitoring of special uses. Existing special-uses are expected to continue. According to Part 2 of the Land Management Plan (“LMP”), new special-use authorizations will be authorized only if: 1) the use is compatible with Forest Service Manual direction; 2) the use cannot be reasonably accommodated on non-National Forest System lands; 3) impacts to national forest resources can be mitigated; and 4) the cost is not a defining issue (USFS 2005, Part 2, Page 36).

The USFS Scenery Management System (“SMS”; USFS 1995) integrates scenery components into overall ecosystem management. The components include landscape character, scenic attractiveness, user concern, visibility, distance zones, and existing scenic integrity (intactness). They are considered by management in the LMP) through the designation of Scenic Integrity Objectives (“SIOs”) for all USFS land areas. This management approach includes consideration of the effects of changes in the landscape and incorporation of people’s values in decision-making about those changes (USFS 1995).

USFS Manual 2300, Recreation, Wilderness, and Related Resource Management, Chapter 2380 – Landscape Management, requires the inventory; evaluation; management; and, where necessary, restoration of scenery as a fully integrated part of the ecosystems of National Forest System lands and of the land and resource management and planning process. This manual specifies a requirement to “conduct and document a scenery assessment for all activities that may affect scenic resources and that require analysis under NEPA.” It also requires the “application of the principles of landscape aesthetics, scenery management, and environmental design in project-level planning.” Individual forest plans identify the SIOs required for each management area. The term scenic integrity indicates the degree of intactness of the landscape character or, conversely, the degree of visible disruption of the landscape character. A landscape with very minimal visual disruption is considered to have high scenic integrity (USFS 1995). The SBNF LMP establishes SIOs for National Forest System lands within the analysis area.

In general, the LMP prepared for a national forest guides all natural resource management activities and establishes management standards and guidelines for scenery. The LMP outlines SIOs that prescribe the level of visible change allowable within forest boundaries. SIOs are determined based on scenic attractiveness, visibility, distance zones, concern level, and existing scenic integrity and are managed to ensure that changes and development fit with existing type, form, line, color, and texture (USFS 1995). The five potential SIOs are Very High (unaltered), High (appears unaltered), Moderate (appears slightly altered), Low (moderately altered), and Very Low (highly altered). **Table 2, USFS Scenic Integrity Objectives**, provides the definitions of the five SIOs. Consistency with SIOs is determined by comparison of the objective or integrity level of the applicable SIO with the effects or alteration caused by prospective changes in the landscape. Alterations are compared against the baseline or existing scenic integrity which

is defined as the “current state of the landscape considering previous human objectives.” (USFS Manual 2300, Recreation, Wilderness, and Related Resource Management, Chapter 2380, Sec. 2380.5).

TABLE 2
USFS SCENIC INTEGRITY OBJECTIVES

Very High	Very high scenic integrity refers to landscapes where the valued landscape character "is" intact with only minute if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
High	High scenic integrity refers to landscapes where the valued landscape character "appears" intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.
Moderate	Moderate scenic integrity refers to landscapes where the valued landscape character "appears slightly altered." Noticeable deviations must remain visually subordinate to the landscape character being viewed.
Low	Low scenic integrity refers to landscapes where the valued landscape character "appears moderately altered." Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed, but also compatible or complimentary to the character within.
Very Low	Very low scenic integrity refers to landscapes where the valued land “appears heavily altered.” Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes or architectural styles within or outside landscape being viewed. However deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.

SOURCE: USFS 1995.

3.1.1 SBNF Land Management Plan

Segment 2, approximately 13 miles of the 65-mile alignment, is located within the SBNF. The USFS manages land under its jurisdiction according to the goals and policies outlined in its LMP. The scenic inventory, the information base for designation of SIOs, is included in the LMP planning process. The SIOs prescribe the level of visible change allowable within SBNF boundaries. Of particular note are the SBNF LMP management area requirements (Aesthetic Management Standards S9 and S10) in Part 3 of the LMP (USFS 2005, Part 3, Page 6):

Aesthetic Management Standards

S9: Design management activities to meet the Scenic Integrity Objectives (SIOs) shown on the Scenic Integrity Objectives Map.

S10: Scenic Integrity Objectives will be met with the following exceptions:

- Minor adjustments not to exceed a drop of one SIO level is allowable with the Forest Supervisor’s approval.
- Temporary drops of more than one SIO level may be made during and immediately following project implementation providing they do not exceed three years in duration.

SBNF lands' scenery is managed based on the five SIOs. SBNF lands in the Proposed Project corridor were designated geographically into just one of the five potential SIOs: High SIO. Landscapes within the SBNF with High SIO are managed to maintain a natural appearance. This SIO prevails throughout the Proposed Project corridor (MP 14.0 to 27.0). It was based on the inventory of scenery resources, public concern for scenery, and kinds of uses for each geographic area of the national forest (USFS 1995). **Exhibit 2, SBNF Scenic Integrity Objectives**, portrays the locations of the SIOs for the Proposed Project corridor.

Part 2, Appendix B, *Program Strategies and Tactics*, of the SBNF LMP establishes three program strategies relevant to scenery management in the SBNF (USFS 2005):

LM 1 – Landscape Aesthetics

Manage landscapes and built elements to achieve scenic integrity objectives:

- Use best environmental design practices to harmonize changes in the landscape and advance environmentally sustainable design solutions.

LM 2 – Landscape Restoration

Restore landscapes to reduce visual effects of nonconforming features:

- Prioritize landscape restoration activities in key places (Arrowhead, Big Bear, Big Bear Back Country, Front Country, Garner Valley, Idyllwild, Lytle Creek, San Bernardino Front Country, San Geronio, and Santa Rosa and San Jacinto National Monument). Integrate restoration activities with other resource restoration.
- Restoration of landscape should consider not only the existing condition but the sustainable natural appearing landscape that is the desired condition of the mature forest.

LM 3 – Landscape Character

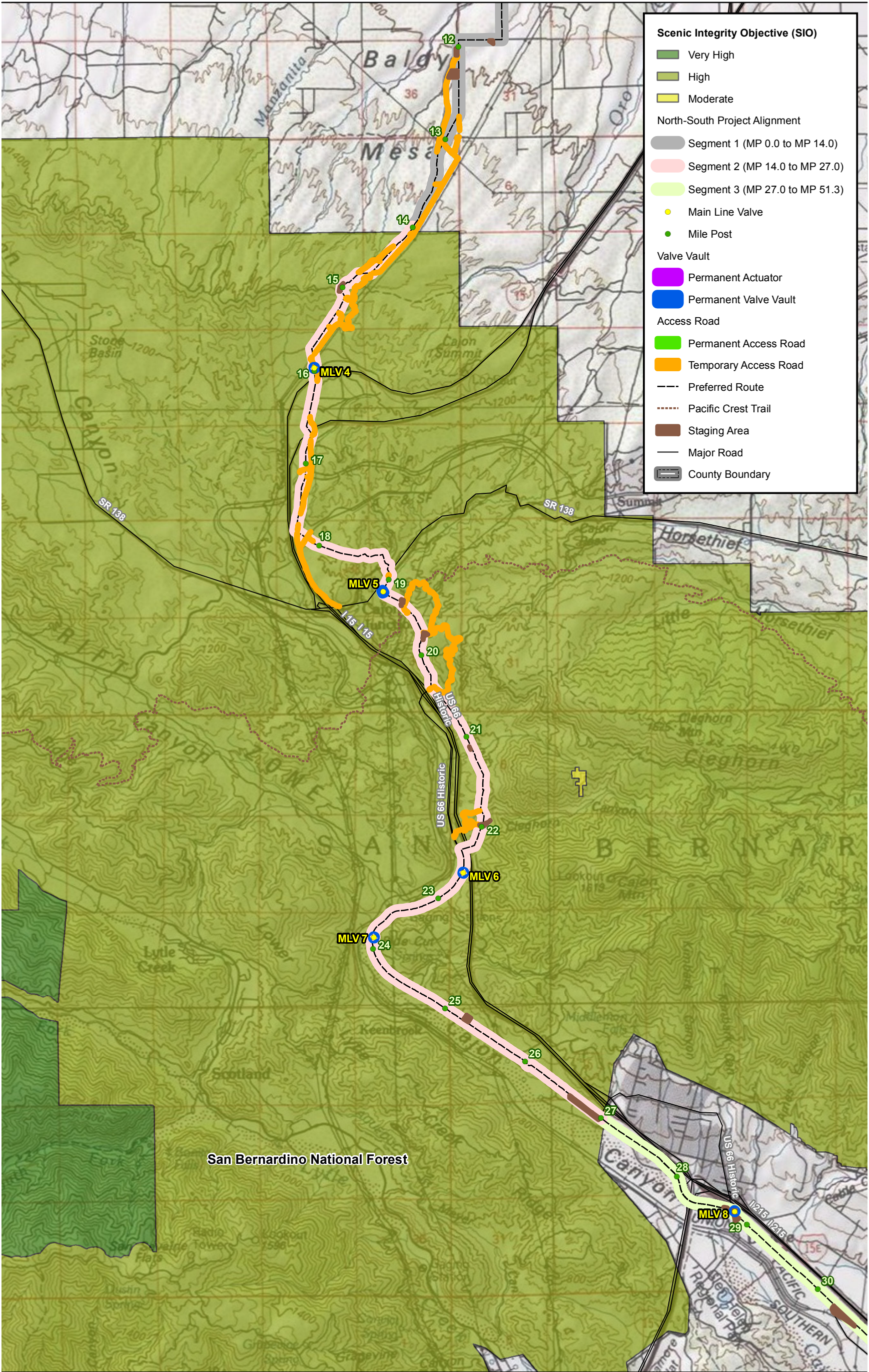
Maintain the character of “Key Places” (see LM 2) to preserve their intact nature and valued attributes:

- Maintain the integrity of the expansive, unencumbered landscapes and traditional cultural features that provide the distinctive character of the place.
- Promote the planning and improvement of infrastructure along scenic travel routes.

The SBNF LMP contains the strategic direction and program emphasis objectives expected to result in the sustainability of the national forest (USFS 2005). As discussed in the LMP, the SBNF is divided into a series of geographic units referred to as “places.” Each place has its own landscape character, theme, desired condition, and program emphasis in regards to scenery and general land management. Portions of the proposed alignment located within the national forest would traverse the Cajon Pass Place, an approximately 27,000-acre area located east and west of the Cajon Pass. The Cajon Pass Place is described as a major modern transportation and Federal Energy Corridor consisting of railroads, highways, pipelines, fiber optic lines, and electric lines. Vegetative coverage in the place is predominantly chaparral that tends to cover the characteristic hillside and steep mountain topography; however, the northern portion of the area extends to the high desert. The desired condition is that the Cajon Pass Place be maintained as a naturally appearing landscape providing managed recreation opportunities, a transportation gateway, a utility corridor, and a wildlife habitat linkage (USFS 2005). Lastly, the Cajon Pass Place program emphasis is focused on maintaining utility corridor service for people, goods, and services while at the same time retaining the rugged and picturesque character of the landscape.

3.1.2 National Trail Systems Act

The pipeline would cross the Pacific Crest Trail (“PCT”), a federally designated national scenic trail primarily administered by the USFS. The PCT is managed pursuant to the 1968 National Trails System



Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.

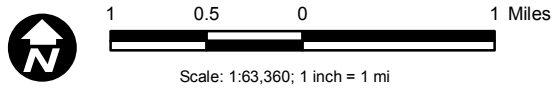


Exhibit 2
SBNF Scenic Integrity Objectives
North-South Project

Act, which instituted a national system of recreation, scenic, and historic trails and standards to preserve the scenic value of these trails, and authorized creation of the PCT as a national scenic trail (National Park Service [“NPS”] 2012). National scenic trails, established in Section 5 of the Act, are designated extended trails (at least 100 miles in length) intended to provide maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. Natural scenic trails may be located as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms that exhibit significant characteristics of the physiographic regions of the United States. Section 7(a)(2) of the 1968 Act establishes the relationship between the trail and the management of adjacent land:

Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land.

The 1982 Pacific Crest National Scenic Trail Comprehensive Plan provides guidelines and criteria for design and location of the PCT (USFS 1982). Specifically, these guidelines state that the most desirable location for the PCT will avoid established highways, unattractive motor roads, mining areas, power and telephone lines, existing commercial and industrial developments, fences, and other features incompatible with the natural condition of the trail, and with its use for outdoor recreation. Where the trail encounters such developments, it should be located so as not to adversely affect, or conflict with, the purpose of the development. Natural vegetation, topography, or natural plantings shall also be used, where possible, to screen objectionable features from the view of the trail user.

3.2 State Regulatory Setting

3.2.1 California Public Utilities Commission

The CPUC has primary state jurisdiction over the Proposed Project by virtue of its discretionary approval authority over construction, operation, and maintenance of public utility facilities. Because local governments generally do not have discretionary authority over projects within CPUC jurisdiction, such projects are generally exempt from local land use and zoning regulations and permitting. However, as part of the CEQA impact analysis, SoCalGas considered local and state land use plans and policies.

3.2.2 California Scenic Highway Program

In 1963, the California Legislature created the Scenic Highway Program to protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to the highways. The State regulations and guidelines governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. A highway may be designated as “scenic” depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers’ enjoyment of the view. A portion of the Proposed Project would be visible from a Designated or Eligible State Scenic Highway (California Department of Transportation [“Caltrans”] 2011). Designated or eligible State scenic highway routes in the Proposed Project area include Designated State Scenic Highway Route 243, State Eligible Scenic Highway Route 138 - Rim of the World Scenic Byway, and State Eligible Scenic Highway Route 330.

3.3 Local General Plans and Ordinances

As part of its environmental review process, SoCalGas considered local aesthetic resource policies. Relevant portions of local laws, ordinances, regulations, and statutes (“LORS”) applicable to pipelines or utility corridor aesthetics, scenery, or visual resources are described below.

3.3.1 San Bernardino County General Plan (2007)

Segments 1, 2, and 3 are all located in San Bernardino County. San Bernardino County is vast and consists of three distinct geographic regions: the Valley, the Mountains, and the Desert (San Bernardino County 2007). The General Plan addresses the distinctions between the three geographic regions while being mindful of the need to have unified goals and policies that would address countywide issues and opportunities. Most of the policies within the General Plan address the County in its entirety and are referred to as countywide policies. Countywide policies relevant to the Proposed Project’s aesthetic considerations are organized by elements of the General Plan:

Land Use Element

- **LU 1.2.** The design and siting of new development will meet locational and development standards to ensure compatibility of the new development with adjacent land uses and community character.

Open Space Element

- **OS 1.9.** Ensure that open space and recreation areas are both preserved and provided to contribute to the overall balance of land uses and quality of life.
- **OS 3.6.** Consistent with safety and operational considerations, support the use of channels, levees, aqueduct alignments, and similar linear spaces for open space and/or trail use.
- **OS 5.1.** Features meeting the following criteria will be considered for designation as scenic resources:
 - a. A roadway, vista point, or area that provides a vista of undisturbed natural areas
 - b. Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed (the area within the field of view of the observer)
 - c. Offers a distant vista that provides relief from less attractive views of nearby features (such as views of mountain backdrops from urban areas)
- **OS 7.3.** Because open space can promote neighborhood and civic identity by providing a clear definition to districts and neighborhoods, the County supports the use of open space and landscaping to define neighborhoods and district boundaries and to delineate edges between the natural and built environment.

3.3.2 San Bernardino County Night Sky Protection Ordinance

Section 83.07.40 of the San Bernardino County Development Code (also referred to as the Night Sky Protection Ordinance) provides standards for outdoor lighting in the Mountain and Desert Regions (San Bernardino County 2007). The Adelanto Compressor Station, Segment 1 of the Proposed Project, and portions of Segment 2 are located in the Desert Region. This section of the development code requires new permitted lighting for construction and operational lighting be fully shielded to preclude light pollution or light trespass on adjacent property, other property within line of sight (direct or reflected) of the light source, or members of the public who may be travelling adjacent on adjacent roadways or ROWs. Emergency lighting operated by public utility or agency during the course of repairing or

replacing damaged facilities is exempt from the requirements of development code. Fixtures producing light directly by the combustion of fossil fuels (e.g., kerosene lanterns, gas lamps, etc.) are also exempt.

3.3.3 Riverside County General Plan (2014)

Segment 4 is located within Riverside County. Riverside County contains abundant natural visual resources, including low-lying valleys, mountain ranges, rock formations, rivers, and lakes (Riverside County 2014a). These features are often enjoyed via the County's many roadways. Due to the visual significance of many of these areas, several roadways have been officially recognized as either Eligible or Designated State or County Scenic Highways. These roadways are depicted in the Circulation Element (Figure C-9 of the General Plan) as well as within each of the 19 area plans, where applicable. The intent of these policies is to conserve significant scenic resources along designated scenic highways for future generations and to manage development along scenic highways and corridors so as not to detract from the area's scenic quality.

Policies

- LU 13.1.** Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public. (AI 32, 79)
- LU 13.2.** Incorporate riding, hiking, and bicycle trails and other compatible public recreational facilities within scenic corridors. (AI 33, 41)
- LU 13.3.** Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County scenic highway corridors are compatible with the surrounding scenic setting or environment. (AI 3, 32, 39)
- LU 13.4.** Maintain at least a 50-foot setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways. (AI 3)
- LU 13.5.** Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground. (AI 3, 32)
- LU 13.7.** Require that the size, height, and type of on-premise signs visible from Designated and Eligible State and County Scenic Highways be the minimum necessary for identification. The design, materials, color, and location of the signs shall blend with the environment, utilizing natural materials where possible. (AI 3)
- LU 13.8.** Avoid the blocking of public views by solid walls. (AI 3)

3.3.4 Riverside County Ordinance No. 655 Regulating Light Pollution (1988)

Segment 4 is located within the Riverside County and therefore subject to Ordinance No. 655 restricting the permitted use of certain light fixtures emitting into the night sky undesirable light rays that have a detrimental effect on astronomical observation and research, with the exception of the use of low pressure sodium lighting of single-family dwellings for security purposes (Riverside County 1988). The application for any required County approval for work in Zones A and B involving nonexempt outdoor lighting fixtures shall include evidence that the proposed work will comply with the ordinance, including (1) the location of the site where the outdoor light fixtures will be installed; (2) plans including the location and type of fixtures on the premises; and (3) a description of the outdoor lighting fixtures, including manufacturer's catalog cuts and drawings. Within Zone B (over a 15-mile radius from Palomar Observatory but under a 45-mile radius of the observatory; the Moreno Valley Station is located approximately 41.2 miles northwest of the observatory), the following relevant requirements for lamp source and shielding have been established for Class II (night lighting for streets, walkways equipment yards, outdoor security, etc.):

- **Lamp Type:**
 - Low pressure sodium lamps and others 4050 lumens and below are allowed; lamps above 4050 lumens are prohibited.
 - Maximum of 8,100 total lumens per acre or parcel if under one acre.
 - When lighting is allowed by this ordinance, it must be fully shielded if feasible and partially shielded in all other cases, and must be focused to minimize spill light into the night sky and onto adjacent properties.
- **Prohibitions:**
 - The installation of other than low pressure sodium street lights on private roadways and streets is prohibited within Zones A and B.
 - Outside sales, commercial, assembly, repair, and industrial areas may be lighted when such areas are actually in use.
 - All Class II lighting in Zones A and B may remain on all night.
- **Permanent Exemptions:**
 - Fossil Fuel Light. All outdoor light fixtures producing light directly by combustion of fossil fuels (such as kerosene lanterns, and gas lamps) are exempt from the requirements of this ordinance.

3.3.5 City of Adelanto General Plan (1994)

The Proposed Project begins in the City of Adelanto (a portion of Segment 1 from MP 0 to MP 0.9 and from MP 2.7 to MP 3.4).

Chapter III: Land Use Element

The City of Adelanto's circulation plan will minimize through traffic on residential neighborhood streets (Policy CLU 3.1). The General Plan requires (Policy CLU 3.2) that commercial developments minimize the impacts on residential areas from traffic, lights, visual appearance of parking and loading areas, building bulk and height, noise and drainage (City of Adelanto 1994). Such means as landscaping, berms, fencing, trees, open space, cul-de-sacs, building orientation, and lower intensity of commercial uses (e.g., offices) should be utilized.

Chapter V: Circulation Element

The following policies relevant to the Proposed Project's aesthetic considerations are established in the Circulation Element of the General Plan:

- H. Policies to Implement the Circulation Goals
 - 1. Establish all major rights of way according to the requirements of the build out projections of the General Plan.
 - 2. Develop a consistent design of roadways and landscape treatments that allow for improved visual quality.

General Policies

NR 1.2. The City shall support the underground placement of existing and future utility lines to reduce visual impact. Noise barriers are relatively easy to design and incorporate. Developments typically are bordered by six-foot-tall block walls, behind which residences are "protected" from excessive noise levels. Ideally, noise barriers incorporate the placement of berms, walls, or a combination of the two in

conjunction with appropriate landscaping to create an aesthetically pleasing environment. Where space is available (clustered developments), a meandering earth berm is both effective and pleasing. Where space is restricted, a wall is effective. In either case, however, thick landscaping (without deciduous plants) should be specified to reduce the visual impact of the barrier and retain the rural ambiance.

NS1.2.4. Require all proposed barriers be not only dense enough to be effective but also properly designed and aesthetically compatible with the surrounding community.

Chapter XI. Community Design Element

The purpose of the Community Design Element of the City of Adelanto General Plan is to establish a set of policies as to the appearance of the City of Adelanto both now and in the future. This policy is intended to relate the physical elements of the community in a way that produces an overall environment that is visually pleasing, as well as efficient and functional. The appearance of the community should be an integral concern along with other physical requirements. Visual quality is important in several ways, providing pride and pleasure through its aesthetic quality, and reflecting the cultural values of the community. It can also have a direct bearing on the economic vitality of the community, since increasing numbers of families and businesses are concerned about environmental quality, they seek locations in communities that demonstrate fulfillment of this concern.

4. Open Space: It is the intention of the City of Adelanto to establish a comprehensive open space and trails system throughout Adelanto, utilizing, as much as possible, the existing drainage corridors. These corridors will eventually become a significant visual resource as development encroaches into many parts of the planning area. It is imperative that these corridors be maintained to provide aesthetic value as well as recreational opportunities for residents and visitors. It is also a method of utilizing these drainage corridors to promote the natural occurrence of wildlife and vegetation. Recreational facilities, trails, and plant materials must be carefully designed to maintain the delicate balance of the existing biotic environment. Structures should not clash with the surrounding environment and should be located so that their impact is negligible.

3.3.6 City of Victorville General Plan (2008)

Segment 1 parallels the western edge of the City of Victorville from approximately MP 3.4 to MP 4.9 and traverses the City of Victorville from approximately MP 4.9 to MP 5.5. The following City of Victorville Land Use Element policies are relevant to the Proposed Project (City of Victorville 2008).

GOAL #4: Beautify Victorville – Provide for an aesthetically pleasing community

Objective 4.1: Enhance the appearance of the Victorville community to increase its desirability as an attractive place to live, work and play.

Policy 4.1.1: Promote high quality development.

- Implementation Measure 4.1.1.1: Utilize Specific Plans and/or redevelopment project areas in areas deemed appropriate for design themes.
- Implementation Measure 4.1.1.2: Continually monitor and upgrade the design guidelines for all types of development.
- Implementation Measure 4.1.1.3: Consider a policy to promote or require public art in major developments.

Policy 4.1.2: Promote high quality public spaces.

- Implementation Measure 4.1.2.1: Develop and install streetscape design themes for major corridors into and through key City commercial districts.
- Implementation Measure 4.1.2.1: Enhance entries to the City with integrated signage and design.

Land Use Element

The following City of Victorville Land Use Element policies are relevant to the Proposed Project.

Goal LU-8. “Provide for a fiscally sound and balanced mix of land uses with the best and most efficient use of infrastructure and services. Development shall occur in an orderly, beneficial manner that does not fiscally impact the existing community.”

Relevant policies based on Goal LU-8 include:

- Adopt design standards that will assure land use compatibility and enhance the visual environment, by providing attractive, aesthetically pleasing development sensitive to the unique local characteristics of the Hesperia community.

3.3.7 City of San Bernardino General Plan (2005)

Segment 3 traverses the City of San Bernardino from approximately MP 28.9 to MP 30; parallels the City of San Bernardino in unincorporated territory from MP 30 to MP 31.8; and then traverses the City of San Bernardino from approximately MP 31.8 to MP 41.1, from approximately MP 41.8 to MP 46.3, and from approximately MP 46.9 to MP 48.7. The City of San Bernardino values the preservation of natural resources, wildlife habitat, and air quality (City of San Bernardino 2005a). Scenic resources and wildlife habitat areas provide recreational and ecological benefits, as well as a source of aesthetic enjoyment. Through the strategies and policies outlined in this Element, the City of San Bernardino strives to preserve and protect existing resources and to capture new resources as they become available.

Goal 6.4. Minimize the impact of roadways on adjacent land uses and ensure compatibility between land uses and highway facilities to the extent possible.

Policies

- 6.4.4.** Design developments within designated and eligible scenic highway corridors to balance the objectives of maintaining scenic resources with accommodating compatible land uses. (LU-1)
- 6.4.5.** Encourage joint efforts among federal, state, county, and City agencies and citizen groups to ensure compatible development within scenic corridors.
- 6.4.6.** Impose conditions on development within scenic highway corridors requiring dedication of scenic easements consistent with the Scenic Highways Plan, when it is necessary to preserve unique or special visual features. (LU-1)
- 6.4.7.** Utilize contour grading and slope rounding to gradually transition graded road slopes into a natural configuration consistent with the topography of the areas within scenic highway corridors. (LU-1)

3.3.8 City of Highland General Plan (2006)

Chapter 5: Conservation & Open Space Element Goals and Policies

Segment 3 transverses the City of Highland from approximately MP 42.7 to MP 43.5. Highland is located at the base of the San Bernardino Mountains. The views and vistas that this area affords contribute to its rural, natural character. Although the City of Highland does not regulate private views, it has long realized the importance of view corridor planning in both public and private development. Preserving views of the San Bernardino Mountains and stretches of open space along City Creek and the Santa Ana River will continue to be very important to creating and maintaining a sense of community in Highland. View preservation also includes careful regulation of hillside development by encouraging low-profile massing and natural colors and building materials. The following City of Highland General Plan policies are relevant to the Proposed Project (City of Highland 2006).

Goal 5.1. Preserve, maintain, and create views and vistas throughout the community to enhance the visual experience of Highland.

Policies

- 1) Incorporate view corridor planning in related development efforts and capital improvement programs.
- 2) Along roadway-based view corridors, frame views of attractive features of the natural and built environment with appropriately placed median and street tree landscaping. Use of fire-resistant vegetation and ample spacing between trees and shrubs is encouraged to reduce the spread of fires.
- 5) Require that all excess excavated material (waste materials) be properly removed and disposed of or otherwise reincorporated into the development plan without compromising natural contours or aesthetic qualities of the site.
- 9) Preserve mature trees, natural hydrology, native plant materials and areas of visual interest.

3.3.9 City of Loma Linda General Plan (2008)

Segment 3 traverses the City of Loma Linda from approximately MP 46.3 to MP 46.9. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of Loma Linda 2008).

3.3.10 City of Colton General Plan (2009)

Segment 3 and Segment 4 traverse the City of Colton from approximately MP 48.2 to 51.1. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of Colton 2009).

3.3.11 City of Moreno Valley General Plan (2006)

Segment 4 traverses the City of Moreno Valley from approximately MP 58.2 to MP 65. The City of Moreno Valley has designated specific scenic routes as the basis for preserving outstanding scenic views (City of Moreno Valley 2006). Special attention to the location and design of buildings, landscaping, and other features should be made to protect and enhance views from scenic roadways.

Chapter 9.4.1 Parks Recreation and Open Space Element Goals

Goal 4.1. To enhance Moreno Valley as a desirable place in which to live, work, shop, and do business.

Goal 4.2. To retain an open space system that will conserve natural resources, preserve scenic beauty, promote a healthful atmosphere, provide space for outdoor recreation, and protect the public safety.

Objective 7.7. Where practical, preserve significant visual features and significant views and vistas.

Policies

- 7.7.1. Discourage development directly upon a prominent ridgeline.
- 7.7.2. Require new electrical and communication lines to be placed underground.
- 7.7.3. Implement reasonable controls on the size, number and design of signs to minimize degradation of visual quality.
- 7.7.4. Gilman Springs Road, Moreno Beach Drive, and State Route 60 shall be designated as local scenic roads.
- 7.7.5. Require development along scenic roadways to be visually attractive and to allow for scenic views of the surrounding mountains and Mystic Lake.
- 7.7.6. Minimize the visibility of wireless communication facilities by the public. Encourage “stealth” designs and encourage new antennas to be located on existing poles, buildings and other structures.

3.4 Applicable Specific Plans and Area Plan

3.4.1 City of Victorville Parkview Specific Plan (2006)

Segment 1 parallels the western edge of the Parkview Specific Plan area from approximately MP 4.4 to MP 5.0. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of Victorville 2006).

3.4.2 San Bernardino County Glen Helen Specific Plan (2015)

Segment 3 traverses the Glen Helen Specific Plan Area from approximately MP 28.3 to MP 29.0 (including the proposed location of Main Line Valve No. 7 at MP 28.8) and from approximately MP 30.0 to MP 33.3. The Glen Helen Specific Plan establishes a Scenic Resources Overlay with development standards that will protect, preserve, and enhance important viewsheds within the Glen Helen Specific Plan Area (San Bernardino County Land Use Service Department Planning Division 2015). In general, a feature or vista within the Specific Plan Area can be considered scenic if it (1) provides a vista of undisturbed natural areas, (2) includes a unique or unusual feature that comprises an important or dominant portion of the viewshed, and/or (3) offers a distant vista that provides relief from less attractive views of nearby features (such as views of mountain backdrops from developed areas). The Glen Helen Specific Plan respects the County’s designation of both I-15 and I-215 within the Specific Plan Area as scenic highways, as well as the County’s 200-foot buffer around each highway within which land is subject to additional land use and aesthetic controls under the County’s Open Space Overlay in the Development Code. The Scenic Resources Overlay applies to the following areas:

1. **Long-range southbound views of the Glen Helen area from I-15 in the Cajon Pass:** This viewshed encompasses most of the active areas of the Regional Park and future commercial development. It is desirable that this wide-scale overview offers an oasis scene containing both

services and an aesthetically pleasing environment. Extensive planting of trees and avoidance of glare in development are methods to enhance this existing viewshed.

2. **I-15 Scenic Corridor:** I-15 Scenic Corridor, which extends 200 feet on either side of the freeway.
3. **I-215 Scenic Corridor:** I-215 Scenic Corridor, which extends 600 feet on the west side of the freeway. The following are identified as scenic resources:
 - Vistas of the hills and developed recreation areas of Glen Helen Regional Park and National Forest
 - Sycamore Canyon
 - Sycamore Flats biotic areas
 - Cajon Wash trails
 - Significant landforms along the corridor

The Glen Helen Specific Plan establishes the following development requirements within the Specific Plan Area:

1. **Building and Structure Placement:** The building and structure placement should be compatible with, and should not detract from, the visual setting or obstruct significant views.
2. **Grading:** The alteration of the natural topography of the site shall be minimized and shall avoid detrimental effects to the visual setting of the designated area and the existing natural drainage system. Alterations of the natural topography should be screened from view from either the scenic highway or the adjacent scenic and recreational resource by landscaping and plantings which harmonize with the natural landscape of the designated area, and which are capable of surviving with a minimum of maintenance and supplemental water.
3. **Outside Storage Areas:** Outside storage areas allowed shall be completely screened from view of the right-of-way with walls, landscaping and plantings which are compatible with the local environment and are capable of surviving with a minimum of maintenance and supplemental water.
4. **Utilities:** All utilities shall be placed underground.

The Glen Helen Specific Plan includes a Trails Plan (Exhibit 2-12 of the Specific Plan) that establishes two types of trails in the Cajon Wash that are considered scenic resources: (1) combined pedestrian and bike paths and (2) combined hiking and equestrian trails. The Proposed Project follows the route of a proposed bike trail from approximately MP 28.8 (at Main Line Valve 7) to MP 31.1.

3.4.3 City of San Bernardino Alliance California Specific Plan (2007)

Segment 3 traverses the Alliance Specific Plan area from approximately MP 43.2 to MP 43.5. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of San Bernardino 2007).

3.4.4 City of San Bernardino University District Specific Plan (2005)

Segment 3 traverses the University District Specific Plan area from approximately MP 31.9 to MP 36.8. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of San Bernardino 2005b).

3.4.5 City of San Bernardino Calmat Cajon Creek Specific Plan (1990)

Segment 3 traverses the northeastern edge of the Calmat Cajon Creek Specific Plan area from approximately MP 28.9 to MP 30.1. LORS applicable to pipelines or utility corridor aesthetics, scenery, or visual resources were not found (City of San Bernardino 1990).

3.4.6 City of Colton Reche Canyon Specific Plan (1991)

Segment 3 traverses the Reche Canyon Specific Plan area from approximately MP 48.8 to MP 51.3. The Reche Canyon Specific Plan was adopted by the City of Colton in 1991 in order to provide for the orderly, aesthetic development of the portion of Reche Canyon within the City of Colton in San Bernardino County, bound by the City of Grand Terrace to the west, Barton Road to the north, the City of Loma Linda to the east, and the San Bernardino County–Riverside County border to the south (City of Colton 1991). The Reche Canyon Specific Plan area is located within the foothills south of the developed areas of Colton and provides a backdrop for the city. In 1991, the hillsides were primarily undeveloped open space with limited existing built land uses. The Reche Canyon Specific Plan states that all public utilities shall be located underground, preferably in a common trench in a parkway or under the sidewalk. The following Reche Canyon Specific Plan policies are relevant to the Proposed Project (City of Colton 1991).

Purpose: To establish detailed, yet flexible and easily implemented, development standards within the Reche Canyon Area that will guide future development in such a manner as to retain the canyon's overall rural character while yielding development that will be of the greatest benefit to the cities of Colton and Loma Linda, and the County of San Bernardino.

Goal One: To maintain the semi-rural character of Reche Canyon while allowing for future development.

Objectives

- 1.2. Maintain the residential character of land uses throughout the canyon by limiting non-residential land uses.
- 1.3. Preserve the canyon's major hillsides, ridges and other major features in as natural and undeveloped a state as possible.
- 1.4. Where grading is necessary, ensure that manmade slopes resemble the natural terrain, and that slope planting is as consistent as possible with naturally occurring plant species.
- 1.8. Develop and implement landscaping guidelines that will encourage the use of plant material that is drought tolerant and reflective of naturally occurring plant species.

Goal Four: Preserve, maintain and enhance where possible Reche Canyon's natural features, open space and recreational opportunities.

Objectives

- 4.1. Employ a landscape palette throughout the planning area that encourages drought tolerant native or compatible species reflective of and compatible with the naturally occurring plant community.

- 4.4.** Design grading and other terrain modification so that the modified terrain resembles naturally occurring terrain as much as possible.

Goal Five: Encourage close cooperation between the City of Colton, the City of Loma Linda, and the County of San Bernardino in regulating development in the planning area.

Objectives

- 5.1.** Use this specific plan in all three jurisdictions as a set of development guidelines to provide a consistent set of development standards.

Additionally, Section 6.3 of the Reche Canyon Specific Plan establishes landscape standards for the Specific Plan area to promote the site's natural characteristics and the open, rural California feeling, which has attracted the people who make Reche Canyon their home. Within Reche Canyon Road's 88 foot ROW, there shall be a 14-foot landscaped zone on each side of the street, including a 4-foot-wide one-way bicycle path adjacent to the street, a 5-foot-wide planting area between the bicycle path and the sidewalk, and a 5-foot-wide sidewalk along the edge of the right of way. Landscaping within the street right of way shall be provided and maintained by the City of Colton through its maintenance assessment district. Precise street planting plans for Reche Canyon Road shall be designed by a Landscape Architect licensed by the State of California. The plant palette for streets includes Big Berry Manzanita, Dwarf Coyote Bush, California Lilac, Toyon, Sugar Bush, California Encelia, Incensio, Juniper, Yarrow, Saltbush, California Fuchsia, California Buckwheat, Annual Lupine, Rosemary, Lavender Cotton, Australian pine, Hackberry, medium size Eucalyptus varieties (20-60 feet tall), Catalina Ironwood, Coulter Pine, Canary Island Pine, Aleppo Pine, Western Sycamore, Coast Live Oak, Cork Oak, Interior Live Oak, and Canyon Live Oak.

3.4.7 Riverside County General Plan Amendment 960 – Reche Canyon/Badlands Area Plan

Segment 4 is located within the Reche Canyon/Badlands Area Plan area from approximately MP 51.3 to MP 65.

Conservation and Open Space Resources

Environmental resources, recreation needs, habitat systems, and visual heritage form one comprehensive open space system that needs to be preserved (Riverside County 2014b).

Policies

RCBAP 13.1. Protect visual and biological resources in the Reche Canyon/Badlands area through adherence to General Plan policies found in the Multipurpose Open Space Element.

Conservation (C). The protection of open space for natural hazard protection, cultural preservation, and natural and scenic resource preservation. Existing agriculture is permitted.

Recreational Trails

Multi-purpose trails for hikers, bicyclists, equestrian enthusiasts, and other casual users can serve both as a means of recreation and leisure and as an alternate mode of transportation. The rural nature of the Reche Canyon/Badlands area along with its tremendous scenic qualities make trails a particularly attractive recreational amenity.

Scenic Highways

Scenic Highways designations recognize the value of recreation and tourism and place restrictions on adjacent development to help protect these resources for future generations. The Reche Canyon/Badlands area contains a number of County-Designated or County-Eligible scenic roadways, including San Timoteo Canyon Road, Redlands Boulevard, Gilman Springs Road, and SR-60. With the presence of dramatic and defining natural features such as the Badlands, Box Springs Mountains and the San Jacinto Wildlife Reserve, it is important to maintain the quality of views along those scenic corridors.

Policies

RCBAP 11.1. Protect the scenic highways in the Reche Canyon/Badlands area from change that would diminish the aesthetic value of adjacent properties through policies in the Scenic Corridors sections of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements.

4.0 ENVIRONMENTAL SETTING

The environmental setting section describes the existing visual resources in the Proposed Project area.

4.1 Regional Setting

The regional setting of the Proposed Project corridor extends through the Mojave Desert Province, the Central Transverse Ridges, and the San Bernardino Basin. It extends from the Victor Valley Region of San Bernardino County to the Moreno Valley Region of Riverside County. Victor Valley is a broad valley located in the Mojave Desert lying north of the San Bernardino Mountains. Victor Valley extends northward along the Mojave River to approximately the community of Helendale. Moreno Valley extends to the southeast from the San Bernardino Mountain Range and Reche Canyon. Elevations in the Proposed Project corridor range from 2,950 feet at the northern end, to a high of over 4,500 feet in the national forest, to a low of 1,550 at the southeastern end.

There are five highway or trail routes in the Proposed Project area with designated scenery management objectives. They include: U.S. Historic Route 66, Designated State Scenic Highway Route 243, State Eligible Scenic Highway Route 138 - Rim of the World Scenic Byway, State Eligible Scenic Highway Route 330, and the PCT (**see Exhibit 1a**).

4.2 Proposed Project Corridor Setting

The majority of the Proposed Project would be located within public roadways or adjacent to existing utility corridors. The Proposed Project landscape is characterized by a mix of land uses along the 65-mile alignment, including residential landscapes, forest lands, open space public lands, desert landscape, and utility infrastructure. The majority of the open space is located along the northern portion of the alignment interspersed with isolated homesteads. Mountain views include foreground, middleground, and background distances. To facilitate the evaluation of the Proposed Project, the discussion of the pipeline alignment has been broken into four segments based on existing land use characteristics or jurisdiction (**see Table 1**). Segment 1 encompasses the portion of the alignment that traverses the high desert area in San Bernardino County, Segment 2 traverses the SBNF, Segment 3 is located within the metropolitan San Bernardino area, and Segment 4 is the portion of the alignment in Riverside County.

Approximately 30.5 miles (46.9 percent) of the 65-mile proposed alignment parallels existing underground pipelines, such as the CALNEV Pipeline and SoCalGas Transmission Pipelines Nos. 1185, 4000, and 4002.

4.2.1 Segment 1: High Desert

Segment 1 is an approximately 14.0-mile segment extending from the Adelanto Compressor Station to the SBNF boundary traversing the Cities of Adelanto and Victorville, as well as a portion of unincorporated San Bernardino County (**see Exhibit 1b**). Adjacent communities within the unincorporated portion of San Bernardino County include Baldy Mesa, Phelan, and Oak Hill. From the existing compressor station, the proposed alignment would extend to the south along dirt and paved roadways that traverse an undeveloped and sparsely developed rural residential desert landscape.

4.2.1.1 Scenic Vistas

Segment 1 is not located within the viewshed of any designated scenic vista points. There are no county or city designated scenic vista points in the Proposed Project Area. The nearest State designated scenic vista point is Caltrans' Silverwood Lake 2 Vista Point, located approximately 9.0 miles west of Segment

1; shrubs, pine trees, and structures in the foreground to middleground from this vista point shield the Proposed Project area from view (Caltrans 2015).

4.2.1.2 Scenic Highways

Segment 1 is located approximately 2.9 miles north of State Eligible Scenic Highway Route 138 - Rim of the World Scenic Byway; approximately 6.8 miles east of State Eligible Scenic Highway Route 2; and approximately 35.8 miles west of the nearest Officially Designated State Scenic Highway, State Route ("SR") 38 (Caltrans 2011). Segment 2 is located approximately 3.5 miles north of the PTC at the nearest point. Due to distance and intervening topography, Segment 1 is not located within the viewshed of Routes 138, 2, or 38, or from the PCT.

4.2.1.3 Visual Character and Quality

The characteristic landscape of Segment 1, between the Adelanto Compressor Station and the northern boundary of USFS-administered lands (the beginning of Segment 2), is composed of flat to gently sloping terrain, predominantly exposed soils, creosote bush and other desert shrubs and grasses, scattered Joshua trees, and infrequent lower-lying drainage-ways with Palo Verde trees and related shrub and grass species. The residential landscape consists of a wide variety of structures, rows of pines, and other coniferous and deciduous plantings. The industrial landscape is characterized by long, industrial warehouses; associated surface parking areas located north, northeast, and southwest of the existing compressor station; and an expansive Southern California Edison electrical substation and adjacent photovoltaic installation located approximately 0.5 mile to the southeast.

The photographs from KOPs 1, 2, 3, and 4 show representative views along the corridor for Segment 1 (see **Exhibits 9a, 10a, 11a, and 12a** in Section 6.2.3, *Evaluation of KOPs*).

Segment 1 would parallel existing underground utility pipelines for approximately 11.9 miles of the 14.0-mile pipeline segment (85.0 percent). Segment 1 would parallel the existing 8-inch and 14-inch CALNEV Pipelines for approximately 5.2 miles (37.1 percent of the 14-mile segment), from approximately MP 6.0 to MP 10.3, from MP 12.0 to MP 12.1, and from MP 13.2 to MP 14.0 (Kinder Morgan 2015). Segment 1 would parallel the existing SoCalGas Transmission Pipeline No. 1185 for approximately 11.1 miles (79.3 percent of the 14-mile segment), from approximately MP 0.0 to MP 10.3 and from MP 11.9 to MP 12.7 (SoCalGas 2015).

4.2.1.4 Sources of Light and Glare

Existing outdoor lighting is present throughout the nighttime landscape. The lighting of the Adelanto Compressor Station and the industrial businesses located to the north and northeast of the compressor station are typical of the downward shielded lighting at the northern end of Segment 1. In addition, overhead street lighting is installed on Rancho Road (located immediately north of the Adelanto Compressor Station) and operates during nighttime hours. There is no overhead street lighting along the dirt and paved roads that follow the proposed alignment from Adelanto Station south through MP 14.0. Adelanto High School, which is located approximately 0.4 mile east of the proposed alignment, is equipped with shielded outdoor lighting for nighttime athletic events; Baldy Mesa Elementary School, which is adjacent to Baldy Mesa Road along the proposed alignment, is equipped with shielded outdoor lighting over its parking lots. Other existing sources of nighttime light include residences and periodic lights from vehicles and the Union Pacific Railroad crossing.

Existing sources of daytime glare near Segment 1 include paved roads, residential and institutional development, and intermittent vehicle traffic.

4.2.2 Segment 2: San Bernardino National Forest

Segment 2 is an approximately 13.0-mile segment extending from the northern SBNF boundary to the southern SBNF boundary, including a portion of unincorporated San Bernardino County (**see Exhibit 1c**). Approximately 15.7 percent (approximately 10.2 miles) of the Proposed Project is located on SBNF public land, between MP 14.0 and 25.8; approximately 20 percent (approximately 13.0 miles) of the Proposed Project corridor is located within the extent of the SBNF administrative boundary, from MP 14.0 to 27.0.

4.2.2.1 Scenic Vistas

Segment 2 is not located within the viewshed of any designated scenic vista points. There are no county or city designated scenic vista points in the Proposed Project Area. The nearest State designated scenic vista point is Caltrans' Silverwood Lake Vista Point, located approximately 6.3 miles east of Segment 2; interfering mountainous topography within 0.6 mile of the vista point shields all development outside of the immediate vicinity of Silverwood Lake (including to the west) from view, and the Proposed Project area is not visible from this point (Caltrans 2015).

4.2.2.2 Scenic Highways

Segment 2 would cross under State Eligible Scenic Highway Route 138 - Rim of the World Scenic Byway. Segment 2 is located approximately 6.3 miles southeast of State Eligible Scenic Highway Route 2; approximately 6.4 miles west of State Eligible Scenic Highway Route 173; approximately 6.8 miles west of State Eligible Scenic Highway Route 18; approximately 7.7 miles west of Eligible State Scenic Highway 189; approximately 14.4 miles northwest of State Eligible Scenic Highway Route 330; and approximately 33.2 miles west of the nearest Officially Designated State Scenic Highway, SR-38 (Caltrans 2011). Segment 2 would be located under U.S. Historic Route 66 for approximately 4.7 miles and cross under the PCT. Due to distance and intervening topography, Segment 2 is not located within the viewshed of Routes 2, 173, 18, 330, or 38. Segment 2 is located within the viewshed of Routes 138, 189, and the PCT; however, trees in the foreground along Route 189 shield the proposed alignment from view along this scenic highway.

4.2.2.3 Visual Character and Quality

The characteristic landscape of Segment 2 ranges from of a series of low ridgelines and narrow canyons, to the steep and rocky foothills of mountains. Vegetation is comprised of conifer woodlands (cedar and juniper), riparian species, including cottonwoods, in drainage ways, scattered shrubs, and grasses. The landscape is dominated by the designated utility corridor (transmission lines and pipelines), major and minor roads, and maintenance access roads; however, there are several locations along Segment 2 where ground disturbance has been minimized and the characteristic landscape appears natural.

The I-15 corridor through the Cajon Pass is characterized by mountainous and chaparral-dotted terrain. The SR-138 corridor and adjacent hillside and creek features are characterized by moderate to steep terrain, chaparral, and riparian vegetation. South of SR-138, the proposed pipeline alignment crosses below the PCT and traverses elevated shrub-covered topography via an existing network of dirt roads. The proposed alignment is located to the east and generally parallels I-15 within the foothills of adjacent mountainous landforms. The alignment continues to the southeast, then crosses I-15 and follows Historic Route 66/Cajon Boulevard as it approaches the City of San Bernardino.

The photographs from KOPs 5, 6, 7, 8, 9, 10, and 11 show representative views along the corridor for Segment 2 (see **Exhibits 9a, 10a, 11a, 12a, 13a, 14a, 15a, 16a, 17a, 18a, and 19a** in Section 6.2.3, *Evaluation of KOPs*).

Segment 2 would parallel existing underground utility pipelines for approximately 7.9 miles of the 13.0-mile pipeline segment (60.7 percent) within the SBNF administrative boundary. Segment 2 would parallel the existing 8-inch and 14-inch CALNEV Pipeline for approximately 4.8 miles (36.9 percent of the 13.0-mile segment), from approximately MP 14.0 to MP 14.1, from MP 14.9 to MP 16.6, and from MP 24.0 to MP 27.0 (Kinder Morgan 2015). Segment 2 would also parallel two existing 36-inch SoCalGas Transmission Pipelines (No. 4000 and L4002) for approximately 3.6 miles (27.7 percent of the 13-mile segment):

- Segment 2 would parallel both existing pipelines (4000 and L4002) from approximately MP 18.9 to MP 19.1;
- Segment 2 would parallel the existing SoCalGas Transmission Pipeline No. 4000 from approximately MP 19.1 to MP 21.9, from MP 22.0 to MP 22.2; and
- Segment 2 would parallel the existing SoCalGas Transmission Pipeline No. 4000 at a distance of over 100 feet to the southwest of the proposed alignment and the existing CALNEV pipeline alignment, from MP 26.5 to MP 27.0 (SoCalGas 2015).

Between MP 14.0 and MP 18.9, Segment 2 would also parallel an existing underground fiber optic cable line that follows Santa Fe Road. Above-ground electrical utility transmission lines are also located in the Proposed Project Area.

4.2.2.4 Sources of Light and Glare

There are no outdoor lights along the alignment north of where it would cross under I-15, no continuous Union Pacific Railroad lights, and no streetlights on I-15 north of the SR-138 freeway exit. At the SR-138 exit from the I-15 freeway, there are shielded streetlights on SR-138 and businesses located immediately east and west of I-15 that are existing sources of nighttime light. South of the SR-138 freeway exit on I-15, there are shielded streetlights at the truck weigh station and at the Cleghorn Road freeway exit. There are no streetlights on Historic Route 66/Cajon Boulevard. Other existing sources of nighttime light include a few residences within SBNF and periodic lights from vehicles and the Union Pacific Railroad crossing.

Existing sources of daytime glare near Segment 2 include paved roads, sparse residential and commercial development, and regular vehicle traffic.

4.2.2.5 Scenic Resource Inventory

The scenic inventory and LMP for the SBNF was completed by USFS in 2005. Corridor mileposts (to the one-tenth mile) associated with inventory components and SIOs are included throughout the following USFS- and SBNF-related text.

4.2.2.6 Landscape Character

Landscape Character comprises the particular attributes, qualities, and traits of a landscape that give it an image and make it identifiable or unique (USFS 2005). The landscape character of the Proposed Project corridor within the northern SBNF is composed of conifer woodland (cedar and juniper) from MP 14.0 to 15.5, of which steep and rocky topography dominates from MP 15.0 to 15.5 (see KOP 5 in Exhibit 1c). The conifer woodland consists of dark olive greens aboveground and light, medium, and dark tans and

browns of duff and soil at ground level. Grasses and shrubs occur throughout the remaining Proposed Project corridor, from MP 15.5 to 27.0 (see KOPs 6 to 11). Colors of this area vary by season and range from light to medium greens, tans, and browns of vegetation and medium to dark grays, tans, and browns of the soil. There are very steep and rocky areas from MP 18.4 to 18.5, 19.4 to 19.5 (Crowder Canyon; see KOPs 7 and 8), 19.5 to 19.7, 20.2 to 20.4, and 21.1 to 21.2.

4.2.2.7 Scenic Attractiveness

Scenic Attractiveness is the scenic importance of a landscape based on human perceptions of the intrinsic beauty of landform, rock-form, water-form, and vegetation pattern; it reflects varying visual perception attributes of variety, unity, vividness, intactness, coherence, mystery, uniqueness, harmony, balance and pattern (USFS 2005). It is classified as (1) Distinctive, (2) Typical, and (3) Indistinctive. There is one Class A, Distinctive Scenic Attractiveness, area at Crowder Canyon, which is crossed by the Proposed Project corridor at MP 19.4 (one-tenth mile total; see Exhibit 3). Class B, Typical Scenic Attractiveness, is located from MP 15.3 to 18.0, and 20.3 to 26.1 (3.5 miles total). Class C, Indistinctive Scenic Attractiveness, is located from MP 14.0 to 15.3, 18.0 to 19.4, 19.5 to 20.3, and 26.1 to 27.0 (4.4 miles total).

4.2.2.8 User Concern, Visibility (Seen Areas), and Distance Zones

Concern Level is the classification of travel routes or use areas based on the public's concern over the alterations in the landscape from those viewpoints (USFS 2005). There are three Concern Levels representing degrees of scenery importance: (1) High, (2) Moderate, and (3) Low.

Concern Level 1, High, combined with foreground visibility occurs from MP 14.5 to 18.2 and from MP 18.3 to 27.0 (12.4 miles total; see Exhibit 4).

Concern Level 1, High, combined with middleground visibility occurs from MP 14.0 to 14.5 and at MP 18.3 (0.6 mile total).

4.2.2.9 Existing Scenic Integrity (Intactness)

Scenic Integrity is the state of naturalness or, conversely, the state of disturbance created by human activities or alteration; integrity is stated in degrees of deviation from the existing landscape character (USFS 2005). The Proposed Project corridor crosses the SBNF in landscape that indicates a moderate to low level of intactness (Moderate to Low Scenic Integrity), from MP 14.0 to 14.6, due to adjacency with an existing pipeline and underground fiber optic cable (including cleared ROW approximately 50 feet wide) and an access road that have locally modified the settings (Table 3, *Existing Scenic Integrity for Segment 2*). The corridor deviates from the two underground utilities from MP 14.6 to 15.1, following an access road through steeper terrain and road-related earthwork (cuts and fills) until it reconnects with the two utilities. There is locally intact and steeper landscape of High Scenic Integrity from MP 15.1 to 15.3 (see KOP 5 in Exhibit 9a).

The Proposed Project corridor is adjacent to the two existing underground utilities and access road in Moderate to Low Scenic Integrity from MP 15.3 to 15.8 (see KOP 5 in Exhibit 9a). Throughout MP 15.8 to 17.8 (see KOP 5 and KOP 6 in Exhibits 9a and 10a), it deviates from the utilities and follows existing access roads in less steep, moderate to low landscape intactness (Moderate to Low Scenic Integrity) and crosses I-15 at MP 16.1 and 16.6 (see KOP 5 in Exhibit 9a). The Proposed Project corridor then crosses through an area of moderately steep to very steep High Scenic Integrity landscape from MP 17.9 to 18.9 (see KOPs 6 and 8 in Exhibits 10a and 12a), until it crosses SR 138 from MP 18.9 to 19.0 (Low Scenic Integrity; see KOP 7 in Exhibit 11a).

The Proposed Project corridor is generally located in landscape of moderate to low intactness (Moderate to Low Scenic Integrity) as it follows access roads and the existing SoCalGas Transmission Pipeline No. 4000 (which is aboveground between MP 19.0 and 19.1 and at MP 19.5; see KOPs 7 and 9 in Exhibits 11a and 13a) and crosses under two electrical transmission lines (MP 19.4 and 19.6; see KOPs 7 and 9) in moderate to steep terrain from MP 19.0 to 22.2 (see KOPs 7 and 8 in Exhibits 11a and 12a), including five very steep areas from MP 18.4 to 18.5 (see KOP 8 in Exhibit 12a), MP 19.4 to 19.5 (Crowder Canyon; see KOP 7), MP 19.5 to 19.7 (see KOPs 7 and 9), MP 20.2 to 20.4, and MP 21.1 to 21.2, until it again crosses I-15 at MP 22.3. The very steep terrain areas are intact landscapes and have High Scenic Integrity.

The Proposed Project corridor landscape is in low to very low intactness (Low to Very Low Scenic Integrity) from MP 22.3 to 27.1 (the southern edge of the SBNF; see KOPs 10 and 11 in Exhibits 14a and 15a), as it closely parallels U.S. Route 66/I-15 and crosses local access roads and ancillary disturbances.

TABLE 3
EXISTING SCENIC INTEGRITY FOR SEGMENT 2

Milepost Range	Number of Miles	Existing Scenic Integrity/Intactness Level
14.0 to 15.1	1.1 mile	Moderate to Low Scenic Integrity
15.1 to 15.3	0.2 mile	Moderate Scenic Integrity
15.3 to 17.8	2.5 miles	Moderate to Low Scenic Integrity
17.8 to 18.4	0.6 mile	High Scenic Integrity
18.4 to 18.5	0.1 mile	Moderate to High Scenic Integrity
18.5 to 18.9	0.4 mile	High Scenic Integrity
18.9 to 19.0	0.1 mile	Low Scenic Integrity
19.0 to 19.4	0.4 mile	Moderate to Low Scenic Integrity
19.4 to 19.5	0.1 mile	High Scenic Integrity
19.5 to 19.6	0.1 mile	Moderate to Low Scenic Integrity (ridgeline notch)
19.6 to 19.7	0.1 mile	Moderate Scenic Integrity
19.7 to 20.2	0.5 mile	Moderate to Low Scenic Integrity
20.2 to 20.4	0.2 mile	High Scenic Integrity
20.4 to 21.1	0.7 mile	Moderate to Low Scenic Integrity
21.1 to 21.2	0.1 mile	High Scenic Integrity
21.2 to 21.5	0.3 mile	Moderate to Low Scenic Integrity
21.5 to 21.6	0.1 mile	Moderate Scenic Integrity
21.6 to 22.1	0.5 mile	Moderate to Low Scenic Integrity
22.1 to 22.2	0.1 mile	Low Scenic Integrity (ridgeline notch)
22.2 to 22.3	0.1 mile	Moderate to Low Scenic Integrity
22.3 to 27.1	4.8 miles	Low to Very Low Scenic Integrity

In summary, the existing Proposed Project corridor landscape is characterized by a High Scenic Integrity level for approximately 1.4 miles of the 13.1-mile Segment 2 (10.7 percent); Moderate to High Scenic Integrity for approximately 0.1 mile (0.8 percent); Moderate Scenic Integrity for approximately 0.4 mile (3.1 percent); Moderate to Low Scenic Integrity for approximately 6.2 miles (47.3 percent); Low Scenic

Integrity for approximately 0.2 mile (1.5 percent); and Low to Very Low Scenic Integrity for approximately 4.8 miles (36.6 percent).

4.2.3 Segment 3: San Bernardino Urbanized Area

Segment 3, approximately 24.3 miles, traverses a portion of unincorporated San Bernardino County and the Cities of San Bernardino, Highland, Loma Linda, and Colton (**see Exhibit 1d**). The proposed alignment follows Historic Route 66/Cajon Boulevard as it approaches the City of San Bernardino. The characteristic landscape of this area is consistent with rural residential and industrial vegetation and structures.

4.2.3.1 Scenic Vistas

There are no county or city designated scenic vista points in the Proposed Project Area. The nearest State designated scenic vista point is Caltrans' Donald S. Wieman Vista Point, located approximately 4.5 miles northeast of Segment 3 (Caltrans 2015). Segment 3 is located within the viewshed of this vista point.

4.2.3.2 Scenic Highways

Segment 3 is located approximately 2.9 miles west of State Eligible Scenic Highway Route 330; approximately 3.0 miles west of State Eligible Scenic Highway Route 210; approximately 4.4 miles west of State Eligible Scenic Highway Route 38; approximately 4.4 miles southwest of State Eligible Scenic Highway Route 138; approximately 4.5 miles southwest of Eligible State Scenic Highway 189; and approximately 23.0 miles northwest of the nearest Officially Designated State Scenic Highway, SR-243 (Caltrans 2011). Segment 3 is located approximately 4.9 miles southeast of the PCT at the nearest point. Due to distance and intervening topography, Segment 3 is not located within the viewshed of Routes 210, 38, or 243. Segment 3 is located within the viewshed of Routes 330, 138, and 189, and the PCT (in distant views); however, trees and houses along Route 74 shield the proposed alignment from view along this scenic highway.

Segment 3 is located within the 200-foot I-15 scenic corridor (between MP 28.3 and MP 28.4) and within the 600-foot I-215 scenic corridor (between MP 28.6 and MP 29.0) identified in the San Bernardino County Glen Helen Specific Plan.

4.2.3.3 Visual Character and Quality

South of the SBNF administrative boundary from MP 27.0 to MP 31.9, the landscape is characterized by the Cajon wash, scattered residences, and industrial warehouses. The proposed alignment ROW crosses under Interstate 215 at Palm Avenue between MP 31.9 and MP 32.0. East of the Palm Avenue crossing, the proposed alignment ROW traverses a largely suburban residential setting and is located within established and paved roadways. The visual setting is similar as the alignment turns to the south on 40th Street onto Valencia Avenue at Arrowhead Country Club; however, commercial and industrial land uses including the San Bernardino International Airport contribute to the existing predominantly residential landscape setting along this segment of the ROW (see KOP 12 in Exhibit 20a). Between the Santa Ana River and I-10 (MP 45.2 to MP 46.3), industrial, residential, and commercial uses establish the urban form and character of the landscape. South of I-10, the alignment passes through industrial and residential areas of the City of Loma Linda and then extends to the southeast through Reche Canyon, along Reche Canyon Road at MP 48.9. Development along Reche Canyon Road initially consists of ordered suburban neighborhoods and then transitions to scattered rural residences (see KOP 13 in Exhibit 21a). Overhead utility lines and underground utilities are aligned along the roadway.

The photographs from KOPs 12 and 13 show representative views along the corridor for Segment 3 (see **Exhibits 20a** and **21a** in Section 6.2.3, *Evaluation of KOPs*).

Segment 3 would parallel existing underground utility pipelines for approximately 9.7 miles of the 24.3-mile pipeline segment (39.9 percent). Segment 3 would parallel the existing 8-inch and 14-inch CALNEV Pipeline for approximately 1.0 mile (4.1 percent of the 24.3-mile segment), from approximately MP 27.0 to MP 27.8 and from MP 28.2 to MP 28.4 (Kinder Morgan 2015). Segment 3 would parallel an existing SoCalGas pipelines for approximately 8.7 miles (35.8 percent of the 24.3-mile segment):

- Segment 3 would parallel an existing SoCalGas Transmission Pipeline for approximately 5.2 miles (21.4 percent of the 24.3-mile segment), from approximately MP 28.8 to MP 34.0; and
- Segment 3 would parallel existing SoCalGas High Pressure Distribution Lines for approximately 3.5 miles (14.4 percent of the 24.3-mile segment), from approximately MP 34.0 to MP 34.7, from MP 37.1 to 37.6, and from MP 43.1 to MP 45.4 (SoCalGas 2015).

4.2.3.4 Sources of Light and Glare

South of the SBNF administrative boundary from MP 27.0 to MP 31.9, there are sparsely spaced, shielded streetlights along I-215 and Cajon Boulevard, with shielded warehouse security lights and residential lighting providing sources of nighttime light near the alignment along Cajon Boulevard and Kendall Drive. Starting at the intersection of Kendall Drive and Palm Avenue, more streetlights and businesses provide an existing source of nighttime light in addition to residences along the alignment. South of 40th Street and north of Lynwood Avenue and Arrowhead Country Club on Valencia Avenue are areas with low levels of nighttime light; otherwise, shielded streetlights, residences, and businesses provide sources of light along the alignment until MP 42.3.

The Tippecanoe Avenue landscape contains unlit open spaces between the otherwise lit residences and warehouses. At MP 44.5 to MP 45.0, Segment 3 passes by the San Bernardino International Airport, with its navigation and airplane lights. South of the airport, Segment 3 passes through commercial, industrial, and residential areas that are well lit with shielded streetlights, as well as Montecito Memorial Park and Mortuary, which contains streetlights that are not shielded along roads within the park.

Starting at MP 48.9 on Reche Canyon Road, there are no streetlights, and suburban and rural residences are the main sources of light throughout the canyon. Other existing sources of light include lights from vehicles.

Existing sources of daytime glare near Segment 3 include paved roads, residential, industrial, and commercial development, and regular vehicle traffic.

4.2.4 Segment 4: Riverside County

Segment 4, an approximately 13.7-mile segment, is the portion of the Proposed Project in Riverside County (see **Exhibit 1e**). For this segment, the Proposed Project alignment extends from Reche Canyon Road at the San Bernardino County–Riverside County boundary to the Moreno Pressure Limiting Station. This segment extends through unincorporated Riverside County and the City of Moreno Valley. Within Riverside County, the alignment proceeds to the southeast through Reche Canyon and along Reche Canyon Road.

4.2.4.1 Scenic Vistas

There are no county or city designated scenic vista points in the Proposed Project Area. Two State designated scenic vista points are located within a 15-mile radius of Segment 4: Caltrans' Mill Creek Vista Point, located approximately 13.0 miles northeast of Segment 4, and Caltrans' Donald S. Wieman Vista Point, located approximately 14.3 miles north of Segment 4 (Caltrans 2015). Interfering mountainous topography within 0.5 mile of the Mill Creek Vista Point shields all development outside of the forest (including to the south and west) from view, and the Proposed Project area is not visible from this point. Interfering topography north of the San Bernardino-Riverside County border shields Segment 4 from view from Donald S. Wieman Vista Point.

4.2.4.2 Scenic Highways

Segment 4 is located approximately 4.7 miles southwest of Eligible State Scenic Highway 210; approximately 5.0 miles southwest of State Eligible Scenic Highway Route 38; approximately 8.8 miles southwest of State Eligible Scenic Highway Route 330; approximately 10.6 miles northeast of State Eligible Scenic Highway Route 74; approximately 14.1 miles south of State Eligible Scenic Highway Route 18; approximately 14.5 miles south of Eligible State Scenic Highway 189; approximately 14.7 miles south of State Eligible Scenic Highway Route 138; and approximately 13.4 miles west of the nearest Officially Designated State Scenic Highway, SR-243 (Caltrans 2011). Segment 4 is located approximately 19.1 miles south of the PCT. Due to distance and intervening topography, Segment 4 is not located within the viewshed of Routes 210, 38, 74, 138, or 243. Segment 4 is located within the viewshed of Routes 330, 18, and 189, and the PCT (too distant to be noticeable).

4.2.4.3 Visual Character and Quality

The characteristic landscape along Reche Canyon Road initially consists of ordered suburban neighborhoods and then transitions to scattered rural residences. A segment of Reche Canyon Road (MP 55.8 to MP 58.6) is unpaved and is aligned within a rugged landscape featuring chaparral- and exposed rock-covered hillsides (see KOP 14). Overhead utility lines are also aligned along the roadway.

A series of small residential neighborhoods are located north of SR-60; south of the highway, the pipeline ROW would cross a relatively flat expanse of residential land, open space, and agricultural land. The Moreno Pressure Limiting Station is an existing facility located in the City of Moreno Valley enclosed by a chain-link fence (see KOP 15). The adjacent land use in the area is agricultural land; a fenced utility yard at the intersection of Alessandro Boulevard and Virginia Street; and the San Diego Gas & Electric Company's Moreno Compressor Station, which is located approximately 0.3 mile to the south of the existing Moreno Pressure Limiting Station (see KOP 16).

The photographs from KOPs 14, 15, and 16 show representative views along the corridor for Segment 4 (see **Exhibits 22a, 23a, and 24a** in Section 6.2.3, *Evaluation of KOPs*).

Segment 4 would parallel the existing SoCalGas Pipeline No. 2001 West for approximately 1.0 mile (7.3 percent of the 13.7-mile segment), from approximately MP 62.4 to MP 63.4.

4.2.3.4 Sources of Light and Glare

Along Reche Canyon Road, there are no streetlights, and suburban and rural residences are the main sources of nighttime light throughout the canyon. As Segment 4 follows Moreno Beach Drive, Ironwood Avenue, and Redlands Boulevard, starting at MP 58.8, shielded streetlights provide a source of light in addition to residences, schools, and utility yards, until MP 62.4, when Segment 4 crosses under unlit

agricultural land to Theodore Street and Alessandro Boulevard, which are surrounded by unlit agricultural land that contains no adjacent streetlights. Along Virginia Street near Moreno Pressure Limiting Station, there are shielded security lights at Moreno Pressure Limiting Station and Moreno Compressor Station, but there are no streetlights. Other existing sources of light include periodic lights from vehicles.

Existing sources of daytime glare near Segment 4 include paved roads, residential and commercial development, water storage tanks, and intermittent vehicle traffic.

4.3 Additional Proposed Components

4.3.1 Whitewater Pressure Limiting Station

The Whitewater Pressure Limiting Station is an existing facility located in unincorporated Riverside County approximately 1.3 miles northeast of the Palm Springs city limits (**see Exhibit 1a**). It is located approximately 0.3 mile south of the I-10/SR-62 interchange and enclosed within a chain-link fence. The existing station is located in the middle of a wind energy farm, with wind turbines and dirt roads being the only physical aboveground improvements. Sources of nighttime light in the vicinity of the station include a shielded security light at the station, lights on the wind turbines, periodic trains along the railway located approximately 0.6 mile south of the station, and vehicles on I-10 and SR-62.

The Whitewater Pressure Limiting Station is located approximately 0.4 mile south of Officially Designated State Scenic Highway Route 62, approximately 1.0 mile north of State Eligible Scenic Highway Route 111, approximately 11.0 miles northeast of Officially Designated State Scenic Highway Route 243, and approximately 18.1 miles northeast of Officially Designated State Scenic Highway Route 74 (Caltrans 2011). The Whitewater Pressure Limiting Station is located approximately 4.3 miles east of the PCT at the nearest point. Due to distance and intervening topography, the Whitewater Pressure Limiting Station is not located within the viewshed of Routes 62, 111, 243, or 74. The Whitewater Pressure Limiting Station is located within the viewshed of the PCT (in distant views).

4.3.2 Shaver Summit Pressure Limiting Station

The Shaver Summit Pressure Limiting Station is a proposed facility located in unincorporated Riverside County near the City of Indio (**see Exhibit 1a**). It is located approximately 0.7 mile east of the existing Shaver Summit Main Line Valve, and approximately 0.5 mile north of I-10. The surrounding land area is undeveloped. The Chiriaco Summit Airport, a private land strip that has daytime landings, is located approximately 2.2 miles east of the proposed pressure limiting station. Sources of nighttime light in the vicinity of the proposed pressure limiting station include a shielded security light at the Main Line Valve and vehicles on I-10.

The proposed Shaver Summit Pressure Limiting Station is located approximately 14.3 miles northeast of State Eligible Scenic Highway Route 111; approximately 37.9 miles southwest of State Eligible Scenic Highway Route 62; and approximately 36.6 miles east of the nearest Officially Designated State Scenic Highway, SR-74 (Caltrans 2011). The proposed Shaver Summit Pressure Limiting Station is located approximately 46.3 miles east of the PCT at the nearest point. Due to distance and intervening topography, the proposed Shaver Summit Pressure Limiting Station is not located within the viewshed of Routes 111, 62, or 74, or the PCT.

4.3.3 Desert Center Compressor Station

The Desert Center Compressor Station is an existing facility located in unincorporated Riverside County near the community of Desert Center (**see Exhibit 1a**). It is located adjacent to and south of I-10, approximately 1 mile southeast of SR-177, and enclosed within a chain-link fence. Access is off Aztec Avenue. The surrounding land area is undeveloped, except for overhead utility lines that parallel the I-10 freeway east-west to the north and south of the compressor station. Sources of nighttime light in the vicinity of the station include a shielded security light at the station and vehicles on I-10.

The Desert Center Compressor Station is located approximately 25.1 miles southwest of State Eligible Scenic Highway Route 62; approximately 32.3 miles northeast of State Eligible Scenic Highway Route 111; and approximately 58.2 miles northwest of the nearest Officially Designated State Scenic Highway, SR-74 (Caltrans 2011). The Desert Center Compressor Station is located approximately 68.2 miles east of the PCT at the nearest point. Due to distance and intervening topography, the Desert Center Compressor Station is not located within the viewshed of Routes 62, 111, or 74, or the PCT.

5.0 IMPACT EVALUATION CRITERIA AND METHODOLOGY

5.1 Evaluation of Proposed Project under the National Environmental Policy Act and the California Environmental Quality Act

Pursuant to NEPA and CEQA, federal and state agencies must evaluate the potential environmental consequences of discretionary activities prior to carrying out or approving such projects.

Due to the nature of the Proposed Project, approvals from both federal and State agencies will be required; therefore, it must be evaluated pursuant to both NEPA and CEQA. Though there are differences between the two laws, the Council on Environmental Quality (“CEQ”) and the California Governor’s Office of Planning and Research (“OPR”) have provided guidance for the preparation of joint NEPA and CEQA documents in an effort to integrate the federal and State environmental review processes and meeting the requirements of both statutes.

5.1.1 California Environmental Quality Act Approach

The evaluation of impacts under CEQA must consider all aspects of a project, including impacts resulting from construction and the long-term operation of a project. The analysis in this technical report uses the questions in the CEQA Environmental Checklist form contained in Appendix G of the State CEQA Guidelines as the basis for evaluating potential impacts resulting from the Proposed Project.

5.1.2 National Environmental Policy Act Approach

Because a portion of the Proposed Project would be located on USFS-managed land, the NEPA analysis for aesthetics uses the USFS methodology for assessing impacts to scenery, and impacts to viewers. The evaluation also considers the effects of the project in relation to the long-term policy objectives of managing portions of the forest consistent with the High SIO and related management standard of the SBNF. The analysis also considers the Land Management Plan strategies related to accommodating oil and gas pipelines that need to cross the SBNF. The USFS serves as the NEPA lead agency due to the project approval authority for use of ROW within the SBNF.

5.2 Thresholds for Evaluation

5.2.1 California Environmental Quality Act Significance Criteria

The significance criteria for assessing the impacts to aesthetics come from the CEQA Environmental Checklist. According to the CEQA Environmental Checklist, a project causes a potentially significant impact to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

5.2.2 National Environmental Policy Act Evaluation Criteria

For the purposes of this NEPA evaluation, the criteria of scenic integrity (intactness) and landscape character form, line, color, and texture were applied to all analysis by milepost and to KOPs, including those not on USFS-managed land, in order to standardize the analysis of determining the potential impacts of the Proposed Project. USFS LMP management standards were evaluated to determine consistency with the applicable SBNF SIO and to determine whether the Proposed Project would result in a change in the SIO as compared to the Scenic Integrity level characterized in the baseline condition.

5.3 Methodology

The technical report was prepared based on procedures documented in CEQA and USFS standard systems for determining impacts to people, impacts to scenery, and compliance with agency aesthetics and visual management objectives. A viewshed analysis was conducted within 15 miles (agency background distance zone) of the Proposed Project to indicate the locations in the landscape from which Proposed Project facilities would be seen by the public and to determine the validity of KOPs. After a review of the regulatory framework and Proposed Project components, multiple site visits to coordinate with USFS and take photographs from KOP locations, and preparation of visual simulations, the evaluation of the potential impacts of the Proposed Project was conducted using CEQA thresholds and USFS LMP management standards to determine project impacts, the potential for changes from the SIO of the baseline conditions, the potential for the project to effect the ability of the USFS to manage the property to attain a consistency with the assigned management of goal of High SIO. The evaluation also considers the LMP policy related to accommodation of oil and gas pipelines that need to cross the SBNF.

5.3.1 Key Observation Points

KOPs were selected for the purpose of analyzing and describing existing visual resources in the Proposed Project area and for preparing visual simulations. The KOPs are located in publicly accessible areas with views of Proposed Project components. The KOPs were selected as representative views that are available to the general public. Visual simulations were prepared for views from KOP locations to illustrate the potential visual effects of the Proposed Project on viewers at these locations. The visual simulations present computer-generated, photo-realistic images of the Proposed Project components as they would appear from each KOP. **Exhibit 1a** identifies the locations of the KOPs used in the visual analysis.

Sixteen KOPs were selected to characterize local settings. These KOPs are listed in **Table 4, Key Observation Points and Project Components**.

TABLE 4
KEY OBSERVATION POINTS AND PROPOSED PROJECT COMPONENTS

KOP	Milepost	Direction of View	Location	Project Component
1	MP 0.0	South	Rancho Road and Muskrat Avenue	Adelanto Compressor Station, Main Line Valve 1 with up-to-40-foot high radio antenna powered by solar or existing commercial power
2	0.4 mile east of MP 1.9	North	Adelanto High School	Adelanto Compressor Station, Main Line Valve 1 with up-to-40-foot high radio antenna powered by solar or existing commercial power

KOP	Milepost	Direction of View	Location	Project Component
3	Between MP 5.3 and MP 5.4	North	Nearest Residence on Baldy Mesa Road and Olivine Road	Main Line Valve 2 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Staging Area, and Pipeline Alignment
4	Between MP 9.6 and MP 9.7	South	Railroad Crossing and Residence on Baldy Mesa Road south of Trinity Road	Main Line Valve 3 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Staging Area, and Pipeline Alignment
5	Between MP 15.0 and MP 15.1	South	USFS Route 3N24	Main Line Valve 4 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Access Roads, and Pipeline Alignment
6	0.4 mile west-northwest of MP 17.7	East	Baldy Mesa Road/Hillside West of Interstate 15	Access Roads and Pipeline Alignment on Slope
7	0.1 mile north of MP 19.1	South	State Eligible Scenic Highway Route 138 Eastbound Turnout	Main Line Valve 5 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Staging Area, Access Road, and Pipeline Alignment
8	0.1 mile east-southeast of MP 18.8	West	State Eligible Scenic Highway Route 138 Westbound	Pipeline Alignment
9	0.04 mile west-southwest of MP 19.4	Southeast	Pacific Crest National Scenic Trail	Access Road, Pipeline Alignment, and Ridgeline Notch Restoration
10	0.1 mile north of MP 22.6	South	Cajon Blvd. (Historic Route 66) south of Swarthout Canyon Road	Main Line Valve 6 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Access Road, and Pipeline Alignment
11	0.2 mile south-southwest of MP 22.2	North-northeast	Interstate 15 Southbound Turnout	Pipeline Alignment and Ridgeline Notch Restoration
12	Between MP 42.7 and MP 42.8	Southeast	Tippecanoe Avenue South of Union Street	Main Line Valve 11 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Staging Area, Access Road, and Pipeline Alignment
13	1.0 mile west of MP 50.4	East-northeast	Blue Mountain Trail in Reche Canyon	Pipeline Alignment, Access Road, and Staging Areas
14	Between MP 56.5 and MP 56.6	East	Reche Canyon Road east of High Country Drive near rural residences in Reche Canyon	Main Line Valve 14 with up-to-40-foot high radio antenna powered by solar or existing commercial power, Access Road, and Pipeline Alignment

KOP	Milepost	Direction of View	Location	Project Component
15	Between MP 64.7 and MP 64.8	South	Alessandro Boulevard and Virginia Street	Moreno Valley Pressure Limiting Station, Staging Area, and Pipeline Alignment
16	1.0 mile northeast of MP 65.0	Southwest	Nearest Residential Land on Lisa Lane	Moreno Valley Pressure Limiting Station, Staging Area, and Pipeline Alignment

The settings of the Proposed Project compressor station, corridor, access roads, and limiting station as seen from each of the 16 KOP locations are described as follows:

KOP 1 – View from Rancho Road and Muskrat Avenue toward the Adelanto Compressor Station that includes existing industrial and linear development in the City of Adelanto

KOP 1 is a view southwest from Rancho Road in the City of Adelanto. The photograph from KOP 1 is representative of views along Rancho Road toward the Adelanto Compressor Station site and vicinity, where there is substantial existing industrial and linear development (see **Exhibit 5a**). The time period of the view would be of medium to long duration. The duration of view is determined by activity of the viewer, based on movement (speed) and location of the project in comparison with the direction of travel.

The photograph from KOP 1 shows the flat terrain of the surrounding area and angular ridges in the background. Light brown to tan soils are apparent in the immediate foreground.

Structures in the foreground consist of rectilinear shapes, horizontal and vertical lines, light to medium mustard, tan and brown colors, and fine textures. Steel lattice transmission line structures are visible in the middleground.

The vegetation of this view consists of irregularly rounded creosote bush shrubs and interspersed grasses visible in the foreground and middleground. The shrubs and grasses are light to medium olive green and medium tans, respectively. The shrubs are medium to coarse textured and the grasses are fine textured. The vegetation creates an overall horizontal line, appearing scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 2 – View from Adelanto High School at Calendula Street and Mojave Drive toward the Adelanto Compressor Station that includes existing industrial and linear development in the City of Adelanto

KOP 2 is a view north-northwest from Adelanto High School at the intersection of Calendula Street and Mojave Drive in unincorporated San Bernardino County. The photograph from KOP 2 is representative of views from around the high school toward the Adelanto Compressor Station site and vicinity, where there is substantial existing industrial development and electrical transmission infrastructure (see **Exhibit 6a**). The time period of the view would be of medium to long duration.

The photograph from KOP 2 shows the flat terrain of the surrounding area and angular ridges in the background. Light brown to tan soils are apparent in the immediate foreground.

Structures in the foreground consist of rectilinear shapes, horizontal and vertical lines, light to medium mustard, tan and brown colors, and fine textures. Steel lattice transmission line structures are visible in the middleground.

The vegetation of this view consists of irregularly spaced grasses visible in the foreground and middleground. The desert shrubs are front-lit and light to medium tans in color. The grasses are fine textured. The vegetation creates an overall horizontal line, appearing scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 3 – View from the nearest residence on Baldy Mesa Road and Olivine Road toward Main Line Valve 2, Staging Area, and Pipeline ROW that includes existing utility development and roads in San Bernardino County

The photograph from KOP 3 is representative of views from residences near Baldy Mesa Road at Olivine Road facing north along the pipeline alignment toward the proposed pipeline, Main Line Valve 2, access road, and two existing pipelines in unincorporated San Bernardino County (see **Exhibit 7a**). The time period of the view would be of long duration.

The photograph from KOP 3 shows the flat terrain of the surrounding area and angular ridges in the far background. Light brown to tan soils are apparent in the immediate foreground.

Road and existing pipelines in the foreground consist of planar shapes, horizontal lines, light to medium tan and brown colors, and fine textures. Steel lattice transmission line structures are visible in the middleground.

The vegetation of this view consists of irregularly shaped Joshua trees, rounded creosote bush shrubs, and interspersed grasses visible in the foreground and middleground. The Joshua trees are dark olive green, and the shrubs and grasses are light to medium olive green and medium tans, respectively. The Joshua trees are coarse textured, the shrubs are medium to coarse textured, and the grasses are fine textured. The vegetation creates an overall broken horizontal line, appearing scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 4 – View from residence on Baldy Mesa Road South of Trinity Road toward Main Line Valve 3, Staging Area, and Pipeline ROW that includes the railroad crossing and railroad embankment in San Bernardino County

The photograph from KOP 4 is representative of views from residences near Baldy Mesa Road south of Trinity Road facing south along the proposed pipeline alignment and Main Line Valve 3 toward the existing railroad crossing in unincorporated San Bernardino County (see **Exhibit 8a**). The time period of the view would be of long duration.

The photograph from KOP 4 shows the flat terrain of the surrounding area. Light brown to tan soils are apparent in the immediate foreground.

Road, electrical line, and railroad facilities in the foreground consist of planar shapes, horizontal lines, vertical lines, light to medium tan and brown colors, and fine textures. Residential structures are visible in the foreground and middleground and consist of rectangular and angular shapes, horizontal and vertical lines, and widely varied colors.

The vegetation of this view consists of irregularly shaped Joshua trees, rounded creosote bush shrubs, and interspersed grasses visible in the foreground and deciduous (residential) trees and shrubs in the foreground and middleground. The Joshua trees are dark olive green and the shrubs and grasses are light to medium olive green and medium tans, respectively. The Joshua trees are coarse textured, the shrubs are

medium to coarse textured, and the grasses are fine textured. The residential trees are an assortment of light to medium greens. The vegetation creates an overall broken horizontal line, appearing scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 5 – View from a vantage point near USFS Route 3N24 toward Main Line Valve 4, Access Roads, and Pipeline ROW that includes existing utility development and roads in the SBNF

The photograph from KOP 5 is representative of views near USFS Route 3N24, a designated off-road vehicle route facing south-southeast toward the proposed pipeline alignment, Main Line Valve 4, access road, and existing pipelines in the SBNF (see **Exhibit 9a**). The time period of the view would be of medium duration.

The photograph from KOP 5 shows the steep terrain of the surrounding area and angular ridges in the foreground and middleground. Light brown to tan soils are apparent in the immediate foreground.

Existing access roads, road cuts, and pipelines in the foreground consist of planar and angular shapes, horizontal lines, light to medium tan and brown colors, and fine textures.

The vegetation of this view consists of desert shrubs and grasses in the foreground and middleground. The shrubs are medium to dark olive green. The grasses are fine textured. The clumped vegetation creates undefined to broken lines, appearing scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 6 – View from hillside west of I-15 toward Access Roads and Pipeline ROW on Slope that includes existing utility development and roads in the SBNF

The photograph from KOP 6 is representative of views near I-15 facing southeast toward the proposed pipeline alignment as it ascends a publicly visible slope and existing (distant) access roads and pipelines in the SBNF (see **Exhibit 10a**). The time period of the view would be of medium duration.

The photograph from KOP 6 shows the moderate to steep terrain of the surrounding area and angular ridges in the foreground and middleground. Light tan to light red soils are apparent in the immediate foreground and middleground.

The view is dominated by I-15 in the foreground and consists of planar shapes, vertical and horizontal lines, light to medium tan, red and brown colors, and fine textures. There are multiple existing access roads and existing pipeline ROW clearings in the middleground and background. The existing features are comprised of planar shapes and angular lines, light to medium tan colors, and finer textures than those of the surrounding landscape.

The vegetation of this view consists of interspersed desert shrubs and grasses in the foreground and middleground. The shrubs are medium to dark olive green and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

There are numerous exposed rock formations in the foreground and middleground.

KOP 7 – View from State Eligible Scenic Highway Route 138 toward Main Line Valve 5, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in Crowder Canyon in the SBNF

The photograph from KOP 7 is representative of views from State Eligible Scenic Highway Route 138 facing southwest toward the proposed pipeline alignment, Main Line Valve 5, staging area, access roads and existing access roads, and pipelines in the SBNF (see **Exhibit 11a**). The time period of the view would be of short to medium duration.

The photograph from KOP 7 shows the steep terrain of the surrounding area and angular ridges in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground and middleground.

The existing access road, road cuts, transmission line structures, and pipelines in the foreground and middleground consist of planar shapes, vertical and horizontal lines, light to medium red and brown colors, and fine textures. SoCalGas Transmission Pipeline No. 4000 (painted beige/tan) is visible aboveground in the foreground.

The vegetation of this view consists of interspersed desert shrubs and grasses in the foreground and middleground. The shrubs are light to medium to dark olive green and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 8 – View from State Eligible Scenic Highway Route 138 toward Pipeline ROW that includes existing utility development and roads in riparian area within the SBNF

The photograph from KOP 8 is representative of views from State Eligible Scenic Highway Route 138 facing west-northwest toward the proposed pipeline alignment and existing access roads and pipelines in the SBNF (see **Exhibit 12a**). The time period of the view would be of short duration.

The photograph from KOP 8 shows the steep terrain of the surrounding area and angular ridges in the foreground and middleground. Light tan and light brown to red soils are apparent in the immediate foreground and middleground.

The existing road and road cuts in the foreground and middleground consist of planar shapes; vertical and horizontal lines; light to medium tan, red, and brown colors; and fine textures.

The vegetation of this view consists of riparian trees and interspersed desert shrubs and grasses in the foreground and middleground. The trees are light to medium olive greens, the shrubs are light to medium to dark olive greens, and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

There are numerous exposed rock formations in the foreground and middleground.

KOP 9 – View from Pacific Crest National Scenic Trail toward Access Road and Pipeline ROW that includes existing utility development and roads in Crowder Canyon within the SBNF

The photograph from KOP 9 is representative of views from the PCT facing east toward the proposed pipeline alignment, staging area, and existing access roads, electrical transmission lines, and pipelines in the SBNF (see **Exhibit 13a**). The time period of the view would be of medium to long duration.

The photograph from KOP 9 shows the steep terrain of the surrounding area and angular ridges in the foreground. Light tan and brown soils are apparent in the foreground. SoCalGas Transmission Pipeline No. 4000 (pipe) is visible aboveground in the foreground, which has been painted a beige/tan color (see Exhibit 13a, to the left of the access road towards the middle of the photograph). There is an existing notch in the ridgeline and exposed rock where SoCalGas Transmission Pipeline No. 4000 was installed in 1960 below ground at that location.

The existing access road, road cuts, ridgeline notch, electrical transmission line structures, and pipeline in the foreground consist of planar and pyramidal shapes, vertical and horizontal lines, light to medium red and brown colors, and fine textures.

The vegetation of this view consists of interspersed desert shrubs and grasses in the foreground and middleground. The shrubs are light to medium to dark olive green and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears both scattered and continuous in the foreground.

There are exposed rock formations in the foreground.

KOP 10 – View from Cajon Boulevard (Historic Route 66) South of Swarthout Canyon Road toward Main Line Valve 6, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in the SBNF

The photograph from KOP 10 is representative of views from Cajon Boulevard (Historic Route 66) south of Swarthout Canyon Road facing south toward the proposed pipeline alignment and Main Line Valve 6 and existing access roads in the SBNF (see **Exhibit 14a**). The time period of the view would be of long duration.

The photograph from KOP 10 shows the moderate terrain of the surrounding area and angular ridges in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground and middleground.

The road pattern is dominant in the foreground and consists of curvilinear, planar shapes, horizontal lines, light to medium red and brown colors, and fine textures.

The vegetation of this view consists of interspersed desert shrubs and grasses in the foreground and middleground. The shrubs are light to medium to dark olive green and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 11 – View from Interstate 15 toward Pipeline ROW to the north that includes existing utility development and roads in the SBNF

The photograph from KOP 11 is representative of views from Interstate 15 facing north-northeast toward the proposed pipeline alignment where it descends the slope and crosses under I-15 and existing pipeline in the SBNF (see **Exhibit 15a**). The time period of the view would be of short duration.

The photograph from KOP 11 shows the steep terrain of the surrounding area and angular ridges in the foreground and middleground. Light tan and light brown to red soils are apparent in the immediate foreground and middleground. There is a visually dominant existing notch in the ridgeline where SoCalGas Transmission Pipeline No. 4000 was installed in 1960 below ground at that location.

The road pattern is dominant in the foreground and consists of curvilinear planar shapes, horizontal lines, light to medium gray, red and brown colors, and fine textures.

The vegetation of this view consists of interspersed desert shrubs and grasses in the foreground and middleground. The shrubs are light to medium to dark olive green and the grasses are light to medium greens and tans, depending on the season. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 12 – View from Tippecanoe Avenue South of Union Street toward Main Line Valve 11, Staging Area, and Pipeline ROW that includes existing utility development, roads and residential areas in the City of San Bernardino

The photograph from KOP 12 is representative of views from Tippecanoe Avenue south of Union Street (in the City of San Bernardino) facing southeast toward the proposed pipeline alignment, Main Line Valve 11, staging area, and existing access roads and pipelines in the City of Highland (see **Exhibit 16a**). The time period of the view would be of medium duration.

The photograph from KOP 12 shows the residential area in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground.

The existing road, utility line, and residential structures in the foreground consist of planar shapes, vertical and horizontal lines, light to medium red and brown colors, and fine textures.

The vegetation of this view consists of residential trees, shrubs and grasses in the foreground and middleground. The vegetation is widely varied in color and generally light to medium to dark olive green. Fine to moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears scattered in the foreground and continuous as the foreground transitions to the middleground.

KOP 13 – View from Blue Mountain Trail toward Staging Areas, Access Roads, and Pipeline ROW in Reche Canyon that includes existing residential development and roads in Reche Canyon, San Bernardino County

The photograph from KOP 13 is representative of views from Blue Mountain Trail in Reche Canyon facing east toward the proposed pipeline alignment, staging areas, and existing roads in the City of Colton (see **Exhibit 17a**). The time period of the view would be of long duration.

The photograph from KOP 13 shows the rocks and moderate to steep terrain of the immediate foreground area and angular ridges in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground and middleground.

The existing disturbances in this view consists of trails in the foreground and residential and roads in the middleground. The middleground consists of planar shapes, vertical and horizontal lines, light to medium tan and brown colors, and fine textures.

The vegetation of this view consists of foreground grasses and shrubs and middleground residential trees, shrubs, and grasses. The grasses and shrubs in the foreground are light to medium greens and tans, depending on the season and lighting conditions. The residential trees and shrubs are light to medium to dark olive green. Fine to moderate to coarse textures define the varied landscape pattern. The vegetation appears continuous in the foreground and scattered in the middleground.

KOP 14 – View from Reche Canyon Road East of High Country Drive toward Main Line Valve 14, Access Road, and Pipeline ROW that includes existing utility development and roads near rural residences in Reche Canyon, Riverside County

The photograph from KOP 14 is representative of views from Reche Canyon Road east of High Country Drive near rural residences in Reche Canyon facing west toward the proposed pipeline alignment, Main Line Valve 14, and existing access roads and pipelines in unincorporated Riverside County (see **Exhibit 18a**). The time period of the view would be of medium duration from the road and long duration from the residences.

The photograph from KOP 14 shows the moderate terrain of the surrounding area and angular ridges in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground and middleground.

The existing access road, road cuts, and electrical transmission line structures consist of planar and columnar shapes, vertical and horizontal lines, light to medium red and brown colors, and fine textures.

The vegetation of this view consists of grasses and two planted pine trees in the foreground and middleground. The grasses are light to medium greens and tans, depending on the season, and the trees are dark olive green. Moderate to coarse texture defines the majority of the landscape pattern. The vegetation appears continuous as the foreground transitions to the middleground.

KOP 15 – View from Alessandro Boulevard at intersection with Virginia Street toward Moreno Valley Pressure Limiting Station, Staging Area, and Pipeline ROW that includes existing utility development and roads in the City of Moreno Valley

The photograph from KOP 15 is representative of views from Alessandro Boulevard at the intersection with Virginia Street facing south toward the proposed Moreno Valley Pressure Limiting Station, pipeline alignment, staging area, and existing pipelines in the City of Moreno Valley and unincorporated Riverside County (see **Exhibit 19a**). The time period of the view would be of medium duration.

The photograph from KOP 15 shows the flat terrain of the surrounding area and angular ridges in the background. Light tan to brown soils are apparent in the immediate foreground.

The existing utility structures, road and pipelines in the foreground consist of planar and columnar shapes, vertical and horizontal lines, light to medium red and brown colors, and fine textures.

The vegetation of this view consists of agricultural fields and grasses in the foreground and middleground. The grasses are light to medium greens and tans, depending on the season. Fine texture defines the majority of the landscape pattern. The vegetation appears continuous as the foreground transitions to the middleground.

KOP 16 – View from the nearest residential land on Lisa Lane toward Moreno Valley Pressure Limiting Station, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in the City of Moreno Valley

The photograph from KOP 16 is representative of views from the nearest residential land on Lisa Lane facing south toward the proposed Moreno Pressure Limiting Station and pipeline alignment, and existing Moreno Valley Limiting Station, access roads, and pipeline ROW in unincorporated Riverside County (see **Exhibit 20a**). The time period of the view would be of long duration.

The photograph from KOP 16 shows the moderate terrain of the surrounding area and angular ridges in the foreground and middleground. Light brown to red soils are apparent in the immediate foreground and middleground.

The existing road in the foreground consists of planar shapes, horizontal lines, light to medium red and brown colors, and fine textures. The structures in the middleground consist of planar and columnar shapes, horizontal and vertical lines, light to medium tan and mustard colors, and fine textures.

The vegetation of this view consists of agricultural fields and grasses in the foreground and middleground. The grasses are light to medium greens and tans, depending on the season. Fine texture defines the majority of the landscape pattern. The vegetation appears continuous as the foreground transitions to the middleground.

5.3.2 CEQA Impact Assessment

Multiple site visits; a literature review of federal/state/local plans, ordinances, regulations, statutes, and designated scenic resources; and a desktop analysis were completed in the evaluation of the Proposed Project's potential to result in significant impacts to aesthetics in regard to scenic vistas, scenic resources within a state scenic highway, visual character or quality, and new sources of daytime or nighttime light or glare. KOPs were selected as representative views of the Proposed Project that are available to the general public with views of the Proposed Project components along the 65-mile proposed pipeline alignment for the purpose of analyzing and describing existing visual resources in the Proposed Project area and for preparing visual simulations. Visual simulations were prepared using site photographs and digital modeling for views from KOP locations to illustrate the potential visual effects of the Proposed Project on viewers at these locations. Photographs were taken at each of the KOPs in the foreground area (50 feet from the KOP), approximately a quarter of a mile away from the KOP (background), and a midway point between the foreground and background locations. Computer-aided photographic simulations were prepared of the proposed facilities and disturbances as would be seen from KOPs. Each KOP has been represented by a photograph of the existing landscape, a photograph simulating the as-built facilities and disturbances, and a photograph simulating post-restoration conditions.

5.3.3 NEPA Assessment

Because a portion of the Proposed Project would be located on USFS-managed land, the NEPA analysis for aesthetics uses the USFS methodology for assessing impacts to scenery, impacts to viewers, and

consistency with the applicable SIO and related management standard of the SBNF. The characterization of baseline conditions has been established in regard to scenic resource inventory, landscape character, scenic attractiveness, user concern, visibility (seen areas), distance zones, existing scenic integrity, and views from 16 KOPs that were used to characterize local settings throughout the 5-mile alignment. Seven of the KOPs are located within the SBNF. Coordination with USFS was conducted to verify the 6 locations of KOPs that would represent important views within the SBNF and to confirm the methodology of the technical report.

5.3.3.1 *Scenic Resource Inventory*

The scenic inventory and LMP for the SBNF was completed by USFS in 2005. Corridor mileposts (to the one-tenth mile) associated with inventory components and SIOs are included throughout the following USFS- and SBNF-related text.

5.3.3.2 *Landscape Character*

The Landscape Character of the Proposed Project corridor within the northern SBNF was identified through multiple site visits and a review of terrain and aerial imagery in connection with the corridor mileposts.

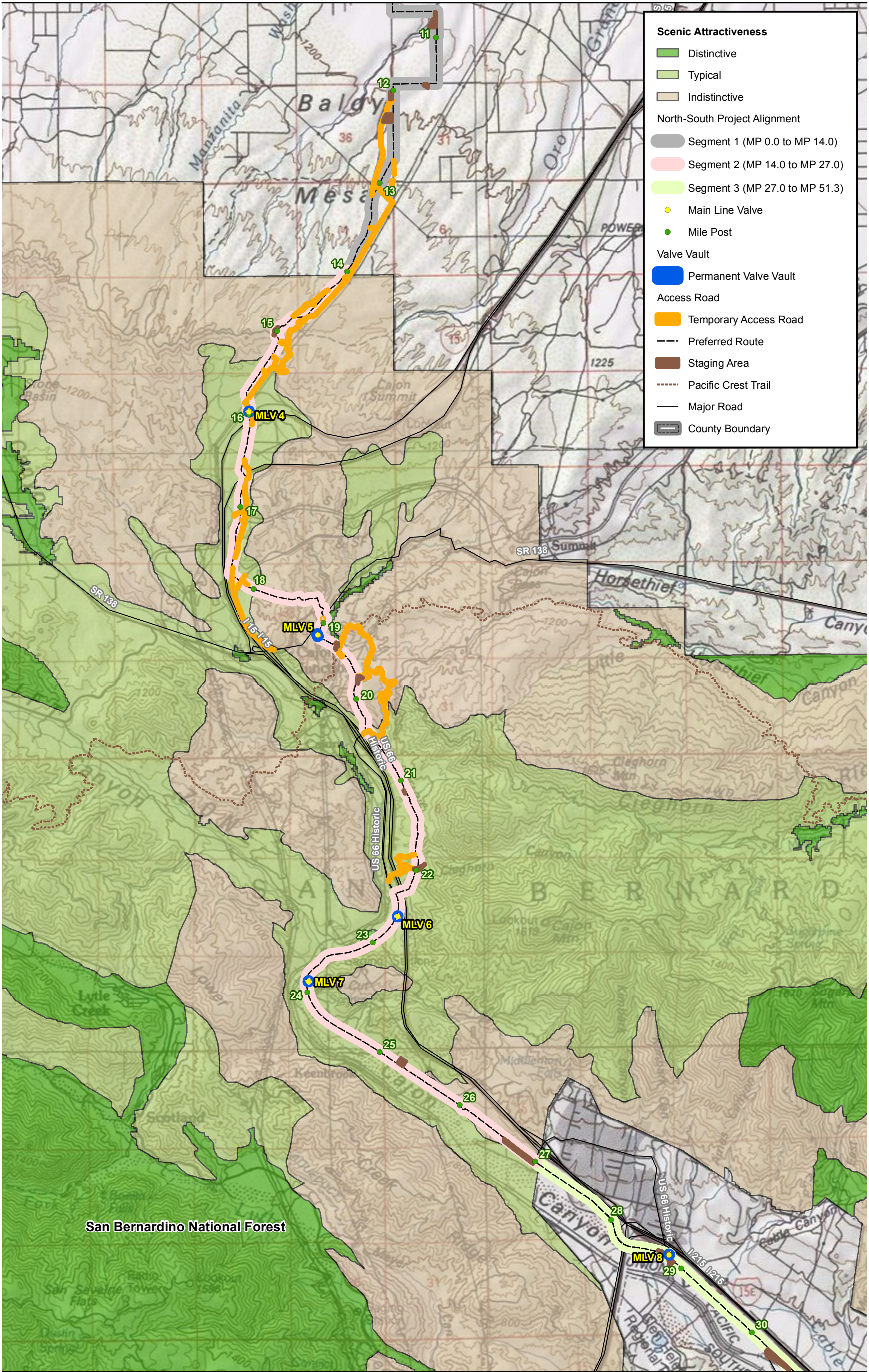
5.3.3.3 *Scenic Attractiveness*

Based on USFS Scenery Management System guidance (USFS 1995), Inherent Scenic Attractiveness (“ISA”) classes (**Exhibit 3, Scenic Attractiveness Classes**) are developed on National Forest System lands to determine the relative scenic value of lands within a particular Landscape Character. The three ISA classes are Class A, Distinctive; Class B, Typical; and Class C, Indistinctive. The landscape elements of landform, vegetation, rocks, cultural features, and water features are described in terms of their line, form, color, texture, and composition for each of these classes. The classes and their breakdown are displayed in an MP format, and **Exhibit 3** delineates the ISA classes for the Proposed Project corridor area of interest (USFS N.D).

5.3.3.4 *User Concern, Visibility (Seen Areas), and Distance Zones*

The User Concern Analysis (**Exhibit 4, User Concern Inventory**) serves as the USFS guide to perceptions of attractiveness, helps identify special places, and helps to define the meaning people give to the subject landscape (USFS 1995). This constituent analysis leads to a determination of the relative importance of aesthetics to the public; this importance is expressed as a Concern Level. Sites, travel ways, special places, and other areas are assigned a Concern Level value of 1, 2, or 3 to reflect the relative High, Medium, or Low importance of aesthetics. Seen Areas and Distance Zones are integrated with Concern Levels 1, 2, or 3 areas to determine the relative sensitivity of scenes based on their distance from an observer. These zones are identified as:

- Immediate Foreground (up to a quarter-mile from the viewer);
- Foreground (up to a half-mile from the viewer);
- Middleground (up to 4 miles from the foreground); and
- Background (4 miles from the viewer to the horizon).



Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.

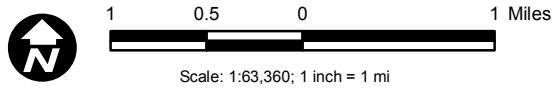
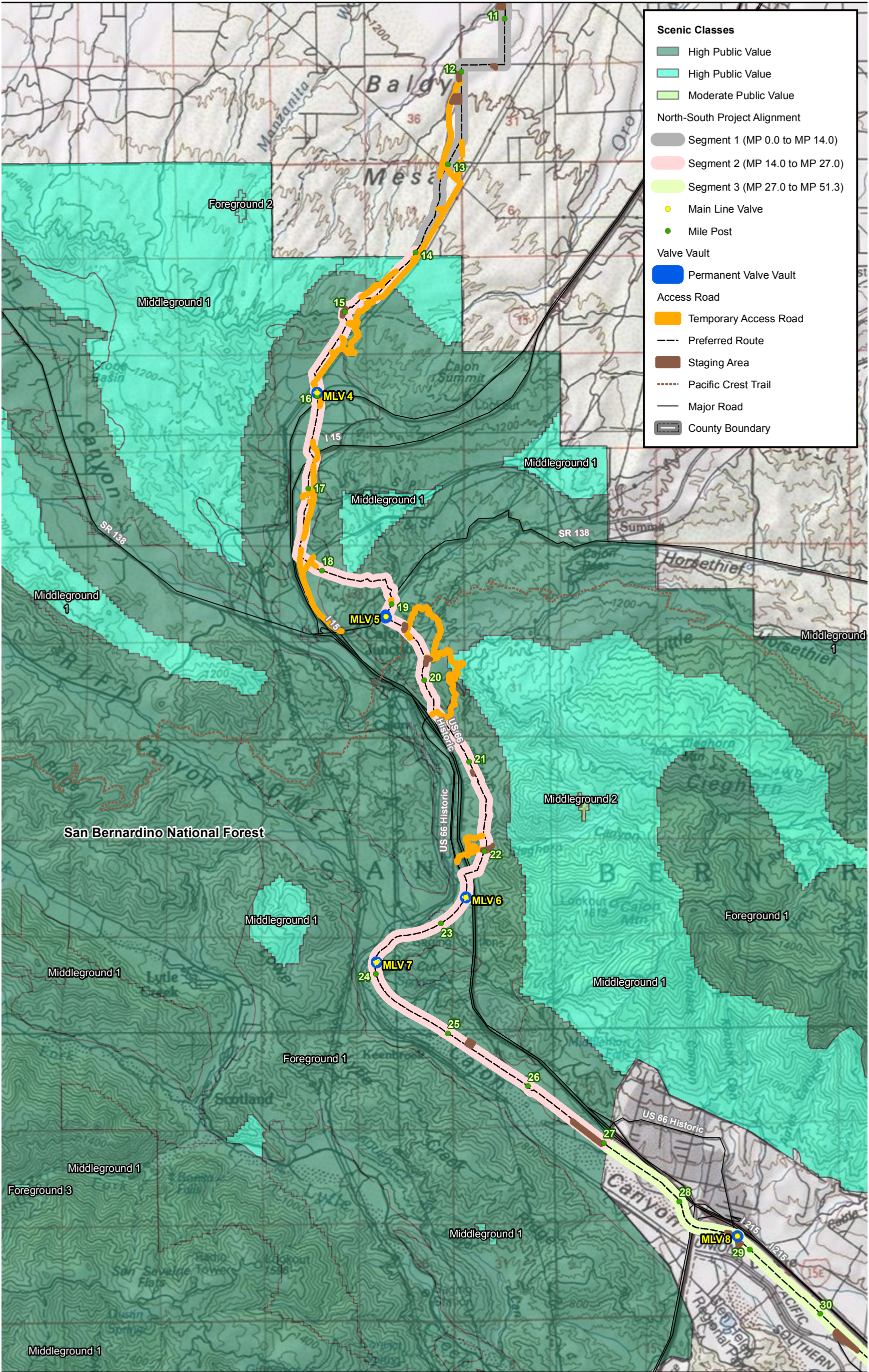


Exhibit 3
Scenic Attractiveness Classes
North-South Project



Source: SoCalGas, USDA Forest Service, Caltrans, ESRI.



1 0.5 0 1 Miles

Scale: 1:63,360; 1 inch = 1 mi

Exhibit 4
User Concern Inventory
North-South Project

5.3.3.5 Existing Scenic Integrity (Intactness)

Existing Scenic Integrity analysis provides documentation of existing conditions and Scenic Integrity Objectives are based on USFS land planning and management decisions. Existing Scenic Integrity mapping is not available from the SBNF. Thus, the following analysis is based on the experience and related professional judgment of the Proposed Project consultant.

6.0 IMPACT ANALYSIS

This assessment is based on the potential impacts of the Proposed Project on aesthetics. The study area for aesthetics is the Proposed Project viewshed, shown in **Exhibit 1a**. The visible height threshold for structures was set at 30 feet for the compressor station structures, 8 feet for the Main Line Valves, and ground level for the pipeline ROW. These thresholds assume that a person seeing at least these heights in these locations would perceive the presence of the Proposed Project. The ArcGIS viewshed application was used to determine visibility of the Proposed Project out to the horizon for the compressor stations and for the Main Line Valves, and 2 miles for the pipeline ROW alignment.

Visual simulations of the proposed facilities were included for full build-out only.

6.1 CEQA Impact Assessment

6.1.1 *Impacts Associated with Scenic Vistas*

Would the project have a substantial adverse effect on a scenic vista?

Construction Impacts

There are no federal, county, or city designated scenic vistas within the Proposed Project area. There are four State (Caltrans) designated vista points within a 15-mile radius of the Proposed Project (Table 5, *Caltrans Designated Vista Points*). The Proposed Project would not be visible from three of these points due to intervening topography, vegetation, and existing structures in the foreground. The construction of the Proposed Project would potentially be visible in the middleground and background from the Donald S. Wieman Vista Point, located approximately 4.5 miles northeast of the Proposed Project, but it would not be expected to adversely affect the vista because the portion of the alignment within the viewshed from this vista point would follow existing roads and predominantly be located within urban areas. Operation would not be expected to impact scenic vistas because the pipeline would be underground and the block valves would blend in with the existing structures within the viewshed from Donald S. Wieman Vista Point.

TABLE 5
CALTRANS DESIGNATED VISTA POINTS

Name	Route	Post Mile	Distance from Proposed Project	Visibility Level
Donald S. Wieman	18	21.4	4.5 miles northeast	Visible but not significant; construction of the underground alignment would potentially be visible in the distance (middleground and background) from this point, but it would not adversely affect the vista because the portion of the alignment within the viewshed from this vista point would follow existing roads and predominantly be located within urban areas.
Mill Creek	38	10.7	13.5 miles east	Not visible; interfering mountainous topography within 0.5 mile of the vista point shields all development outside of the forest (including to the south and west) from view, and the Proposed Project would not be visible from this point.
Silverwood Lake	138	3.6	6.3 miles east	Not visible; interfering mountainous topography within 0.6 mile of the vista point shields all development outside of the immediate vicinity of Silverwood Lake (including to the west) from view, and the Proposed Project would not be visible from this point.
Silverwood Lake 2	138	3.6	9.0 miles west	Not visible; shrubs, pine trees, and structures in the foreground to middleground would shield the Proposed Project from view.

SOURCE: Male, Laura, Sapphos Environmental, Inc. Pasadena, CA. 3 July 2015. Communication with Daniel Kitowski, Transportation Manager (GIS), California Department of Transportation.

Because the Caltrans designated scenic vista with a view of the Proposed Project area (Segment 3) currently overlooks an urban area in which construction of the proposed project would occupy a minor portion of the view, construction activities would not have a substantial adverse effect on a scenic vista. Therefore, there would be a less than significant impact in relation to substantial adverse effects on a scenic vista.

Operation Impacts

Because there are no designated scenic vistas within the Proposed Project area or with a view of the Proposed Project area, none of the components of the Proposed Project would have the potential to have a substantial adverse effect on a scenic vista. Therefore, no significant impacts are anticipated from operation of the Proposed Project.

6.1.2 Impacts Associated with Scenic Resources within a State Scenic Highway

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

There are five highway or trail routes in the Proposed Project area with designated scenery management objectives. They include: U.S. Historic Route 66, Designated State Scenic Highway Route 243, State Eligible Scenic Highway Route 138 - Rim of the World Scenic Byway, State Eligible Scenic Highway Route 330, and the PCT (see **Exhibit 1a**).

Construction Impacts

Because all of the state scenic highways crossed by the Proposed Project corridor or access roads or with a view of the Proposed Project corridor or access roads have substantial levels of existing utility development and/or access roads or human-made modifications, construction activities would not have the potential to damage scenic resources or have a long-term substantial adverse effect on a State-designated scenic highway. The Proposed Project is not located within any Officially Designated State scenic highway corridors and would not affect scenic resources within a designated State scenic highway corridor. No historic buildings would be removed within eligible scenic highway corridors. Construction would potentially require the removal of trees and rock outcroppings in the Proposed Project ROW, within one-half mile of SR 138, an eligible State scenic highway. Implementation of Applicant Proposed Measure (“APM”) **AES-1: Implementation of Revegetation and Restoration Plan** is required to return temporary areas of disturbance to their pre-construction conditions to the extent feasible according to a revegetation plan following construction. Implementation of **APM-AES-2: Block Valve Locations** would further reduce potential visual impacts within State scenic highways through location of block valves outside of the foreground viewshed of State and county-designated scenic routes and the use of visual screening where block valves cannot be located outside of the foreground. After implementation of APM-AES-1 and APM-AES-2, temporary impacts from construction of the Proposed Project are anticipated to be below the level of significance.

Operation Impacts

All of the state scenic highways crossed by the Proposed Project corridor or access roads or with a view of the Proposed Project corridor or access roads have substantial levels of existing utility development and/or access roads or human-made modifications that facilitate access for operational and maintenance activities without requiring the removal or alteration of trees, rock outcroppings, or historic buildings within a State scenic highway corridor. Therefore, operational activities would not have the potential to damage scenic resources or have a substantial adverse effect on a State-designated or eligible scenic highway. Therefore, no significant impacts are anticipated from operation of the Proposed Project.

6.1.3 Impacts Associated with Visual Character or Quality

Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Construction Impacts

As discussed in Section 4.2, Proposed Project Corridor Setting, the Proposed Project landscape is characterized by a mix of land uses along the 65-mile alignment, including residential landscapes, forest lands, open space public lands, desert landscape, and utility infrastructure. Outside of the SBNF, Segment 1 retains more natural areas with only scattered residential development. Segments 3 is an urbanized area

and the Proposed Project would be located primarily with existing road ROWs. Segment 4 includes Reche Canyon. Construction activities associated with the Proposed Project would occur within the immediate viewshed of existing utility development, and/or access roads, or other similar modifications to the natural environment. Therefore, no significant impact to the existing visual character or quality of the site and its surroundings is anticipated from construction of the Project.

Operation Impacts

Operation of the Proposed Project would include periodic inspections, maintenance, and repair work. As a result, no additional changes to the visual character or quality of the site and its surroundings would be anticipated during the operation of the Proposed Project as compared to construction of the Proposed Project. Therefore, no additional impact is anticipated from operation of the Proposed Project.

6.1.4 Impacts Associated with Substantial Light or Glare

Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Construction Impacts

Construction of the Proposed Project would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Under normal circumstances, construction of the Proposed Project would occur between the hours of 6:00 A.M. and 7:00 P.M. Monday through Friday and some Saturdays, except during hydrostatic testing and start-up operations, when work hours may extend up to 24 hours per day in accordance with local noise ordinances and permit requirements.

In the locations where temporary construction lighting is needed for nighttime construction for the safety of construction workers, lighting would be directed toward the construction activities and installed in accordance with the applicable provisions of the San Bernardino County Night Sky Protection Ordinance and the Riverside County Ordinance No. 655 Regulating Light Pollution (San Bernardino County 2007; Riverside County 1998). Standalone portable light towers/poles may be used to provide illumination at night at the staging yards and/or compressor and limiting sites for safety and security purposes. These lights would be oriented to minimize their effect on any nearby sensitive receptors. Therefore, less than significant impacts are anticipated from construction of the Proposed Project.

Operation Impacts

Proposed Project facilities that may require additional nighttime lighting include the Adelanto Compressor Station and Moreno Pressure Limiting Station. Lighting at these locations would consist of pole-mounted light fixtures for areas of the yard where emergency activities may be required. The facilities would be illuminated at night under normal conditions and would be consistent with other industrial or utility lighting in neighboring facilities. Additionally, the lighting would be installed in accordance with the applicable provisions of the San Bernardino County Night Sky Protection Ordinance and the Riverside County Ordinance No. 655 Regulating Light Pollution (San Bernardino County 2007; Riverside County 1998).

Additional lighting required for the compressor and limiting stations would be a new source of lighting in an area that is currently characterized by industrial security lighting or street lighting. The lighting would be directed downward and shielded to eliminate off-site light spill at times when the lighting would be in use. Because the nighttime lighting would be similar to existing lighting, the Proposed Project would not

create a unique new source of light or glare that would adversely affect day or nighttime views in the area. Therefore, less than significant impacts are anticipated from operation of the Proposed Project.

6.2 NEPA Assessment

The NEPA assessment approach is discussed in Section 5.1.2. Corridor mileposts (to the one-tenth mile) are included throughout the following SBNF lands-related text.

6.2.1 Construction Effects

Visual resources would be adversely affected from construction of the Proposed Project during construction and for a period of several years following construction, requiring the consideration of mitigation to restore native plant communities and minimize visibility of the pipeline alignment. Direct impacts to visual resources would occur from modifications of scenery and from introductions of different and view-changing forms, lines, colors, and textures of landform, vegetation, and structures needed to accommodate Proposed Project construction activities.

Planar, cubed, or cylindrical forms of structures; angular, vertical, and horizontal lines of structures; light to medium tan and brown colors; and smooth textures would result from introduced piping, valves, walls, vegetation clearing, fences, and roads. In less developed areas, these elements would contrast with existing characteristic landscapes to a moderate to strong degree. In viewsheds with existing utility structures and ground disturbances, contrasts would be weak to moderate, depending on distance from the observer and number and type of structures. In all cases, construction activities occurring in the immediate foreground (one-quarter mile) and foreground (one-half mile) of the observer would cause greater contrasts than those appearing at a further distance.

The introduction of the Proposed Project's construction-related structures, equipment, and areas' cubed forms, horizontal and vertical lines, multiple colors, and smooth textures in less developed areas would contrast with the characteristic landscape to a strong degree. In viewsheds with existing developed activities, contrasts would be weak to moderate, depending on proximity of the Proposed Project with similar activities and distance from observers.

In the short term of construction, impacts to visual resources would be expected to be moderate to high.

Construction of the Proposed Project would result in degradation of the landscape character or quality of the landscape in areas of moderately steep to very steep terrain combined with high existing scenic integrity (intactness) landscapes from MP 15.1 to 15.3, 17.9 to 18.9, 19.4 to 19.5 (Crowder Canyon), 19.5 to 19.7, 20.2 to 20.4 and 21.1 to 21.2. The construction impacts are expected to temporarily reduce these areas to SIO levels of Low and Very Low. Implementation of APM AES-1 would result in Moderate SIO levels within 3 years.

After construction, the Proposed Project would result in some long-term changes to the visual resources and landscape character of the Proposed Project area from the introduction of different and view-changing forms, lines, colors and textures of landform, vegetation, and structures, as noted under Construction Impacts. Within 3 years following construction, it is anticipated that the areas located from MP 15.1 to 21.2 would achieve an SIO level of Moderate. After implementation of APM-AES-1, this impact would be reduced to acceptable adverse effects (Table 6, *Proposed Project Scenic Integrity for Segment 2*). After 7 to 8 years following construction, it is anticipated that restoration would allow the areas from MP 15.1 to 21.2 to achieve an SIO level of Moderate to High.

TABLE 6
PROPOSED PROJECT SCENIC INTEGRITY FOR SEGMENT 2

Milepost Range	Existing Scenic Integrity Level	Proposed Project Scenic Integrity Level Immediately After Construction	Proposed Project Scenic Integrity Level at 3 Years with Restoration	Proposed Project Scenic Integrity Level After 7-8 Years with Restoration
14.0 to 15.1	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
15.1 to 15.3	Moderate Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
15.3 to 17.8	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
17.8 to 18.4	High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
18.4 to 18.5	Moderate to High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
18.5 to 18.9	High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
18.9 to 19.0	Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
19.0 to 19.4	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
19.4 to 19.5	High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
19.5 to 19.6	Moderate to Low Scenic Integrity (ridgeline notch)	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
19.6 to 19.7	Moderate Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
19.6 to 20.2	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
20.2 to 20.4	High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
20.4 to 21.1	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
21.1 to 21.2	High Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
21.2 to 21.5	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
21.5 to 21.6	Moderate Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
21.6 to 22.1	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
22.1 to 22.2	Low Scenic Integrity (ridgeline notch)	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity

22.2 to 22.3	Moderate to Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity
22.3 to 27.1	Low to Very Low Scenic Integrity	Low to Very Low Scenic Integrity	Moderate Scenic Integrity	Moderate to High Scenic Integrity

6.2.2 Operation Effects

Operation of the Proposed Project would include periodic inspections, maintenance, and repair work. As a result, no additional visual impacts are anticipated during operation of the Proposed Project.

6.3 Evaluation of KOPs

Included in the analysis are estimates of impacts to scenery, impacts to viewers, and consistency with the applicable SIO of the SBNF. Evaluation criteria for KOPs include potential sky-lining (or not), sun angle situation (front-lit or back-lit), view distance, observer position, duration of view, short- and long-term changes to the landscape elements, change to intactness of the natural landscape, level of scenic quality impacts, level of viewer impacts, and compliance with state and local LORS or consistency with the SBNF High SIO. The “before project” (existing conditions) and “after project” (visual simulation) images from the KOPs are shown in **Exhibits 5a** (the letter “a” indicates “before project”) through **20b** (the letter “b” indicates “after project”). Where KOPs are located within the SBNF, two visual simulations have been created: **Exhibits 13b-1** through **19b-1** indicate “after 3 years of restoration” and **Exhibits 13b-2** through **19b-2** indicate “after restoration has been completed.”

KOP 1 – View from Rancho Road and Muskrat Avenue toward the Adelanto Compressor Station and Main Line Valve 1 that includes existing industrial and linear development in the City of Adelanto

Construction of the Proposed Project would be visible from KOP 1 in the immediate foreground and would be sky-lined. The existing condition is shown in **Exhibit 5a, KOP 1-Before Project**, and the simulated Proposed Project is shown in **Exhibit 5b, KOP 1-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, or normal, resulting in typical impacts. The time period of the view would be of short duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from KOP 1. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible as they are erected throughout the construction period.

After construction, the Proposed Project components would result in long-term changes to the foreground of the existing environment of KOP 1. Long-term visible changes would result from the addition of structures, fencing, and disturbance of the ground surface in the foreground. Areas permanently cleared of vegetation could be visible in the foreground of KOP 1. Operation of the Proposed Project would result in no additional long-term visual changes.

Implementation of the Proposed Project in the view from KOP 1 would result in low to moderate changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view of predominantly developed landscape and immediate foreground viewing situation from Rancho Road. Impacts to scenery would be low based on change to low quality existing scenery. The changes to the existing environment in the view from KOP 1 would occur on private land and would conform to City of Adelanto LORS.

In conclusion, impacts to scenery would be moderate, and impacts to viewers would be low to moderate. The Proposed Project would conform to local LORS. Therefore, impacts to visual character are anticipated to be less than significant.

KOP 1 – View from Rancho Road that includes existing industrial and linear development

Exhibit 5a, KOP 1-Before Project



Exhibit 5b, KOP 1-After Project



KOP 2 – View from Adelanto High School at Calendula Street and Mojave Drive toward the Adelanto Compressor Station and Main Line Valve 1 that includes existing industrial and linear development in the City of Adelanto

Construction of the Proposed Project along the pipeline alignment to the west would be visible from KOP 2 in the foreground and would be slightly sky-lined. The existing condition is shown in **Exhibit 6a, KOP 2-Before Project**, and the simulated Proposed Project is shown in **Exhibit 6b, KOP 2-After Project**. The front-lit sun angle would limit shades and shadows, resulting in diminished contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of long duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary fugitive dust that would be visible from KOP 2. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles may be visible.

After construction, the Proposed Project components would not result in long-term changes to the foreground of the existing environment of KOP 2. Operation of the Proposed Project would result in no long-term visual changes.

Implementation of the Proposed Project in the view from KOP 2 would result (during construction) in low changes to form, line, color, and texture of the landform, vegetation, and structures. Construction impacts to viewers would be low to moderate based on the overall view of predominantly developed landscape and foreground viewing situation from the high school. Construction impacts to scenery would be low based on change to low-quality existing scenery. The changes to the existing environment in the view from KOP 2 would occur on private land and would conform to San Bernardino County LORS.

In conclusion, construction impacts to scenery would be low, and impacts to viewers would be low. The Proposed Project would conform to local LORS. Therefore, impacts to visual character are anticipated to be less than significant.

KOP 2 – View from Adelanto High School that includes existing industrial and linear development
Exhibit 6a, KOP 2-Before Project



Exhibit 6b, KOP 2-After Project



KOP 3 – View from the nearest residence on Baldy Mesa Road and Olivine Road toward Main Line Valve 2, Staging Area, and Pipeline ROW that includes existing utility development and roads in San Bernardino County

Construction of the Proposed Project would be visible from KOP 3 in the immediate foreground and middleground, and the up-to-40-foot-high antenna with solar panel and only the uppermost parts of the valve column and perimeter fence would be sky-lined. The existing condition is shown in **Exhibit 7a, KOP 3-Before Project**, and the simulated Proposed Project is shown in **Exhibit 7b, KOP 3-After Project**. The front-lit sun angle would limit shades and shadows, resulting in diminished contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of long duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain-link fence, vegetation, signage, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the foreground of this KOP. After installation of each segment of the pipeline is complete, restoration would start immediately and involve restoration of vegetation and repaving of roads affected by construction of the proposed alignment (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 3 would result in low to moderate changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view from residences on Baldy Mesa Road. Impacts to scenery would be low to moderate based on changes to low- to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 3 would occur on private land and would conform to San Bernardino County LORS.

In conclusion, impacts to scenery would be low to moderate, and impacts to viewers would be low to moderate. The Proposed Project would conform to state and local LORS. Therefore, impacts are anticipated to be less than significant.

KOP 3 – View from the nearest residence on Baldy Mesa Road that includes existing utility development and roads
Exhibit 7a, KOP 3-Before Project



Exhibit 7b, KOP 3-After Project



KOP 4 – View from residence on Baldy Mesa Road South of Trinity Road toward Main Line Valve 3, Staging Area, and Pipeline ROW that includes the railroad crossing and embankment in San Bernardino County

Construction of the Proposed Project would be visible from KOP 4 in the immediate foreground and the antenna, and only the uppermost parts of the valve column and perimeter wall would be sky-lined. The existing condition is shown in **Exhibit 8a, KOP - Before Project**, and the simulated Proposed Project is shown in **Exhibit 8b, KOP 4-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of long duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain-link fence, vegetation, and signage within the ROW. Areas permanently cleared of vegetation could be visible in the foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration would start immediately and involve restoration of vegetation and repaving of roads affected by construction of the proposed alignment (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 4 would result in low changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view of existing utilities and railroad from these residences on Baldy Mesa Road. Impacts to scenery would be low to moderate based on changes to low- to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 4 would occur on private land and would conform to San Bernardino County LORS.

In conclusion, impacts to scenery would be low, and impacts to viewers would be low to moderate. The Proposed Project would conform to local LORS. Therefore, impacts to visual character are anticipated to be less than significant.

KOP 4 – View from residence on Baldy Mesa Road that includes the railroad bed and embankment
Exhibit 8a, KOP 4-Before Project



Exhibit 8b, KOP 4-After Project



KOP 5 – View from a vantage point near USFS Route 3N24 toward Main Line Valve 4, Access Roads, and Pipeline ROW that includes existing utility development and roads in the SBNF

Construction of the Proposed Project would be visible from KOP 5 in the foreground, and the facilities would not be sky-lined. The existing condition is shown in **Exhibit 9a, KOP 5-Before Project**, and the simulated Proposed Project is shown in **Exhibit 9b-1, KOP 5-After 3 Years of Restoration** and **Exhibit 9b-2, KOP 5-After Restoration Has Been Completed**. The back-lit sun angle would increase shade and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be superior, resulting in an elevated view and greater visibility. The time period of the view would be of medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become barely visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain-link fence, vegetation, signage, access roads, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration would start immediately and involve restoration of vegetation and restoring the contours of ridgelines affected by the construction of the pipeline alignment (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 5 would result in low changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate based on the overall view of existing utilities and roads from USFS Route 3N24. Impacts to scenery would be moderate based on changes to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 5 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact.” The Proposed Project valve station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 5 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 5 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate, and impacts to viewers would be moderate. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a Moderate SIO. APM-AES-1 would reduce the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 5 – View toward Valve Vault 4, Access Roads, and Pipeline ROW from a vantage point near USFS Route 3N24 in the SBNF
Exhibit 9a, KOP 5-Before Project



Exhibit 9b-1, KOP 5-After 3 Years of Restoration



KOP 5 – View toward Valve Vault 4, Access Roads, and Pipeline ROW from a vantage point near USFS Route 3N24 in the SBNF

Exhibit 9b-2, KOP 5-After Restoration Has Been Completed



KOP 6 – View from hillside west of I-15 toward Access Roads and Pipeline ROW on Slope that includes existing utility development and roads in the SBNF

Construction of the Proposed Project would be visible from KOP 6 in the foreground, and the construction equipment would be sky-lined. The existing condition is shown in **Exhibit 10a, KOP 6-Before Project**, and the simulated Proposed Project is shown in **Exhibit 10b-1, KOP 6-After 3 Years of Restoration** and **Exhibit 10b-2, KOP 6-After Restoration Has Been Completed**. The front-lit sun angle would limit shades and shadows, resulting in diminished contrasts with the surrounding landscape. The observer position would be superior, resulting in emphasized impacts. The time period of the view would be of short duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible.

After construction, the Proposed Project components would result in long-term changes to the middleground of the existing environment of this KOP. Long-term visible changes would result from the disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and restoration of the contours of ridgelines affected by the construction of the pipeline alignment would begin immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond the infrequent presence of maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 6 would result in moderate to high levels of change to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate to high based on the overall view of existing utilities and roads. Impacts to scenery would be moderate based on changes to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 6 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact.” The Proposed Project MLV station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 6 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 6 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a Moderate SIO. APM-AES-1 would reduce the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 6 – View toward Access Roads and Pipeline ROW from near Baldy Mesa Road on Hillside West of Interstate 15 in the SBNF
Exhibit 10a, KOP 6-Before Project



Exhibit 10b-1, KOP 6-After 3 Years of Restoration



KOP 6 – View toward Access Roads and Pipeline ROW from near Baldy Mesa Road on Hillside West of Interstate 15 in the SBNF

Exhibit 10b-2, KOP 6-After Restoration Has Been Completed



KOP 7 – View from State Eligible Scenic Highway Route 138 toward Main Line Valve 5, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in Crowder Canyon in the SBNF

Construction of the Proposed Project would be visible from KOP 7 in the immediate foreground, and the facilities would be sky-lined. The existing condition is shown in **Exhibit 11a, KOP 7-Before Project**, and the simulated Proposed Project is shown in **Exhibit 11b-1, KOP 7-After 3 Years of Restoration** and **Exhibit 11b-2, KOP 7-After Restoration Has Been Completed**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short to medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain-link fence, vegetation, signage, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and restoration of the contours of ridgelines affected by the construction of the pipeline alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent the presence of maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 7 would result in moderate to high changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate to high taking into account the overall view of existing utilities and access roads from State Eligible Scenic Highway Route 138.

Impacts to scenery would be moderate to high based on changes to moderate quality existing scenery and immediate foreground viewing condition. The changes to the existing environment in the view from KOP 7 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” The Proposed Project valve Station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 7 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 7 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a High or Moderate SIO. APM-AES-1 would reduce the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 7 – View toward Valve Vault 5, Staging Area, Access Road, and Pipeline ROW from State Eligible Scenic Highway Route 138 in the area of Crowder Canyon in the SBNF
Exhibit 11a, KOP 7-Before Project



Exhibit 11b-1, KOP 7-After 3 Years of Restoration



KOP 7 – View toward Valve Vault 5, Staging Area, Access Road, and Pipeline ROW from State Eligible Scenic Highway Route 138 in the area of Crowder Canyon in the SBNF
Exhibit 11b-2, KOP 7-After Restoration Has Been Completed



KOP 8 – View from State Eligible Scenic Highway Route 138 toward Pipeline ROW that includes existing utility development and a road in riparian area within the SBNF

Construction of the Proposed Project would be visible from KOP 8 in the immediate foreground, and the construction equipment would be sky-lined. The existing condition is shown in **Exhibit 12a, KOP 8-Before Project**, and the simulated Proposed Project is shown in **Exhibit 12b-1, KOP 8-After 3 Years of Restoration** and **Exhibit 12b-2, KOP 8-After Restoration Has Been Completed**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short to medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the signage and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation, repaving of roads affected by construction of the proposed alignment, and restoration of the contours of ridgelines affected by the construction of the pipeline alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond the infrequent presence of maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 8 would result in moderate to high changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate to high based on the immediate foreground view and overall view of existing utilities and access roads from State Eligible Scenic Highway Route 138.

Impacts to scenery would be moderate to high based on changes to moderate- to high-quality existing scenery. The changes to the existing environment in the view from KOP 8 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” The Proposed Project valve Station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 8 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 8 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a High or Moderate SIO. APM-AES-1 would reduce resolve the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 8 – View from State Eligible Scenic Highway Route 138 that includes existing utility development and roads

Exhibit 12a, KOP 8-Before Project



Exhibit 12b-1, KOP 8-After 3 Years of Restoration



KOP 8 – View from State Eligible Scenic Highway Route 138 that includes existing utility development and roads

Exhibit 12b-2, KOP 8-After Restoration Has Been Completed



KOP 9 – View from Pacific Crest National Scenic Trail toward Access Road and Pipeline ROW that includes existing utility development and roads in Crowder Canyon within the SBNF

Construction of the Proposed Project would be visible from KOP 9 in the foreground, and the facilities would be sky-lined. The existing condition is shown in **Exhibit 13a, KOP 9-Before Project**, and the simulated Proposed Project is shown in **Exhibit 13b-1, KOP 9- After 3 Years of Restoration** and **Exhibit 13b-2, KOP 9-After Restoration Has Been Completed**. The underground pipeline would ascend the slope on the left side of the existing electrical utility access road in the middle of the photograph parallel to the existing pipeline shown in the “before project” photograph. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical visibility. The time period of the view would be of medium to long duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible.

After construction, the Proposed Project components would result in long-term changes to the foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the vegetation, signage, access road, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and restoration of the contours of ridgelines affected by the construction of the pipeline alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond the infrequent presence of maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 9 would result in moderate to high changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate to high based on the immediate foreground viewing condition and overall view of existing utilities and access roads from the Pacific Crest National Scenic Trail.

Impacts to scenery would be moderate to high based on changes to moderate- to high-quality of existing scenery. The changes to the existing environment in the view from KOP 9 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” The Proposed Project valve Station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 9 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 9 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.”

In conclusion, impacts to scenery would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a Moderate SIO, and would eventually return to a High or Moderate SIO. APM-AES-1 would reduce resolve the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 9 – View toward Access Road and Pipeline ROW from the Pacific Crest National Scenic Trail in the SBNF
Exhibit 13a, KOP 9-Before Project



Exhibit 13b-1, KOP 9- After 3 Years of Restoration



KOP 9 – View toward Access Road and Pipeline ROW from the Pacific Crest National Scenic Trail in the SBNF

Exhibit 13b-2, KOP 9-After Restoration Has Been Completed



KOP 10 – View from Cajon Boulevard (Historic Route 66) South of Swarthout Canyon Road toward Main Line Valve 6, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in the SBNE

Construction of the Proposed Project would be visible from KOP 10 in the immediate foreground, and the facilities would not be sky-lined. The existing condition is shown in **Exhibit 14a, KOP 10-Before Project**, and the simulated Proposed Project is shown in **Exhibit 14b-1, KOP 10-After 3 Years of Restoration** and **Exhibit 14b-2, KOP 10-After Restoration Has Been Completed**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short to medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain-link fence, vegetation, signage, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and repaving of roads affected by construction of the proposed alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 10 would result in moderate changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view of existing utilities and access roads from Cajon Boulevard (Historic Route 66).

Impacts to scenery would be moderate based on changes to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 10 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” The Proposed Project MLV station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 10 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 10 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate, and impacts to viewers would be moderate. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a Moderate SIO. APM-AES-1 would reduce resolve the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 10 – View toward Valve Vault 6, Staging Area, Access Road, and Pipeline ROW from Cajon Boulevard (Historic Route 66) in the SBNF
Exhibit 14a, KOP 10-Before Project



Exhibit 14b-1, KOP 10-After 3 Years of Restoration



KOP 10 – View toward Valve Vault 6, Staging Area, Access Road, and Pipeline ROW from Cajon Boulevard (Historic Route 66) in the SBNF
Exhibit 14b-2, KOP 10-After Restoration Has Been Completed



KOP 11 – View from Interstate 15 toward Pipeline ROW to the north that includes existing utility development and roads in the SBNE

Construction of the Proposed Project would be visible from KOP 11 in the immediate foreground, and the construction equipment would be sky-lined. The existing condition is shown in **Exhibit 15a, KOP 11-Before Project**, and the simulated Proposed Project is shown in **Exhibit 15b-1, KOP 11-After 3 Years of Restoration** and **Exhibit 15b-2, KOP 11-After Restoration Has Been Completed**. The front-lit sun angle would limit shades and shadows, resulting in diminished contrasts with the surrounding landscape. The observer position would be inferior, resulting in increased impacts. The time period of the view would be of short duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and restoration of the contours of ridgelines affected by the construction of the pipeline alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 11 would result in moderate to high changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view of existing utilities and access roads from I-15.

Impacts to scenery would be moderate to high based on changes to moderate to high quality of existing scenery. The changes to the existing environment in the view from KOP 11 would occur on USFS land and would not be consistent with the High SIO, “where the valued landscape character ‘appears’ intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.” The Proposed Project valve Station structures and ground-clearing and leveling activities would impact the scenic integrity of the view from KOP 11 after construction. After implementing mitigation associated with APM-AES-1, it is anticipated that the Proposed Project alignment associated with KOP 11 would return to a Moderate SIO level within 3 years, and would eventually return to a Moderate to High SIO level.

In conclusion, impacts to scenery would be moderate to high, and impacts to viewers would be moderate to high. After construction, the Proposed Project would temporarily result in a decrease in SIO levels but within 3 years of construction would return to a Moderate SIO. APM-AES-1 would reduce the adverse effects of revegetation removal and grading to baseline conditions for visual character and quality.

KOP 11 – View toward Pipeline ROW from Interstate 15 to the North in the SBNF
Exhibit 15a, KOP 11-Before Project



Exhibit 15b-1, KOP 11- After 3 Years of Restoration



KOP 11 – View toward Pipeline ROW from Interstate 15 to the North in the SBNF

Exhibit 15b-2, KOP 11-After Restoration Has Been Completed



KOP 12 – View from Tippecanoe Avenue South of Union Street toward Main Line Valve 11, Staging Area, and Pipeline ROW that includes existing utility development, roads and residential areas in the City of San Bernardino

Construction of the Proposed Project would be visible from KOP 12 in the immediate foreground, and the facilities would not be sky-lined. The existing condition is shown in **Exhibit 16a, KOP 12-Before Project**, and the simulated Proposed Project is shown in **Exhibit 16b, KOP 12-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short to medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, wall, vegetation, signage, and disturbance of the ground surface within the ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration would start immediately and involve installation of vegetation and repaving of roads affected by construction of the proposed alignment (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 12 would result in low changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low to moderate based on the overall view of existing utilities and access roads from Tippecanoe Avenue.

Impacts to scenery would be low to moderate based on changes to low- to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 12 would occur on private land and would conform to City of San Bernardino LORS.

In conclusion, impacts to scenery would be moderate, and impacts to viewers would be moderate. The Proposed Project would conform to local LORS. Impacts to visual character would be less than significant.

KOP 12 – View from Tippecanoe Avenue that includes existing utility development, roads and residential

Exhibit 16a, KOP 12-Before Project



Exhibit 16b, KOP 12-After Project



KOP 13 – View from Blue Mountain Trail toward Staging Areas, Access Roads, and Pipeline ROW in Reche Canyon that includes existing residential development and roads in Reche Canyon, San Bernardino County

Construction of the Proposed Project would not be visible from KOP 13. The existing condition is shown in **Exhibit 17a, KOP 13-Before Project**, and the simulated Proposed Project is shown in **Exhibit 17b, KOP 13-After Project**. The time period of the view would be of long duration. Construction of new infrastructure and preparation of the site could result in temporary fugitive dust that might be visible from this KOP.

After construction, the Proposed Project components would result in no long-term changes to the foreground of the existing environment of this KOP. Operation of the Proposed Project would result in no long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 13 would result in no changes to form, line, color, and texture of the landform, vegetation, and structures. No impacts to viewers would be visible from the Blue Mountain Trail in Reche Canyon.

The changes to the existing environment in the view from KOP 13 would occur on private land and would conform to Riverside County LORS.

In conclusion, no impacts to scenery would be visible from this KOP and the Proposed Project would conform to local LORS. Impacts to visual character would be less than significant.

KOP 13 – View from Blue Mountain Trail in Reche Canyon that includes existing residential development and roads

Exhibit 17a, KOP 13-Before Project



Exhibit 17b, KOP 13-After Project



KOP 14 – View from Reche Canyon Road East of High Country Drive toward Main Line Valve 14, Access Road, and Pipeline ROW that includes existing utility development and roads near residences in Reche Canyon, Riverside County

Construction of the Proposed Project would be visible from KOP 14 in the immediate foreground, and the facilities would be sky-lined. The existing condition is shown in **Exhibit 18a, KOP 14-Before Project**, and the simulated Proposed Project is shown in **Exhibit 18b, KOP 14-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short to medium duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the antenna, chain link fence, vegetation, signage, and disturbance of the ground surface within the access road and pipeline ROW. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond infrequent maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 14 would result in moderate changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be moderate based on the overall view of existing utilities and access roads from Reche Canyon Road near residences in Reche Canyon, Riverside County.

Impacts to scenery would be moderate based on changes to moderate-quality existing scenery. The changes to the existing environment in the view from KOP 14 would occur on private land and would conform to Riverside County LORS.

In conclusion, impacts to scenery would be moderate, and impacts to viewers would be moderate. The Proposed Project would conform to local LORS. Impacts to visual character would be less than significant.

KOP 14 – View from Reche Canyon Road near residences in Reche Canyon that includes existing utility development and roads
Exhibit 18a, KOP 14-Before Project



Exhibit 18b, KOP 14-After Project



KOP 15 – View from Alessandro Boulevard at intersection with Virginia Street toward Moreno Valley Pressure Limiting Station, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in the City of Moreno Valley

Construction of the Proposed Project would be visible from KOP 15 in the immediate foreground, and the facilities would not be sky-lined. The existing condition is shown in **Exhibit 19a, KOP 15-Before Project**, and the simulated Proposed Project is shown in **Exhibit 19b, KOP 15-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be eye-level, resulting in typical impacts. The time period of the view would be of short duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the immediate foreground of the existing environment of this KOP. Long-term visible changes would result from the addition of the limiting station structures and perimeter fences or walls, vegetation, signage, and disturbance of the ground surface within the staging area, pipeline ROW, and limiting station. Areas permanently cleared of vegetation could be visible in the immediate foreground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 15 would result in low changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low based on the overall view of existing facilities, utilities, and access roads from Alessandro Boulevard and Virginia Street in the City of Moreno Valley. Impacts to scenery would be low based on changes to low-quality existing scenery. The changes to the existing environment in the view from KOP 15 would occur on private land and would conform to City of Moreno Valley LORS.

In conclusion, impacts to scenery would be low, and impacts to viewers would be low. The Proposed Project would conform to local LORS. Impacts to visual character would be less than significant.

KOP 15 – View toward Moreno Valley Limiting Station, Staging Area, Access Road, and Pipeline ROW from Alessandro Boulevard and Virginia Street in the City of Moreno Valley
Exhibit 19a, KOP 15-Before Project



Exhibit 19b, KOP 15-After Project



KOP 16 – View from the nearest residential land on Lisa Lane toward Moreno Valley Pressure Limiting Station, Staging Area, Access Road, and Pipeline ROW that includes existing utility development and roads in the City of Moreno Valley

Construction of the Proposed Project would be visible from KOP 16 in the middleground, and the facilities would not be sky-lined. The existing condition is shown in **Exhibit 20a, KOP 16-Before Project**, and the simulated Proposed Project is shown in **Exhibit 20b, KOP16-After Project**. The back-lit sun angle would increase shades and shadows, resulting in heightened contrasts with the surrounding landscape. The observer position would be superior, resulting in elevated view and increased visibility. The time period of the view would be of long duration. Construction would result in short-term changes to the existing environment of this view. Construction of new infrastructure and preparation of the site could result in temporary clearing of vegetation and fugitive dust that would be visible from this KOP. Construction equipment and/or vehicles would be present during construction, and movement of such vehicles would be visible. Structures and ancillary facilities would become visible throughout the construction period as they are erected.

After construction, the Proposed Project components would result in long-term changes to the middleground of the existing environment of this KOP. Long-term visible changes would result from the addition of the limiting station structures and perimeter fences or walls, vegetation, and disturbance of the ground surface within the staging area, pipeline ROW, and limiting station. Areas permanently cleared of vegetation could be visible in the middleground of this KOP. After installation of each small segment of the pipeline is complete, restoration of vegetation and repaving of roads affected by construction of the proposed alignment would start immediately (APM-AES-1). Operation of the Proposed Project would result in no additional long-term visual changes beyond maintenance vehicles and personnel.

Implementation of the Proposed Project in the view from KOP 16 would result in low changes to form, line, color, and texture of the landform, vegetation, and structures. Impacts to viewers would be low based on the overall view of existing facilities, utilities, and access roads from the nearest residential area on Lisa Lane in the City of Moreno Valley. Impacts to scenery would be low based on changes to low-quality existing scenery. The changes to the existing environment in the view from KOP 16 would occur on private land and would conform to City of Moreno Valley LORS.

In conclusion, impacts to scenery would be low, and impacts to viewers would be low. The Proposed Project would conform to local LORS. Impacts to visual character would be less than significant.

KOP 16 – View toward Moreno Valley Limiting Station, Staging Area, Access Road, and Pipeline ROW from Nearest Residential Area on Lisa Lane in the City of Moreno Valley
Exhibit 20a, KOP 16-Before Project



Exhibit 20b, KOP 16-After Project



6.4 Impact Conclusion

Construction: Construction of the Proposed Project would not result in significant impacts to designated scenic vistas, and temporary impacts to state scenic highways would be less than significant. Impacts to visual character and quality would be moderate to high during construction. Overall, construction of the Proposed Project would result in moderate to high short-term impacts on visual resources, with visual and scenic integrity of the area temporarily disturbed by the Proposed Project anticipated to return to current levels over time. After implementation of APM-AES-1 and APM-AES-2, the construction-related impacts would be less than significant.

For KOPs 1-4 and 12-16, impacts to visual character would be less than significant, with construction-related impacts to scenery and to viewers anticipated to be either low or low to moderate, depending on the individual KOP. For KOPs 5-11, Proposed Project construction would cause a temporary decrease in scenic integrity, with construction-related impacts to scenery and to viewers anticipated to be either moderate or moderate to high, depending on the individual KOP. After implementation of APM-AES-1, the impacts to KOPs 5-11 are expected to be reduced to an acceptable level in relation to the SBNF Land Management Plan. Thus for the purposes of CEQA, impacts would be reduced to below the threshold of significance.

Operation: No additional visual impacts are anticipated during operation of the Proposed Project.

7.0 APPLICANTS' PROPOSED MEASURES

APM-AES-1: Implementation of Revegetation and Restoration Plan. Following construction, temporary areas of disturbance shall be returned to their pre-construction conditions to the extent feasible. Where pipeline installation would require the removal of natural vegetation and alteration of the existing landforms that could result in new line and color contrasts, areas would be restored according to a revegetation plan. Following construction activities in primarily natural appearing settings, the permanent pipeline ROW and adjacent temporary construction easement, except existing access roads, would be reseeded with a seed mix appropriate to the region and local area and would be approved by the applicable jurisdictional agency, depending on the location. Revegetation plans would require approval of the applicable jurisdictional agency and installation would be consistent with accepted techniques for the area and particular implementation task. Effectiveness criteria and monitoring protocols consistent with that required by jurisdictional agencies would be implemented to support establishment and success of the revegetation plan. On developed lands and in urban areas, the ground surface would be restored to original condition approved by property owner and/or applicable agency requirements. Unpaved roads would be backfilled and regraded to existing levels and contours. Drainage patterns would be re-established to original conditions. Following construction, paved roadways would be compacted, repaved, and restored to pre-construction conditions.

APM-AES-2: Main Line Valve Locations. To reduce the apparent scale and visual prominence of above ground components, main line valves will be located outside of the viewshed of State and county-designated scenic routes. If such placement is determined to be infeasible during the design process, then main line valves will be located within the middleground (i.e., 0.5 to 3.0 miles) or background (i.e., greater than 3.0 miles) distance zones as measured from the scenic route in question. If engineering design limits the ability to locate main line valves outside of the foreground, the facility will be screened appropriately.

8.0 REFERENCES

- California Department of Transportation (Caltrans). (2011). Officially Designated State Scenic Highways and Historic Parkways. Retrieved from http://www.dot.ca.gov/hq/LandArch/scenic_highways/
- City of Adelanto. (1994). Adelanto General Plan. Retrieved from http://www.ci.adelanto.ca.us/index.asp?SEC=BD86D30C-2FD0-41C0-9747-39E6FF82C0DA&DE=066DAE56-F8FB-45D2-9E13-92CCC0450217&Type=B_BASIC
- City of Colton. (1991). Reche Canyon Specific Plan. Retrieved from <http://ca-colton.civicplus.com/DocumentCenter/View/276>
- City of Colton. (2009). Colton 2009 General Plan. Retrieved from <http://www.ci.colton.ca.us/index.aspx?NID=778>
- City of Highland. (2006). City of Highland General Plan. Retrieved from <http://www.ci.highland.ca.us/GeneralPlan/>
- City of Loma Linda. (2008). Loma Linda 2008 General Plan. Retrieved from <http://www.lomalinda-ca.gov/asp/Site/Departments/CommunityDev/PlanningDivision/GeneralPlan/>
- City of Moreno Valley. (2006). Moreno Valley 2006 General Plan. Retrieved from http://www.moreno-valley.ca.us/city_hall/general_plan.shtml
- City of San Bernardino. (1990). Calmat Cajon Creek Specific Plan SP 90-01. Retrieved from <https://www.ci.san-bernardino.ca.us/civicax/filebank/blobdload.aspx?BlobID=13487>
- City of San Bernardino. (2005a). City of San Bernardino General Plan. Retrieved from https://www.ci.san-bernardino.ca.us/cityhall/community_development/planning/planning_documents.asp
- City of San Bernardino. (2005b). University District Specific Plan. Retrieved from <https://www.ci.san-bernardino.ca.us/pdf/DevSvcs/University%20Dist%20SP%2011-05.pdf>
- City of San Bernardino. (2007). San Bernardino Alliance California Specific Plan. Retrieved from <https://www.ci.san-bernardino.ca.us/civicax/filebank/blobdload.aspx?BlobID=16993>
- City of Victorville. (2006). Parkview Specific Plan. Retrieved from <http://www.ci.victorville.ca.us/uploadedFiles/CityDepartments/Development/Parkview%20Specific%20Plan.pdf>
- City of Victorville. (2008). Victorville 2030 General Plan. Retrieved from <http://ci.victorville.ca.us/generalplan.aspx>
- Kinder Morgan. (2015). The CALNEV Pipeline Expansion – from Colton to Las Vegas. Retrieved from <http://www.urssocal.com/calnev/>
- Male, Laura, Sapphos Environmental, Inc. Pasadena, CA. 3 July 2015. Email communication with Daniel Kitowski, Transportation Manager (GIS), California Department of Transportation.
- National Park Service (NPS). Website last modified 12 July 2012. The National Trails System Act. Also

- found in United States Code, Volume 16, Sections 1241-1251. Retrieved from: <http://www.nps.gov/nts/legislation.html>
- Riverside County (1988). Ordinance No. 655: An Ordinance of the County of Riverside Regulating Light Pollution. Retrieved from <http://www.clerkoftheboard.co.riverside.ca.us/ords/600/655.htm>
- Riverside County (2014a). Riverside County General Plan. Retrieved from <http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx>
- Riverside County (2014b). Riverside County 2014 General Plan Amendment 960, Reche Canyon/Badlands Area Plan. Retrieved from http://planning.rctlma.org/Portals/0/genplan/general_plan_2013/3%20Area%20Plan%20Volume%202/RCBAP_clean_112414.pdf
- San Bernardino County (2007). The County of San Bernardino 2007 General Plan. Retrieved from <http://cms.sbcounty.gov/lus/Planning/GeneralPlan.aspx>
- San Bernardino County Land Use Services Division (2007). County of San Bernardino 2007 Development Code. Retrieved from <http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/dc011614.pdf>
- San Bernardino County Land Use Service Department Planning Division. (2015). Glen Helen Specific Plan. Retrieved from <http://www.sbcounty.gov/uploads/lus/specificplans/ghsp.pdf>
- Southern California Gas Company (SoCalGas). (2015). Gas Transmission and High Pressure Distribution Pipeline Interactive Map - San Bernardino. Retrieved from <http://www.socalgas.com/safety/pipeline-maps/san-bernardino.shtml>.
- United States Congress (1967) National Environmental Policy Act (NEPA). Washington, DC. Retrieved from <http://www.epa.gov/compliance/nepa/index.html>
- United States Congress (1976) National Forest Management Act (NFMA). Washington, DC. Retrieved from <http://www.fs.fed.us/emc/nfma/index.htm>
- United States Department of Agriculture, United States Forest Service (USFS). N.D. Forest Planning & Monitoring Datasets. Retrieved from <http://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=STELPRDB5327165>
- United States Department of Agriculture, United States Forest Service (USFS). 1995. Landscape Aesthetics: A Handbook for Scenery Management. Agriculture Handbook 701. United States Department of Agriculture Washington, DC. Retrieved from http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf
- United States Department of Agriculture, United States Forest Service (USFS). 2005. San Bernardino National Forest Land Management Plan (SBNF LMP). Retrieved from <http://www.fs.usda.gov/land/sbnf/landmanagement>
- Scenic Integrity Objectives Map retrieved from http://a123.g.akamai.net/7/123/11558/abc123/forestservic.download.akamai.com/11558/www/nepa/76364_FSPLT2_123939.pdf

Land Use Zones Map retrieved from
http://a123.g.akamai.net/7/123/11558/abc123/forestservice.download.akamai.com/11558/www/nepa/76364_FSPLT2_123935.pdf

United States Department of Agriculture, United States Forest Service (USFS), Pacific Northwest Region. January 1982. Comprehensive Management Plan for the Pacific Crest National Scenic Trail. Available online at: http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5311111.pdf

USFS Manual 2300, Recreation, Wilderness, and Related Resource Management, Chapter 2380, Sec. 2380.5 Retrieved from http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?2300